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

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UGPTI Department Publication No. 165

September 2005

Acknowledgements

The authors wish to acknowledge and thank those who contributed to this report by giving of their time and sharing related information and insights. Special thanks go to staff of the North Dakota Department of Transportation, the North Dakota Department of Human Services, various transportation service providers, and the study's steering committee. This report would not have been possible without their dedication and assistance.

Disclaimer

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

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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.

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1. Introduction

In many ways, North Dakotans appear to be more mobile than average Americans. While the United States averages 675 licensed drivers per 1,000 residents, North Dakota has 725. The average American traveled 9,941 miles in personal vehicles in 2003; the average North Dakotan traveled 11,782 miles. In 2003, the United States averaged 1.12 registered cars, pick-ups, vans, and sport utility vehicles per licensed driver; North Dakota averaged 1.35. In summary, North Dakota has more drivers, more vehicles, and more miles per capita than the national average.

Source: United States Department of Transportation – Bureau of Transportation Statistics - http://www.bts.gov/publications/state_transportation_profiles/state_transportation_statistics_2004/html/table_04_02.html

Similarly, North Dakotans are not faced with the same mobility problems that routinely confront many Americans. Given North Dakota's sparse population and relative lack of metropolitan areas, mobility factors such as traffic congestion and related travel times, vehicle pollution, parking problems, and land use planning are usually non-issues for the state's traveling public.

This does not mean, however, that personal mobility is not an important issue in North Dakota. Personal mobility is, in fact, of utmost importance because of significant distances between places and the relative lack of transportation options available to many North Dakotans. Personal mobility is especially difficult for those who do not have direct access to a private automobile or those who live in small urban or rural areas where transit services are not readily available.

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 involves improving North Dakota's passenger transportation system to allow for optimal personal mobility (North Dakota Department of Transportation, 2002).

This personal mobility study is an extension of *Transaction*. 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 currently exist regarding personal mobility in North Dakota, and
- Provide state policy makers with options concerning the enhancement of personal mobility for state residents.

To accomplish these goals, this study will inventory existing forms of personal transportation in North Dakota, develop targeted levels of transportation services, identify unmet personal mobility needs, and formulate recommendations that will facilitate the satisfaction of unmet personal mobility needs. This study will also present recommendations to help NDDOT monitor progress being made towards the satisfaction of the personal mobility needs of state residents.

TransAction presented 16 initiatives and related strategies to further develop and enhance North Dakota's personal and freight transportation systems. The plan included a comprehensive public input process which utilized surveys, interviews, public input sessions, and advisory committees comprised of representatives from the transportation industry and all levels of government to generate input concerning the status of North Dakota's transportation system and related needs.

This personal mobility study addresses at least four of *TransAction's* initiatives and presents several strategies to implement related recommendations which will enhance personal mobility in North Dakota. These enhancements will provide direct and indirect benefits to state residents and to the state's business community.

TransAction initiatives that are addressed, either in full or in part, by this study include:

- Initiative #2: Define the levels of transportation service that North Dakota will strive to provide and maintain.

- Initiative #11: Create a special transportation program (infrastructure funding and technical assistance) to facilitate economic development and competitiveness.

- Initiative #12: Take a lead role in promoting public-private partnerships to bring about selected transportation initiatives.

- Initiative #15: Develop a statewide personal mobility plan.

TransAction's recommendations concerning the need to develop specific plans regarding personal mobility coincide with federal statistics regarding transportation options available in North Dakota. The U.S. Department of Transportation's Bureau of Transportation Statistics ranks North Dakota last among the 48 continental states in terms of rural residents' access to commercial intercity transportation services.

According to the Bureau's April 20, 2004, report on "Scheduled Intercity Transportation: Rural Service Areas in the United States," 94.4 percent of the nation's residents live within easy driving distance of a commercial intercity transportation service provider. Conversely, only 62 percent of North Dakota's rural residents live within 25 miles of a commercial, intercity transportation service (bus, air, or rail). Other low-ranking states include South Dakota (66.8 percent), Nebraska (72.7 percent), Montana (77.5 percent), and Wyoming (78.6 percent) (Bureau of Transportation Statistics, 2004).

NDDOT and the Small Urban & Rural Transit Center (SURTC) identified several tasks which, if completed, would ensure the completion of a comprehensive personal mobility plan. The approach to this study and the chapters in this report focus specifically on these tasks. The remaining chapters in this report include:

- Chapter 2: North Dakota Demographics - Emerging Trends and Transportation Needs Indicators

- Chapter 3: Literature Review - Other States' Mobility Plans

- Chapter 4: Existing Means of Personal Mobility

- Chapter 5: Public Transit Trends and Performance

- Chapter 6: Base Levels of Required Service and Gaps in Existing Systems

- Chapter 7: Potential "Intelligent Transportation System" Applications

- Chapter 8: Policy and Program Options and Recommendations

This study was undertaken with input and direction provided by staff from NDDOT and a steering committee comprised of representatives of transit operators, constituent groups, and government agencies involved with the provision of transportation services. Members of this steering committee are identified in Appendix A. Related study information is also available on SURTC's website at www.surtc.org.

Government's role in satisfying personal mobility needs is unavoidably subjective. Every person has different mobility needs and a different view of the role that government should play relative to the satisfaction of those needs.

The 2001 National Household Travel Survey (NHTS) conducted by the U.S. Department of Transportation found that people travel at different frequencies and for a variety of reasons. Nationally, people make an average of 4.1 trips per day. Daily trip counts vary by age and a person's status as a licensed driver. People age 25-54 make an average of 4.6 trips per day while people age 65 and over average 3.4 trips per day (U.S. Department of Transportation, 2001).

Not surprisingly, licensed drivers also tend to make more trips. Licensed drivers average 4.5 trips per day while individuals without a drivers license average only 2.6 trips per day. NHTS results indicate that 91.2 percent of all trips are made in personal automobiles; 4.9 percent are via transit and 2.8 percent are walking trips.

The survey also found that family and personal business accounted for 44.6 percent of all trips. Other major trip purposes included social/recreational (27.1%), work and work-related (17.7%), and school/church (9.8%).

The NHTS did not generate results specific to North Dakota but it is assumed that North Dakotans' travel patterns are fairly similar to those of the rest of the country. If major differences exist, they might be expected in the area of travel mode. Given North Dakota's relative lack of transit compared to major population centers, the state might see a higher percentage of trips via personal automobile and a lower percentage by transit. More importantly, however, national findings concerning the purpose of daily trips probably mirror those found in North Dakota. The lack of related data specific to North Dakota may warrant further study.

Despite the lack of North Dakota-specific NHTS-type data, it is possible to identify segments of the population that are traditionally transit dependent (senior citizens, low income families, minorities, etc.). This study will identify these populations on a county-by-county basis and develop county ratings that will permit comparisons by county and region around the state.

This study will also inventory the personal mobility facilitators that exist within each North Dakota county (transit services, commercial transportation providers, etc.). Comparing these inventories with the needs ratings discussed above will help identify areas which may be candidates for service enhancements to address local mobility deficiencies.

Before mobility deficiencies can be addressed, however, goals must be established concerning the availability of mobility facilitators. To develop these goals, this study's steering committee was asked to consider a wide array of factors and to identify base levels of service for various geographic areas (rural, small city, regional hubs, etc.) and demographic groups (pre-school, adults, disabled, etc.). This analysis included consideration of the following mobility factors:

Personal Mobility Considerations

Geographic Areas	Demographic Groups
Rural Areas	Pre-School Children
Cities Under 1,000	School Children K-8
Cities 1,000 – 4,499	School Children 9-12
Cities 4,500 – 20,000	Adults
Cities Over 20,000	Disabled
	Minorities
	Senior Citizens

Trip Purposes	Service Levels & Quality	Available Modes
School	Availability (Yes or No)	Taxi
Extracurricular	Frequency (Days & Times)	Fixed Route Bus
Work	Reliability	Public Dial-A-Ride
Shopping	Cost	Special Needs Bus
Church	Local Only	Intercity Bus
Social	Travel Within Region	Train
Routine Medical	Intercity/Between Regions	Airline Service
Emergency	Interstate	Car Rental
Other	Modal Connections	Volunteer Drivers
	Other	Ambulance
		Personal Auto
		Other

Important considerations in this goal-setting process included "wants" vs. "needs," program funding, and the role of government vs. that of the individual, other family members, commercial entities, private organizations, churches, etc. The steering committee's recommendations concerning mobility goals will be discussed in Chapter 6.

The steering committee was also asked to balance state mobility goals with local value determinations. While state-level policy makers may establish certain personal mobility goals, those goals and related values may not necessarily be shared at all local levels.

Because program funding and service operations are at least partially dependent on local involvement, state goals may not be forced on local units of government. While the state may establish its own goals and related program incentives and requirements, local implementation requires local affirmation and involvement. Conversely, if local citizens and decision makers decide not to provide local transit services, the state should honor that decision. This action should, however, result in a lack of state funding for related personal mobility programs.

Concerning the achievement of program goals, there is a related need to monitor progress. The ideal way to monitor progress is by "indexing" or developing a numbering system to compare "then" and "now" levels of mobility. Unfortunately, such indices would be highly subjective and do not currently exist.

Despite the lack of a personal mobility index, it is possible to subjectively monitor related progress. For example, monitoring the creation of mobility enhancements in deficient areas is one way to determine if the state is achieving its personal mobility goals. Other means of assessing related achievements might include observing the creation of county-wide transit services over time, monitoring performance indicators of various service providers (ridership,

frequency of service, miles traveled, etc.), and conducting annual reviews concerning the removal of mobility constraints facing state residents. Related discussions and recommendations will be presented in the final chapter of this report.

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. This study will help state policy makers develop goals and strategies to enhance personal mobility, both now and in the future.

2. North Dakota's Mobility Profile & Concentrations of Need

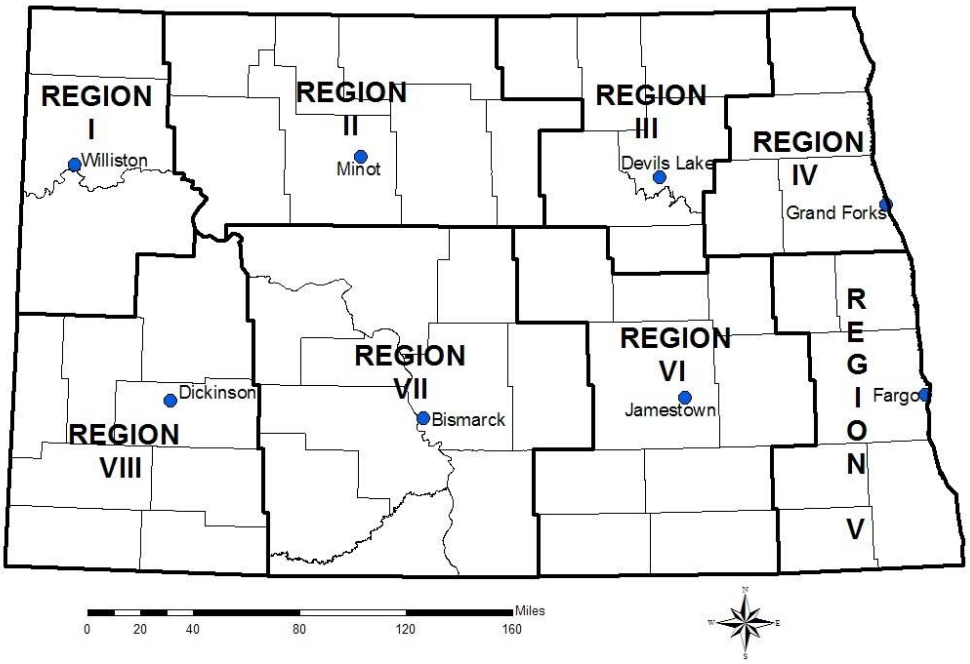
Knowledge of the spatial distribution of individuals with mobility challenges is essential to the appropriate design of transportation policy. Furthermore, if one accepts the notion that the type and quality of services provided to those with greatest need serves as a measure of society itself, an understanding of these characteristics including the location of these persons is of paramount importance. A related approach would be to think of the location of these individuals as mobility demand nodes for governmental transportation facilities and services, in conjunction with the free market as the supply side of the mobility market.

This chapter is intended to describe various attributes of the North Dakota residents and to present a novel method of calculating the relative immobility of a particular region's inhabitants. The aim of the latter section is to aid in prioritizing the level of service that a region may need. We begin by presenting the mobility profile of North Dakota's residents.

2.1 Geographic Levels of Interest

To get an accurate picture of the mobility challenges facing North Dakota's residents, data is assembled at three geographic levels. These include North Dakota's eight planning regions, 53 counties, and 14 largest cities. Because their combined populations make Beulah-Hazen a large city, by North Dakota standards, these neighboring communities are considered one city for the purposes of this report.

The state is divided into eight super-county economic planning regions as shown in Figure 2.1. Those interested in additional regional level analysis of transportation issues should refer to a study by Hegland, Mielke, and Miller (2004).



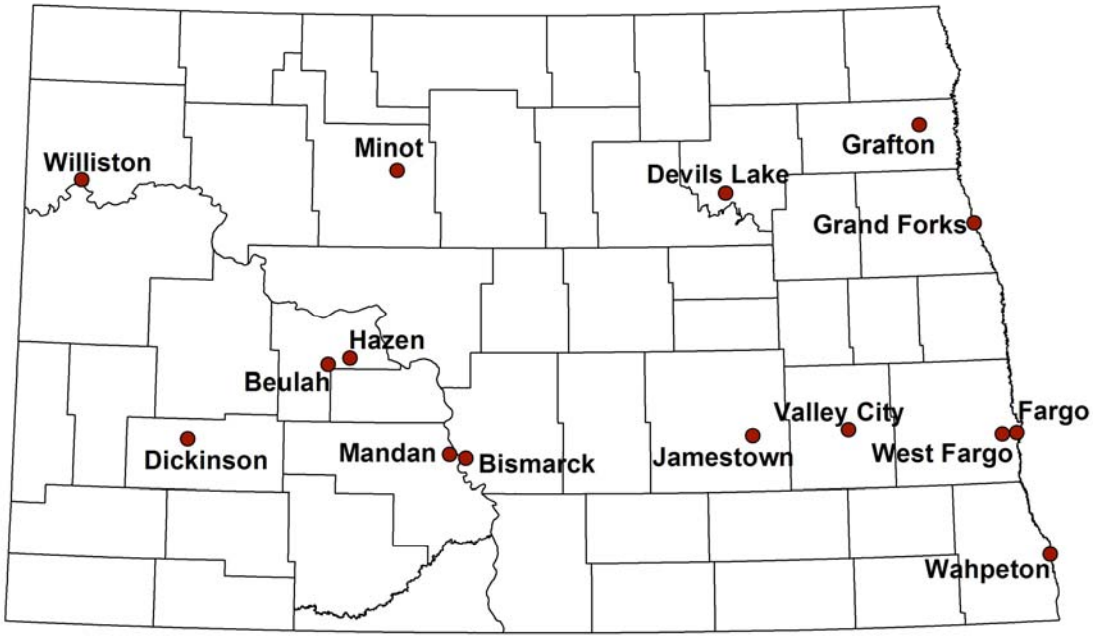
Source: Enhancing Passenger Mobility Services in North Dakota through Increased Coordination, 2004

Figure 2.1 North Dakota Economic Planning Regions and Hub Cities

2.2 Urban Areas in North Dakota

The economic, political, and social structure of the State of North Dakota is relatively dichotomous in nature, with significant differences, both real and perceived, between rural and urban communities. In the context of this study, the definitions of these terms are quite different than those more commonly accepted. We do not define urban locales as metropolitan areas, but rather are referring to communities with 4,500 people or more. This is a smaller number of people than that used at the federal level by an order of magnitude, but to those familiar with North Dakota, the break is intuitive.

These cities provide the retail, medical, and governmental services that meet the regular needs of the vast majority of individuals including those with mobility challenges. As there are no cities in North Dakota with a population of 3,000 to 4,000 residents, this provides for a natural break for those cities selected and those omitted. These cities: Beulah-Hazen, Bismarck, Devils Lake, Dickinson, Fargo, Grafton, Grand Forks, Jamestown, Mandan, Minot, Valley City, Wahpeton, West Fargo, and Williston are displayed graphically in Figure 2.2.



Source: Small Urban & Rural Transit Center, 2005

Figure 2.2 Selected Cities

2.3 Population Mobility Characteristics

There are a number of possible attributes and data sources that describe pertinent aspects of a community's mobility needs. Much of this information is gathered by survey sampling which, if done correctly, produces results that describe the population. However, a great deal of this analysis, for example the Nationwide Personal Transportation Survey (NPTS) collected by the Federal Highway Administration (FHWA), is focused at either the regional or national level. This often results in little or no data being collected from within North Dakota, limiting the descriptive power of these analyses for the state or more local levels.

Making use of data available from the 2000 decennial census addresses this concern as it relies on actual population counts for the entire nation and is complemented by a more in-depth survey. This survey is uniformly completed by approximately one in six scientifically selected households across the nation. The use of this data also remedies challenges that will arise if the analysis is to be repeated in the future because there is consistency in questions from one census to the next.

In this study, six populations are of interest: the elderly, elementary and high school students, low-income individuals, the disabled, minorities, and individuals in households without vehicles. Data on these attributes, classified by city, county, and region, are presented in tables 2.1 to 2.8.

Population estimates for North Dakota arranged by region and county are presented in Table 2.1. Given its size of 70,704 square miles and population of 634,366, North Dakota is considered a rural state even though more than half its residents live in urban areas of 2,500 or more people. With just over half of its population, 322,347 individuals, located in Burleigh, Cass, Grand Forks, and Ward counties, there is clearly a urban-rural dichotomy in the state. Rural areas in the eastern part of the state tend to be more densely populated than in west.

Region V, which includes the North Dakota portion of the Fargo-Moorhead metropolitan area, is the largest region with an estimated population of 166,678. It is followed by Region VII, a 10-county area with 131,764 residents that includes the Bismarck-Mandan metropolitan area. The smallest region by population, northwest North Dakota, is Region I at 26,985. It is followed by sparsely populated Region VIII which is home to 36,961 residents in the southwestern part of the state.

Table 2.1 Population Estimates by Region & County

Region I		
	Divide	2,208
	McKenzie	5,499
	Williams	19,278
		26,985
Region II		
	Bottineau	6,846
	Burke	2,074
	McHenry	5,630
	Mountrail	6,530
	Pierce	4,357
	Renville	2,477
	Ward	56,224
		84,138
Region III		
	Benson	6,968
	Cavalier	4,376
	Eddy	2,601
	Ramsey	11,450
	Rolette	13,823
	Towner	2,575
		41,793
Region IV		
	Grand Forks	64,923
	Nelson	3,445
	Pembina	8,190
	Walsh	11,646
		88,204
Region V		
	Cass	128,615
	Ransom	5,828
	Richland	17,626
	Sargent	4,110
	Steele	2,062
	Traill	8,366
		166,607
Region VI		
	Barnes	11,133
	Dickey	5,456
	Foster	3,492
	Griggs	2,515
	LaMoure	4,504
	Logan	2,099
	McIntosh	3,129
	Stutsman	20,928
	Wells	4,658
		57,914
Region VII		
	Burleigh	72,585
	Emmons	3,913
	Grant	2,623
	Kidder	2,563
	McLean	8,815
	Mercer	8,434
	Morton	25,339
	Oliver	1,875
	Sheridan	1,476
	Sioux	4,141
		131,764
Region VIII		
	Adams	2,429
	Billings	825
	Bowman	3,101
	Dunn	3,437
	Golden Valley	1,770
	Hettinger	2,541
	Slope	742
	Stark	22,116
		36,961
Estimated Population as of July 1st, 2004	**State of North Dakota**	**634,366**

Source: Population Division, U.S. Census Bureau

The population of seniors, arranged by region and county, is presented in Table 2.2. Approximately 15 percent of all North Dakotans, or about 94,478 persons, are seniors. Cass County with 11,901 seniors has the largest elderly population of any county in the state. It is followed closely by Burleigh County with 8,640 and Ward County with 7,341 seniors respectively. The lowest senior populations are in the western part of the state where Billings County and Slope County, home to 142 and 137 seniors, are located. Sioux County with 226 seniors has the lowest percentage of elderly residents with only 6 percent age 65 or older. McIntosh County has the highest percentage of elderly citizens, 37 percent.

The dynamics underlying these figures, especially when focus is placed on the proportion of elderly to total population, are of importance. The emigration of young residents seeking education and employment opportunities from rural areas and the emigration of old residents to adequate health care are notable. Areas with large Native American populations have higher birthrates which partially explains the lower percentages seen in Rolette and Sioux counties.

The number of students enrolled in K-12 institutions is presented in Table 2.3. Given the high correlation between the number of residents of school age and actual enrollees, the data presents a good proxy for individuals ages 5 to 18. Approximately 20 percent or 123,939 residents are enrolled in K-12 schools statewide. This ratio is relatively constant across the state. One exception is locations with large Native American populations, especially Sioux, Benson, and Rolette counties, which have a higher percentage of youth than other areas. The highest student populations are located in Cass, Burleigh, Grand Forks and Ward counties, having 20,881, 12,849, 11,757, and 11,203 students respectively.

There is a significant difference between the numbers reported by the Census and the State Department of Public Instruction which reports that there were 114,000 students in 1999. No reason is identified for the difference.

Table 2.2 Senior Population by Region & County

Region I				Region V			
	Divide	674	30%		Cass	11,901	9%
	McKenzie	900	16%		Ransom	1,250	21%
	Williams	3,261	17%		Richland	2,746	16%
					Sargent	740	18%
					Steele	442	21%
					Traill	1,623	20%
		4,835	18%			18,702	11%
Region II				Region VI			
	Bottineau	1,522	22%		Barnes	2,332	21%
	Burke	562	27%		Dickey	1,229	22%
	McHenry	1,305	23%		Foster	803	23%
	Mountrail	1,174	18%		Griggs	708	27%
	Pierce	1,127	25%		LaMoure	1,100	24%
	Renville	575	23%		Logan	623	29%
	Ward	7,341	13%		McIntosh	1,160	37%
					Stutsman	3,862	18%
					Wells	1,326	28%
		13,606	16%			13,143	22%
Region III				Region VII			
	Benson	941	14%		Burleigh	8,640	12%
	Cavalier	1,107	25%		Emmons	1,107	28%
	Eddy	682	26%		Grant	703	26%
	Ramsey	2,266	20%		Kidder	662	26%
	Rolette	1,325	10%		McLean	1,900	21%
	Towner	670	25%		Mercer	1,233	15%
					Morton	3,693	15%
					Oliver	293	15%
					Sheridan	455	30%
					Sioux	226	6%
		6,991	17%			18,912	14%
Region IV				Region VIII			
	Grand Forks	6,368	10%		Adams	624	25%
	Nelson	1,019	30%		Billings	142	17%
	Pembina	1,674	20%		Bowman	707	23%
	Walsh	2,390	20%		Dunn	625	18%
					Golden Valley	410	22%
					Hettinger	683	27%
					Slope	137	18%
					Stark	3,510	16%
		11,451	13%			6,838	18%
Population as of January 1st, 2000					**State of North Dakota**	**94,478**	**15%**

Source: Population Division, U.S. Census Bureau

Table 2.3 Students Enrolled K-12 by Region & County

Region I				Region V			
	Divide	407	18%		Cass	20,881	16%
	McKenzie	1,454	26%		Ransom	1,181	20%
	Williams	4,161	22%		Richland	3,497	20%
					Sargent	874	21%
					Steele	500	24%
					Traill	1,606	19%
		6,022	22%			28,539	17%
Region II				Region VI			
	Bottineau	1,324	19%		Barnes	2,060	19%
	Burke	408	19%		Dickey	1,047	19%
	McHenry	1,183	21%		Foster	816	23%
	Mountrail	1,464	23%		Griggs	545	21%
	Pierce	894	20%		LaMoure	977	22%
	Renville	521	21%		Logan	421	20%
	Ward	11,203	20%		McIntosh	569	18%
					Stutsman	3,983	19%
					Wells	998	21%
		16,997	20%			11,416	20%
Region III				Region VII			
	Benson	1,927	28%		Burleigh	12,849	18%
	Cavalier	1,031	23%		Emmons	840	21%
	Eddy	522	20%		Grant	552	21%
	Ramsey	2,346	20%		Kidder	507	20%
	Rolette	3,857	28%		McLean	1,858	21%
	Towner	595	22%		Mercer	2,188	26%
					Morton	5,190	21%
					Oliver	500	26%
					Sheridan	322	21%
					Sioux	1,258	31%
		10,278	24%			26,064	20%
Region IV				Region VIII			
	Grand Forks	11,757	18%		Adams	526	21%
	Nelson	730	21%		Billings	183	22%
	Pembina	1,734	21%		Bowman	665	22%
	Walsh	2,438	21%		Dunn	862	24%
					Golden Valley	445	24%
					Hettinger	540	21%
					Slope	157	21%
					Stark	4,586	21%
		16,659	19%			7,964	21%
Population as of January 1st, 2000					**State of North Dakota**	**123,939**	**20%**

Source: Population Division, U.S. Census Bureau

The low-income population arranged by region and county is presented in Table 2.4. About 11 percent of the state's population, 72,714 persons, reported having incomes below the poverty line. The numbers vary greatly across the state with the highest absolute numbers of low-income individuals in Cass, Grand Forks, Ward, and Burleigh counties. These same areas, except for Grand Forks County, also have some of the lowest proportions of low-income individuals.

Benson, Rolette, and Sioux Counties have relatively high proportions of low-income individuals with 29, 30, and 38 percent of their residents with incomes below the poverty line. A number of counties located in the central and south-central part of the state: Emmons, Grant, Kidder, and Sheridan also have relatively large low-income populations.

The number of individuals with go-outside-the-home disabilities is presented in Table 2.5. It is important to note that these individuals self identify and an individual who identifies themselves may have the same abilities as some who identifies themselves otherwise. Statewide there are 32,258 people, approximately 5 percent of state residents, who identify themselves as having such a disability. This percentage is relatively constant across the state.

Table 2.6 presents minority population counts by region and county. On a percentage basis, large Native American populations are present in McKenzie, Mountrail, Benson, Rolette, and Sioux Counties which have minority populations of 1,299; 2,255; 3,423; 10,239; and 3,464 respectively. Counties with urban centers are also home to large populations of minorities, many of whom are Native American though sizable African-American and Hispanic populations as well as new Americans and refugees are present. Cass, Burleigh, Ward, and Grand Forks counties have minority populations of 4,578; 3,210; 2,656; and 2,443 respectively.

Table 2.4 Low-Income Population by Region & County

Region I				Region V			
	Divide	319	14%		Cass	11,987	9%
	McKenzie	968	17%		Ransom	491	8%
	Williams	2,314	12%		Richland	1,744	10%
					Sargent	357	8%
					Steele	158	8%
					Traill	743	9%
		3,601	13%			14,737	9%
Region II				Region VI			
	Bottineau	721	11%		Barnes	1,216	11%
	Burke	344	16%		Dickey	794	14%
	McHenry	936	16%		Foster	339	10%
	Mountrail	1,243	19%		Griggs	272	11%
	Pierce	571	13%		LaMoure	678	15%
	Renville	280	11%		Logan	342	16%
	Ward	6,141	11%		McIntosh	497	16%
					Stutsman	2,125	10%
					Wells	673	14%
		10,236				6,936	12%
Region III				Region VII			
	Benson	1,992	29%		Burleigh	5,237	7%
	Cavalier	548	12%		Emmons	852	21%
	Eddy	259	10%		Grant	565	21%
	Ramsey	1,466	13%		Kidder	537	21%
	Rolette	4,188	30%		McLean	1,231	14%
	Towner	249	9%		Mercer	637	8%
					Morton	2,386	9%
					Oliver	307	16%
					Sheridan	354	23%
					Sioux	1,564	38%
		8,702	21%			13,670	10%
Region IV				Region VIII			
	Grand Forks	7,622	12%		Adams	262	10%
	Nelson	366	11%		Billings	113	13%
	Pembina	769	9%		Bowman	259	9%
	Walsh	1,331	11%		Dunn	620	18%
					Golden Valley	276	15%
					Hettinger	393	15%
					Slope	130	17%
					Stark	2,691	12%
		10,088	11%			4,744	13%
Population as of January 1st, 2000					**State of North Dakota**	**72,714**	**11%**

Source: Population Division, U.S. Census Bureau

Table 2.5 Disabled Population by Region & County

Region I				Region V			
	Divide	84	4%		Cass	4,578	4%
	McKenzie	276	5%		Ransom	352	6%
	Williams	1,087	6%		Richland	1,019	6%
					Sargent	186	4%
					Steele	85	4%
					Traill	407	5%
		1,447	5%			6,627	4%
Region II				Region VI			
	Bottineau	326	5%		Barnes	595	5%
	Burke	96	5%		Dickey	404	7%
	McHenry	437	8%		Foster	227	6%
	Mountrail	305	5%		Griggs	156	6%
	Pierce	310	7%		LaMoure	306	7%
	Renville	137	6%		Logan	252	12%
	Ward	2,656	5%		McIntosh	350	11%
					Stutsman	1,249	6%
					Wells	356	8%
		4,267	5%			3,895	7%
Region III				Region VII			
	Benson	430	6%		Burleigh	3,210	4%
	Cavalier	130	3%		Emmons	388	10%
	Eddy	193	7%		Grant	193	7%
	Ramsey	733	6%		Kidder	213	8%
	Rolette	571	4%		McLean	554	6%
	Towner	109	4%		Mercer	191	2%
					Morton	1,408	6%
					Oliver	99	5%
					Sheridan	151	10%
					Sioux	231	6%
		2,166	5%			7,678	6%
Region IV				Region VIII			
	Grand Forks	2,443	4%		Adams	145	6%
	Nelson	206	6%		Billings	23	3%
	Pembina	358	4%		Bowman	108	4%
	Walsh	933	8%		Dunn	246	7%
					Golden Valley	115	6%
					Hettinger	224	9%
					Slope	42	6%
					Stark	1,335	6%
		3,940	4%			2,238	6%
Population as of January 1st, 2000					**State of North Dakota**	**32,258**	**5%**

Source: Population Division, U.S. Census Bureau

Table 2.6 Minority Population by Region & County

Region I				Region V			
	Divide	23	1%		Cass	6,032	5%
	McKenzie	1,299	23%		Ransom	122	2%
	Williams	1,394	7%		Richland	570	3%
					Sargent	77	2%
					Steele	38	2%
					Traill	228	3%
		2,716	10%			7,067	4%
Region II				Region VI			
	Bottineau	199	3%		Barnes	246	2%
	Burke	17	1%		Dickey	128	2%
	McHenry	76	1%		Foster	37	1%
	Mountrail	2,255	35%		Griggs	19	1%
	Pierce	70	2%		LaMoure	36	1%
	Renville	59	2%		Logan	19	1%
	Ward	4,468	8%		McIntosh	38	1%
					Stutsman	541	3%
					Wells	45	1%
		7,144	8%			1,109	2%
Region III				Region VII			
	Benson	3,423	50%		Burleigh	3,450	5%
	Cavalier	92	2%		Emmons	41	1%
	Eddy	100	4%		Grant	88	3%
	Ramsey	928	8%		Kidder	14	1%
	Rolette	10,239	75%		McLean	696	8%
	Towner	77	3%		Mercer	342	4%
					Morton	1,057	4%
					Oliver	50	3%
					Sheridan	13	1%
					Sioux	3,464	85%
		14,859	35%			9,215	7%
Region IV				Region VIII			
	Grand Forks	4,630	7%		Adams	39	2%
	Nelson	53	2%		Billings	11	1%
	Pembina	387	5%		Bowman	33	1%
	Walsh	637	5%		Dunn	483	14%
					Golden Valley	43	2%
					Hettinger	29	1%
					Slope	2	0%
					Stark	562	3%
		5,707	6%			1,202	3%
Population as of January 1st, 2000					**State of North Dakota**	**49,019**	**8%**

Source: Population Division, U.S. Census Bureau

The estimated number of individuals without vehicles in their households, arranged by region and county, are presented in Table 2.7. These numbers have been calculated using data from the U.S. Census by multiplying the number of households without vehicles times the average household size. Many of these households consist of elderly individuals whose household size is significantly smaller than the average. At the same time, many households without vehicles have low-incomes which traditionally have larger household sizes than the average. Data on actual personal automobile registration are presented in Chapter 4.

Statewide there are an estimated 42,739 individuals without vehicles; this is approximately 7 percent of the state's population. Low values are present in the western part of the state such as Slope County where every individual has access to a vehicle. Large numbers of individuals without vehicles are present in Cass County where 8,572 people are without access.

Data for the demographic categories presented thus far are presented for the selected cities in Table 2.8. Though demographic characteristics of these areas are relatively similar, there are some differences. Valley City, Devils Lake, and Grafton have relatively high proportions of seniors with 24, 22, and 20 percent of the total population over the age of 65. Only 6 percent of West Fargo's population is in that category. Sixteen percent of Devils Lake's population reported having low incomes while West Fargo, Beulah-Hazen, and Bismarck have low percentages of 6, 7, and 8 percent.

The size of disabled populations is similar across cities with the exception of Grafton, home to the State Developmental Center, where 11 percent of the population has a going-outside-the-home disability. Devils Lake has a relatively high number of Native Americans, 11 percent, while only 3 percent of Jamestown's and Valley City's populations are minority. Devils Lake also has a high proportion of individuals without vehicles, 14 percent, while West Fargo and Beulah have smaller ones. The relative size of the student population is quite similar with the exception of Beulah-Hazen where nearly 30 percent of the population consists of students enrolled in K-12.

Table 2.7 Individuals without Vehicles Population by Region & County

Region I				Region V			
	Divide	114	5%		Cass	8,572	7%
	McKenzie	355	6%		Ransom	376	6%
	Williams	1,277	7%		Richland	967	5%
					Sargent	208	5%
					Steele	68	3%
					Traill	447	5%
		1,745	6%			10,638	6%
Region II				Region VI			
	Bottineau	273	4%		Barnes	839	8%
	Burke	142	7%		Dickey	293	5%
	McHenry	363	6%		Foster	195	6%
	Mountrail	370	6%		Griggs	203	8%
	Pierce	290	6%		LaMoure	191	4%
	Renville	99	4%		Logan	98	5%
	Ward	3,950	7%		McIntosh	194	6%
					Stutsman	1,789	8%
					Wells	297	6%
		5,487	6%			4,099	7%
Region III				Region VII			
	Benson	646	9%		Burleigh	4,784	7%
	Cavalier	153	3%		Emmons	245	6%
	Eddy	185	7%		Grant	197	7%
	Ramsey	1,149	10%		Kidder	200	8%
	Rolette	1,447	11%		McLean	461	5%
	Towner	156	6%		Mercer	357	4%
					Morton	1,653	7%
					Oliver	68	4%
					Sheridan	91	6%
					Sioux	502	12%
		3,736	9%			8,558	7%
Region IV				Region VIII			
	Grand Forks	4,525	7%		Adams	153	6%
	Nelson	219	6%		Billings	10	1%
	Pembina	413	5%		Bowman	107	4%
	Walsh	783	7%		Dunn	196	6%
					Golden Valley	76	4%
					Hettinger	163	6%
					Slope	0	0%
					Stark	1,832	8%
		5,940	7%			2,537	7%
Computed Population as of January 1st, 2000					**State of North Dakota**	**42,739**	**7%**

Source: Population Division, U.S. Census Bureau

Table 2.8 Demographic Data for Selected North Dakota Cities

	Total*	Senior^		Low-Income^		Disabled^		Minority^		Individuals+ w/o Vehicles		Student^	
Beulah-Hazen	5,465	790	14%	381	7%	143	3%	205	4%	292	5%	1,570	29%
Bismarck	56,344	7,637	14%	4,493	8%	2,742	5%	2,898	5%	4,421	8%	11,145	20%
Devils Lake	6,971	1,542	22%	1,110	16%	554	8%	778	11%	956	14%	1,538	22%
Dickinson	15,683	2,551	16%	1,819	12%	959	6%	454	3%	1,592	10%	3,476	22%
Fargo	91,484	9,139	10%	10,305	11%	3,415	4%	5,278	6%	7,270	8%	17,033	19%
Grafton	4,299	863	20%	534	12%	477	11%	376	9%	428	10%	878	20%
Grand Forks	48,618	4,834	10%	6,631	14%	1,988	4%	3,281	7%	3,960	8%	10,692	22%
Jamestown	15,158	2,784	18%	1,511	10%	943	6%	490	3%	1,606	11%	3,005	20%
Mandan	16,781	2,180	13%	1,648	10%	869	5%	839	5%	1,202	7%	3,675	22%
Minot	35,424	5,622	16%	4,535	13%	2,055	6%	2,493	7%	3,091	9%	7,037	20%
Valley City	6,420	1,572	24%	776	12%	404	6%	178	3%	720	11%	1,248	19%
Wahpeton	8,443	1,139	13%	1,002	12%	521	6%	389	5%	665	8%	2,104	25%
West Fargo	16,431	969	6%	919	6%	551	3%	538	3%	629	4%	3,528	21%
Williston	12,224	2,098	17%	1,653	14%	764	6%	789	6%	967	8%	2,856	23%

Population followed by Percent of Total Population

*Estimated Population as of July 1st, 2003; ^ Population as of January 1, 2000; + Computed Population as of January 1, 2000

Source: Population Division, U.S. Census Bureau

2.4 Population Projections

The values presented thus far represent a snapshot of the state's people that is now more than 5 years old with the exception of the total population estimates which are for July 1, 2003. The dynamic nature of the mobility profile is important to policy makers as their goal is to address current needs not those of circumstances past. To understand the composition of the future population of the state, projections are made.

The basic concept behind population projections is that past behaviors, such as birthrate, mortality, and migration patterns, will continue in the future. This ignores the impact of public policy as well as the changes that would result from a change in economic climate.

Table 2.9 presents the projected population of North Dakota youth, those ages 5 to 19; seniors, those 65 and older; and the total population every five years from 2005 to 2025, in addition to the decennial census counts from the year 2000. The values are different than other projections that have been made, such as those by Rathge, Clemenson, Danielson (2002); however, this is not unexpected as such calculations often use different data and require subjective decisions regarding the model's formal construction. Of primary interest is the decrease in the number of youth while at the same time the number of seniors increases dramatically.

Table 2.9 North Dakota Population Projection 2005 to 2025

Age	2000		2005		2010		2015		2020		2025	
5-19	144,064	22%	126,660	20%	116,801	18%	111,460	17%	114,327	18%	116,677	18%
65+	94,478	15%	95,948	15%	99,444	16%	109,066	17%	123,951	19%	140,008	21%
Total	642,200		638,014		638,077		643,662		652,498		664,439	

Source: Ripplinger, Small Urban & Rural Transit Center, 2005

Looking at the total population at the regional level provides a more local understanding of the projected population dynamics within the state over the next 20 years. Regions with larger urban areas, such as Region V, which includes the city of Fargo, and Region VII, in which Bismarck is located, are projected to experience an increase in population. The remaining regions are projected to have relatively stable or slightly declining populations. Those interested in more in-depth discussion and data on North Dakota population projections are referred to the study by Rathge, Clemenson, Danielson (2002) or a forthcoming paper that focuses on populations that face mobility challenges by Ripplinger.

Table 2.10 Regional Population Projections, 2005 to 2025

Region	2000	2005	2010	2015	2020	2025	% Change 2000-2005
Region I	27,781	26,137	25,003	24,280	23,865	23,616	-18%
Region II	88,089	85,443	84,381	84,159	84,617	85,469	-3%
Region III	43,168	41,345	40,012	39,406	39,171	38,983	-11%
Region IV	90,798	87,309	84,367	82,851	82,082	82,500	-10%
Region V	162,127	169,108	175,326	181,388	187,029	193,343	16%
Region VI	61,454	59,821	58,856	58,802	59,308	60,195	-2%
Region VII	130,418	131,426	133,174	135,802	139,050	142,437	8%
Region VIII	38,365	37,426	36,958	36,975	37,376	37,894	-1%

Source: Ripplinger, Small Urban & Rural Transit Center, 2005

2.5 Concentrations of Need – Mobility Needs Index

Developing an accurate, low-cost, reliable method of measuring mobility needs in a community is difficult. A generally accepted methodology does not currently exist, in part because any model adopted would likely be subjective in nature and vulnerable to some degree of criticism. An original theoretical model could be constructed; however, the cost of collecting, manipulating, and analyzing the data would almost certainly limit its pragmatic value. A method of ranking regions based on readily available data is used instead. This Mobility Needs Index, as it is referred to, is intended to provide an immediately intelligible measure of mobility needs.

It is important to note that this methodology is only an attempt to measure needs associated with identifiable demographic groups. This measurement does not suggest that all related needs are unmet. To the contrary, some cities may have systems and services in place that are satisfying many of their residents' mobility needs.

2.6 The Model

The Mobility Needs Index ranks the relative mobility needs of each of *n* predetermined geographic regions using a three step process that make use of *m* subjectively chosen variables that are related in some way to immobility. The first step scales the data value of a particular characteristic, v_{ij}, where *i* indexes the *n* regions and *j* indexes the *m* variables, by the physical area of the region, a_i, as described by (1). This data, arrayed in a *n*-row vector, $\overline{V}_j$, is then used to determine the quartile contained in the vector, $\overline{q}_j$, to which a particular region-variable combination belongs (2). A simple average of a region's *m* quartile values completes the three step process (3).

$$V_{ij} = \frac{v_{ij}}{a_i} \qquad \text{for } i = 1, 2, \ldots n;\ j = 1, 2, \ldots m \qquad (1)$$

$$\overline{q}_j = Q(\overline{V}_j) \qquad \text{for } j = 1, 2, \ldots m \qquad (2)$$

$$I_i = \sum_{j=1}^{m} \frac{q_{ij}}{m} \qquad \text{for } i = 1, 2, \ldots . n \qquad (3)$$

The process thus ranks all regions on a scale of one to four with higher values identifying areas with greater mobility needs.

2.7 The Data

Determining what characteristics of a community affect its relative degree of mobility is an exercise in subjectivity. The cost of quality data collection and compilation is another concern. By making use of data collected by decennial census the latter apprehension is addressed. A side benefit is that this data is collected using a single instrument. This eliminates the need to accommodate the challenge of making use of data drawn from various samples taken at different times. The factors that were deemed important are those discussed previously in the chapter: the population of elderly, elementary and high school students, low-income individuals, the disabled, minorities, and individuals in households without vehicles.

Unfortunately, data on these populations are not readily available in cross tabulations so double counting does occur. However, by making the assumption that there is a proportional relationship for those with mobility challenges this may actually be a benefit. This would assert that, among other things, a low-income senior has twice the need of an individual in a household without an automobile. The model also requires that the marginal impact of an additional individual with a particular characteristic has the same impact on a community's mobility needs, which is clearly erroneous.

2.8 Mobility Needs Index Values

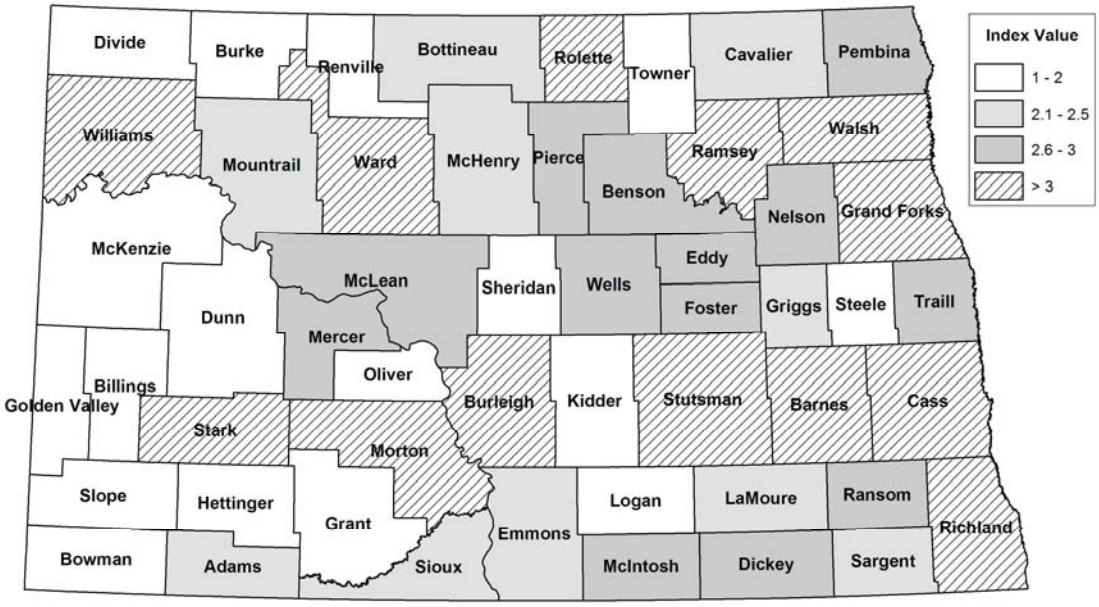
The values calculated for North Dakota's 53 counties are presented in Table 2.11 and Figure 2.3. The results are relatively intuitive as highly populated counties, such as Burleigh, Cass, Grand Forks, and Ward, have high values. Counties with relatively high minority populations have high values as is the case with Benson, Rolette, and Sioux.

As indicated earlier, this index is an attempt to measure concentrations of mobility needs. Resulting indices should not be interpreted to mean that all related needs are unmet; this is certainly not the case.

Table 2.11 Mobility Needs Index Value for North Dakota Counties (including major cities)

IIV	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

Source: Small Urban & Rural Transit Center, 2005



Source: Small Urban & Rural Transit Center, 2005

Figure 2.3 Mobility Needs Index Map I (including select cities)

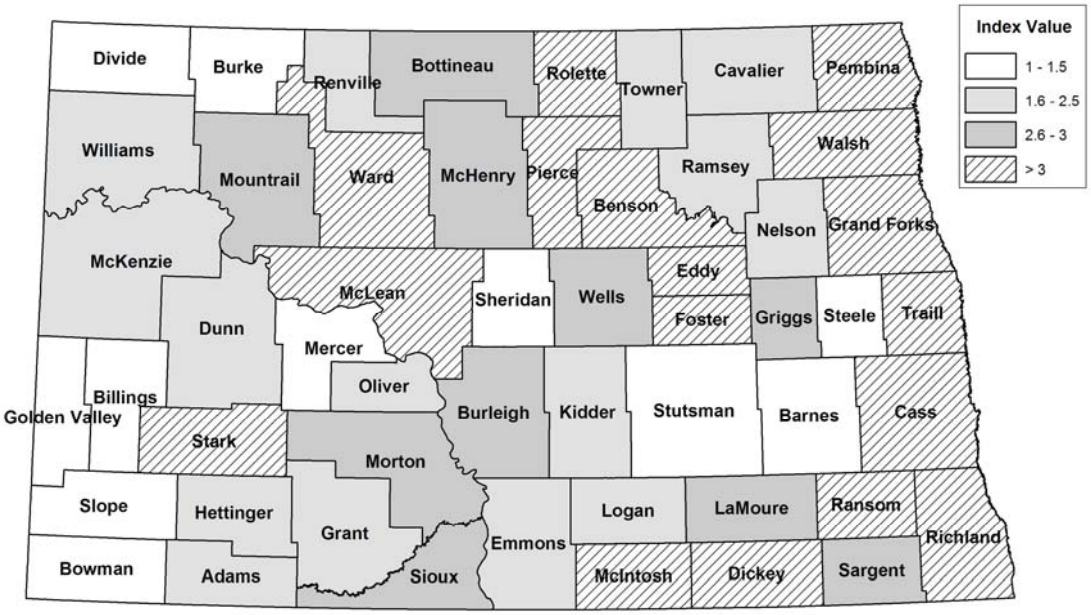
2.9 Removing Selected Cities

The presence of cities is hypothesized to have a definitive, positive effect on a region's Mobility Needs Index Value. In order to isolate this effect, the 14 selected cities identified previously in the chapter were removed, and value for the state's 53 counties were re-tabulated, with the results shown in Table 2.12 and Figure 2.4.

Table 2.12 Mobility Needs Index Values for North Dakota Counties
(exclusive of select cities)

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

Source: Small Urban & Rural Transit Center, 2005



Source: Small Urban & Rural Transit Center, 2005

Figure 2.4 Mobility Needs Index Map: North Dakota Counties Excluding City Data

A side by side comparison of Mobility Needs Index Values is presented in Table 2.13. Though there is a noticeable effect, the results were not a strong as expected. There appears to be a positive effect on the values in the counties with large Native American populations. Predominantly urban counties still had relatively high Mobility Needs Index Values while the opposite behavior was observed in rural counties, particularly those in western North Dakota. These results weakly support the hypothesis that the non-urban parts of a county with a large city are relatively similar to counties without ones. This is likely due to the impact urban areas have on adjacent, less urbanized areas.

Table 2.13 Mobility Needs Index Values for North Dakota Counties: Comparison

	MNIV With Cities	MNIV Without Cities		MNIV With Cities	MNIV Without Cities
Adams	2.2	1.8	McLean	2.6	3.4
Barnes	3.2	1.2	Mercer	2.6	1.4
Benson	2.8	3.6	Morton	3.4	2.8
Billings	1.4	1.0	Mountrail	2.4	3.0
Bottineau	2.4	2.6	Nelson	2.6	2.4
Bowman	1.4	1.2	Oliver	1.4	1.8
Burke	1.6	1.2	Pembina	3.0	4.0
Burleigh	3.6	3.0	Pierce	2.8	3.2
Cass	3.8	3.4	Ramsey	3.6	2.0
Cavalier	2.2	1.8	Ransom	2.8	3.6
Dickey	2.8	3.6	Renville	2.0	2.0
Divide	1.6	1.2	Richland	3.2	3.4
Dunn	1.4	1.6	Rolette	3.2	4.0
Eddy	3.0	3.4	Sargent	2.2	3.0
Emmons	2.2	2.4	Sheridan	1.8	1.4
Foster	2.6	3.4	Sioux	2.4	3.0
Golden Valley	1.4	1.2	Slope	1.2	1.0
Grand Forks	3.4	4.0	Stark	3.2	3.2
Grant	1.6	1.6	Steele	1.6	1.4
Griggs	2.4	2.6	Stutsman	3.2	1.2
Hettinger	1.8	1.8	Towner	2.0	1.8
Kidder	1.8	1.6	Traill	3.0	4.0
LaMoure	2.4	2.6	Walsh	3.6	3.6
Logan	1.8	1.8	Ward	3.4	3.6
McHenry	2.4	2.8	Wells	2.6	2.8
McIntosh	2.6	3.2	Williams	3.6	2.4
McKenzie	1.8	2.0			

Source: Small Urban & Rural Transit Center, 2005

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3. Literature Review – Other States' Mobility Plans

Much has been written in the past 30 years about personal mobility issues from both urban and rural perspectives. A review of applicable literature is discussed in this section of the study. While urban mobility studies have focused largely on funding and coordination efforts within communities, rural studies often highlight service shortfalls and necessary measures to fill these mobility needs.

The first section of the literature review looks at different transportation mode research findings such as bus transit, rail transit, and aviation. This is followed by a review of performance measures utilized to determine service shortfalls. Methods to fix these shortfalls, such as ITS (Intelligent Transportation Systems) technologies and coordination efforts between modes are then discussed followed by a summary of the findings.

3.1 Transportation Systems

Transportation systems vary widely in their scope and usage throughout the country. The following discussion highlights studies which have analyzed different modes to determine their structures and unique features. Different studies approach their analysis from varying points of view. Some studies begin by stating broad definitions of a transportation mode and what features it should include, while others bypass the general analysis preferring to start with the specifics of their local systems. This section begins with bus transit findings followed by rail transit, aviation, and finally bicycle and pedestrian system analysis.

3.1.1 Successful Bus Transit Characteristics

The Louisiana Statewide Surface Transportation Plan of 2003 began by defining the characteristics of a successful public transportation system. Characteristics included providing inexpensive mobility for the transportation disadvantaged in both urban and rural areas, reducing congestion, reducing traffic accidents, and reducing energy consumption, among others (University of New Orleans, 2003). To accomplish these goals, an efficient and economical public transportation system is needed.

The question of what qualifies a transportation system as being a model for the industry was included in a questionnaire distributed to the attendees of the surface passenger advisory council meeting in New Orleans, Louisiana. Responses indicated that public transportation management should be efficient and effective. Solid management, cooperation between providers, and marketing of public transportation are important elements of public transportation which can contribute to its efficiency and effectiveness (University of New Orleans, 2003).

The important equipment qualities of a public transportation system were found to include comfort, reliability, security, safety, cleanliness, and modern appearance. The system's routes

and services are other features of a good transportation system. Responses indicated that public transportation should provide service to the transit-dependent population, elderly, handicapped, and minorities. Also there should be intrastate connectivity. From a passenger's point of view, service should be reliable and vehicles should arrive on time. Frequency of service is another qualification for a good transit system (University of New Orleans, 2003).

Affordability is another aspect that was found to be important in a successful public transportation system. In the industry, additional criticisms of the current pricing system can be found. This includes the current flat-fare pricing system, where fares do not vary with either distance traveled or time of day. Intermodal connectivity, for example between bicycle and bus, between bus and train, and between bus and automobile is another element of a good transit system.

3.1.2 Bus Transit Issues and Shortcomings

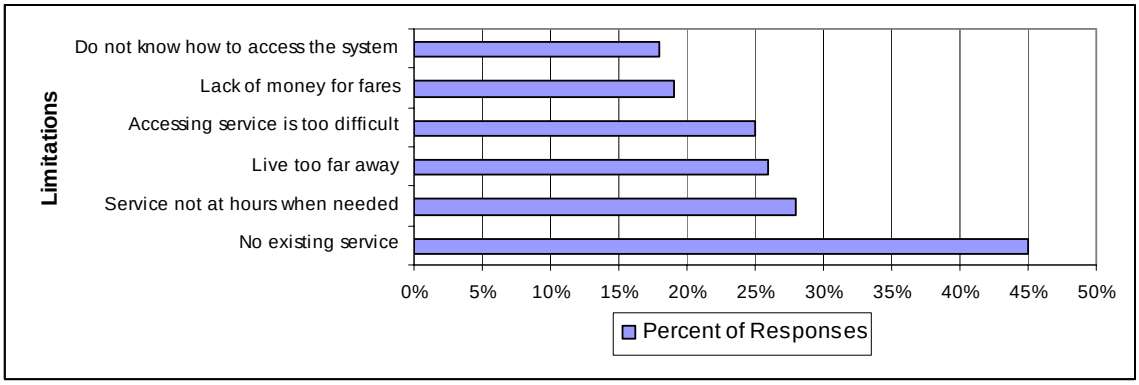
A Montana rural passenger-needs study conducted in 2001 by LSC Transportation Consultants, Inc. surveyed social service providers to gain information about the transportation needs of the low income, elderly, and disabled from the perspective of organizations that work closely with these mobility-impaired populations. Social service agencies were interviewed via written questionnaire about the transportation needs of the populations they serve. Approximately 130 agencies from across the state completed the questionnaire (LSC Transportation Consultants, Inc., 2001).

Nearly all responding social service agencies (95 percent) indicated they serve people who have mobility limitations. On average, agencies estimate that 53 percent of the individuals they serve have one or more mobility limitations. This supports the idea that disadvantages such as physical disabilities, poverty, unemployment, or health problems often result in a lack of mobility for passengers. Age-related mobility impairments were found within 86 percent of the reporting agencies (LSC Transportation Consultants, Inc., 2001).

The majority of agencies that provide transportation to their clientele use an agency vehicle. Only 26 percent of agencies charge participants for their transportation services. Agencies that provide transportation assistance usually identify public funding sources to aid in subsidizing their transportation needs. Responses indicated that 42 percent of agencies receive funding from their local city, county, or special district; 54 percent receive funding through donations, the United Way, fund raising, or volunteer workers; 47 percent receive state aid; and 51 percent receive federal aid (LSC Transportation Consultants, Inc., 2001).

The majority of agencies (71 percent) limit the transportation that they provide to specific groups of participants and specific types of trips. Twenty-nine percent of agencies that supply transportation place no restrictions on who can use the services or how the services can be used. Over half (68 percent) of the restrictions are limits placed by the funding source. About three out of ten agencies also have their own agency policies limiting eligible travelers or trips (LSC Transportation Consultants, Inc., 2001).

Agencies indicated a number of reasons that services via public transportation may be limited. Figure 3.1 shows the primary responses. Nearly half of agencies indicated that no existing service was in place; hours of service and the location of the service provided were other limitations of current services.



Source: LSC Transportation Consultants, 2001

Figure 3.1 – Limitations of Public Transportation in Montana

Agencies were also asked how important they feel public transportation improvements are for seniors and people with disabilities in their community. Improvements needed that ranked the highest included:

- Greater number of door-to-door rides,
- Service easier to use for seniors and persons with disabilities,
- Longer hours of operation,
- More days of operation, and
- More wheelchair accessible vehicles.

Louisiana's Statewide Surface Passenger Transportation Plan (University of New Orleans, 2003) found that its urban public transportation systems are continuing to lose ridership. This study defined urban public transportation systems as those using more than nine vehicles. During the last four years, annual unlinked passenger trips decreased by 5 percent. With the exception of the Baton Rouge Capital Transportation Corporation (CTC), which has shown strong growth in recent years, and ATRANS in Alexandria, Louisiana, all other systems witnessed a downward ridership trend including the New Orleans Regional Transit Authority (RTA), the largest transit system in the state.

Primary reasons for the downward ridership trend included unreliable service, limited service to many high need locations, and limited regional service as the demand for such service continues to increase. The ridership increase for the CTC in Baton Rouge was largely due to an increase in transit equipment, new and expanded routes, provision of night service, reduced headways and more buses on selected routes (University of New Orleans, 2003).

Another major issue within the Louisiana study was the problem created by different programs that federal and state departments provide for specialized public transportation to various state departments. Different state departments receive funding from different programs for specialized transportation (non-emergency, medical, job access/reverse commute) from different federal departments, primarily the U.S. Department of Transportation, the U.S. Department of Health and Human Services, and the U.S. Department of Labor (University of New Orleans, 2003). The multitude of different programs and funding categories has resulted in a duplication of many services throughout the state. In 1997, the governor's office established the Inter-Agency Transportation Coordination Committee (IATCC) to address this issue.

Because of the different funding programs, agencies with transportation as their primary mission (public transit agencies and agencies with other primary missions, i.e. human service agencies) are now both involved in specialized transportation services. This situation continues to cause problems. State departments receive money and distribute it to the local level, where decisions are made on how funds are spent. For example, a local community could decide the funds originally allocated for specialized transportation of the mentally handicapped be used instead for nutrition programs. Thus, specialized transportation funds are not always used for their intended purpose.

Also, if funding forwarded to the district office from the state department is used to provide specialized transportation, district offices have the freedom to choose which provider will be used. During an advisory council meeting for the Louisiana study it was suggested that on the state level it should be required that all government programs with a transportation benefit should use the public transportation provider first, before using private operators. The advisory council felt this would increase the service level and consequently customers would benefit (University of New Orleans, 2003).

Another issue is inadequate local match funding for transit, which is currently 20 percent for capital projects. It should be noted, however, that pending federal legislation proposes increasing the local match requirement to 40 - 50 percent (University of New Orleans, 2003). This is especially important for Louisiana cities, given their high level of poverty and weak economic conditions.

Transit service is limited throughout many areas in Louisiana. One of the major concerns remains the low service levels in rural areas. Further, many times there is a lack of inter-community coordination between the urban areas and surrounding rural areas. For example, the urban transit system in New Orleans, the RTA, mainly provides service within the city limits. There has been very little cooperation with surrounding communities until very recently. The service in the Alexandria urban areas is adequate; however, there exists very little connectivity to the rural areas. This leaves people in the rural areas with no alternative but to use private automobiles.

The following list summarizes the deficiencies in different areas of Louisiana as identified in the surface passenger advisory council meeting in 2002 (University of New Orleans, 2003):
.

- Management
    - Shoestring operations of most rural systems
    - Inadequate match for federal transit funds
- Qualities of Public Transit Systems
    - Safety and security concerns
- Routes/Service
    - Limited transit service in Louisiana
    - Schedule and headways are limited

3.1.3 Rail Transit

The following data is based on a recent on-board survey conducted for Amtrak (Amtrak, 2004). Results of the survey on a national basis indicate:

- “Vacation” and “visiting family and friends” accounted for roughly 50 percent of the stated reasons for traveling.

- 66 percent of passengers planned on being away from home for six days or more.
- The average number of nights spent away from home was nine.
- Relative to which mode of travel was used, for pleasure trips of 250 miles or more, respondents traveled by car 56 percent, train 37 percent, and airplane 20 percent most frequently.

These results indicate that most Amtrak passengers utilize the service for long-distance, multi-day trips. Service and comfort while aboard the train are main factors to consider when such trips make up the normal travel pattern. In recent years, with the introduction of new management techniques paying special attention to passenger service, Amtrak ridership and revenues have increased significantly. The state of Louisiana, for example, has seen a more than 30 percent increase in ridership over the past five years (University of New Orleans, 2003).

Amtrak's improvements towards passenger appreciation and increased ridership largely stem from the Amtrak Reform and Accountability Act of 1997. Since the act was signed, Amtrak has been operating under a mandate to become "operationally self-sufficient" by fiscal year 2003. The Amtrak Reform Council was created to serve as an oversight body to monitor Amtrak's progress towards this goal. This law also provided Amtrak access to $2.2 billion in fund capital and other qualified expenses. The law also specified that "if any time after October 2000 the council finds Amtrak will not meet the goal of operational self-sufficiency by fiscal year 2003, plans for Amtrak's restructuring or liquidation must be prepared" (University of New Orleans, 2003).

On November 9, 2001, the Amtrak Reform Council voted six to five to report formally to Congress that it believes Amtrak will continue to require operating grants after November 2002 and therefore miss the requirement of the 1997 law regarding operational self-sufficiency. As a result of these findings, Amtrak President George Warrington resigned on March 7, 2002. His replacement, David Gunn, was appointed by the board of directors on May 15, 2002. Mr. Gunn has had a successful career heading transit and commuter rail systems in New York, Washington, and Boston and has instituted a new management structure for Amtrak. Amtrak's increased quality service, which has lead to the ridership spike, is believed to be largely due to Mr. Gunn's new vision and direction.

Minnesota and North Dakota receive Amtrak service via the Empire Builder, a long-distance train from Seattle/Portland to Chicago. Stations in North Dakota include Fargo, Grand Forks, Devils Lake, Rugby, Minot, Stanley, and Williston. Currently, one train serves these cities going eastbound and a second train travels westbound daily. Amtrak has identified potential service expansion of an additional train in each direction.

A tri-state high-speed rail feasibility study was conducted to evaluate the potential for various high-speed rail options in the Chicago-Milwaukee-Twin Cities corridor. This study considered incremental improvements from one speed threshold to another for long-range (five to fifteen-year) planning and implementation. It was designed to provide policy makers with information to evaluate and choose among route/technology alternatives, including the financial and institutional arrangements needed and a realistic timetable for successful implementation (MN Department of Transportation, 2003).

The Duluth passenger rail study was a preliminary study conducted by the Minnesota Department of Transportation (MN/DOT), which concluded that the potential exists to restore passenger train service between the Twin Cities metropolitan area and Duluth. Previously served by Amtrak, the 160-mile route was re-examined at the request of the Legislature to potentially renew the region's

economic vitality, its historic demand for tourism and development of a major casino in Hinckley, MN. A similar study was done in Rochester, MN. The purpose of this study (Rochester rail link study) was to determine the feasibility of connecting the Minneapolis-St. Paul International Airport to Rochester International Airport with a high-speed rail line to move both passengers and cargo. The primary goal of this study was to determine if such a rail link could provide a viable transportation option for the Twin Cities and Rochester metropolitan areas (MN Department of Transportation, 2003).

MN/DOT‘s role in passenger rail transit is to develop and administer the state and federal programs for passenger rail transit. The rail planning function is responsible for developing passenger rail transit plans that guide public investment and provide necessary information about commuter rail, light-rail-transit and inter-city rail transportation in Minnesota. MN/DOT is also responsible for overseeing the delivery and construction of commuter rail and light rail projects (MN Department of Transportation, 2003).

Iowa also has produced studies focusing on the further development of passenger rail service within that state. Although there is no direct investment identified for rail passenger services in Iowa, efforts in monitoring and planning for rail passenger services continue. One effort underway is the Midwest Rail Initiative. Iowa is participating with eight other midwestern states, Amtrak and the Federal Railroad Administration in a study to determine the feasibility of a Midwest rail system. Three Iowa routes between Chicago and Omaha will be analyzed, including the Burlington Northern Santa Fe route in southern Iowa, the Union Pacific route through central Iowa, and the Iowa Interstate route in central Iowa (IA Department of Transportation, 1997).

Another Iowa effort will include an intermodal approach to develop an integrated intercity passenger service network. The department will analyze both east-west and north-south rail passenger service, along with commercial air and intercity bus, to identify the appropriate service levels to meet intercity travel needs. Results of these continuing efforts may suggest that investments in rail passenger service are necessary. If this is the outcome, further investments will be recommended and plan modifications will be made (IA Department of Transportation, 1997).

3.1.4 Bicycle and Pedestrian

A main provision of most transportation plans is to make bicycling and walking safer and a more viable way of travel. States have been using the funding available to make considerable improvements to their bicycle and pedestrian infrastructure. Louisiana, for example, has only recently begun to address these issues. A state-level staff person coordinates bicycle projects and metropolitan planning organizations and various municipalities have been increasing their efforts to acquire increased funding to provide local bicycle and pedestrian facilities (University of New Orleans, 2003).

An important element in improving bicycle and pedestrian facilities is the consideration of bicycle and pedestrian infrastructure, where feasible, as an integral part of the design process for highway and transit projects. This includes not just recreational facilities but also consideration of those for whom bicycling and walking are their main forms of transportation. For example, state highway projects should consider the feasibility of wide shoulders for use by bicycles; the replacement of bridges should consider dedicated bike lanes and pedestrian walkways. Transit projects should consider getting bicycles onto buses or improving bicycle facilities at transit hubs as well. Improving bicycle and pedestrian facilities in Louisiana relates to planning which aims

to protect and enhance the environment, promote energy conservation, and improve quality of life (University of New Orleans, 2003).

Most of Iowa's existing bicycle and pedestrian facilities do not serve explicit transportation purposes because they do not link major traffic generators to one another and they are designed to serve mostly recreational trips. Even so, interest in bicycling in Iowa has grown significantly in past years and is expected to continue to grow. Bicyclists carry the same rights and responsibilities as motor vehicle drivers and are legal on virtually all public roadways with the exception of the interstate system. Through public input it was determined Iowans want consideration of on-road improvements in highway and bridge design and continued financing of recreational trails with non-road use tax funds (IA Department of Transportation, 1997).

As a result of the above public input, the following investment guidelines which support the plan's overall themes have been developed for Iowa's bicycle and pedestrian system. These include:

- Safety,
- Efficiency,
- Preservation,
- Economic development, and
- Balance.

In addition to the availability of a roadway system that serves bicyclists and pedestrians, Minnesota leads the country in miles of bicycle and pedestrian trails. These bikeways serve as an alternative mode of transportation for many Minnesotans that commute, shop and travel relatively short distances to their destinations. Nearly two out of three Minnesotans are bicyclists, many riding on the approximately 1,300 miles of trail available throughout the state (MN Department of Transportation, 2003).

Particularly in metropolitan and urban areas of Minnesota, walking is a primary mode of transportation. Whether an individual walks several times a day, uses a wheelchair to get from an office to the bus stop, rides a skateboard through the park, or walks across the parking lost from a car to the grocery store entrance, there is a strong need for well-designed and properly functioning pedestrian facilities. The highest level of pedestrian activity is currently found in urban areas, class one regional trade centers and some first ring suburbs. It is estimated that pedestrian-based trips reflect approximately 5.4 percent of total trips taken. The 2000 U.S. Census reported that the percent of workers 16 years and older who walked to work was 3.3 percent, down from 3.9 percent in the 1990 census (MN Department of Transportation, 2003).

The MN/DOT plays a key role in the development of biking and walking as a mode of transportation. Primary among those roles is to provide leadership and support for bicycle and pedestrian accommodation efforts in Minnesota communities. This is performed through a variety of functions, including:

- Advocating for the modes within the context of MN/DOT plans, policies, standards, and projects;
- Participating in community dialogues on the impact of land use on transportation, and vice versa;
- Developing research efforts to determine transportation needs and satisfaction levels;
- Developing strategic plans based of legislative guidance and market research to solve transportation problems;

- Preparing policies and standards for bike and pedestrian facility development; and
- Contributing to infrastructure databases through user-friendly bikeway mapping.

(MN Department of Transportation, 2003).

3.1.5 Aviation

Components of air travel are a combination of time in the air, time at the airport, and time on the ground spent getting to and from a location. The US DOT "Intermodal Ground Access to Airports: A Planning Guide" (US DOT, 1994), reports the following facts found by surveying large hub airports, conducted in 1994, which are still applicable today:

- The growth potential of airport facilities will be limited as access to airports becomes more difficult and time-consuming;
- Accessibility to the airport is becoming more of a determining factor in a traveler's airport preference;
- Important factors in the use of an airport are quality of service, cost of a ticket, travel time to the airport and parking costs; and
- The preference by passengers for automobile-based airport access and the increased demands for facilities to accommodate those automobiles will continue to put pressure on access facilities.

Coordination between the roadway system and the airside of an airport is imperative to ensure adequate height clearance (for roadway lights and signs in the approach slope of a runway), adequate access, capacity, and signage.

Washington state's urban and rural communities are served by an airport system that provides mobility to Washington's citizens, visitors, and other traveling public. The strong performance by Washington's airports has been integral in the development and sustaining of the state's role in international trade. The economic benefits of major airports are well known and acknowledged, but less well known are the benefits to the state and rural communities provided by rural airports (Newkirk and Casavant, 2002).

Washington's study on the functioning and benefits of rural airports in their state identifies the wide range of benefits that rural communities receive because they have an airport. Study objectives included:

- Describe the economic environment within which rural communities operate,
- Understand why flights are made in order to understand how the community is served by aviation-related and other activities that use rural airports,
- Identify the benefits communities receive and how rural airports are integrated into the fabric of these communities, and
- Investigate strategies for decision makers concerned about the vitality of rural airports.

Case studies were performed in rural communities throughout the state. Communities included the Forks area, located in the northwest corner of Washington, the Omak area in Okanogan County in North Central Washington, and the Goldendale/Dallesport area in Klickitat County bordered by the Columbia River and Oregon in South Central Washington. The focus of the study was on the benefits that communities derive from rural airports and intentionally did not identify the specific benefits of each individual airport.

By design and with the agreement of the Aviation Division of the Washington Department of Transportation (WA/DOT), questions were of such a nature as to preclude using the information to discriminate, compare, or contrast one airport with another (Newkirk and Casavant, 2002).

Phone and personal interviews were made with initial community contacts. A list of potential interviewees was then developed. Focus groups, individual interviews, and monitoring of city and county meetings provided data for further research. Not one person who was contacted declined to participate in the study.

Conclusions of the study found that the benefits airports bring to rural communities are many, varied, and critical to the economic well-being of a location. Rural airports improve the quality of life in rural communities. The individual benefits of rural airports include improving the quality of health care, supporting local businesses, providing critical emergency and disaster response, strengthening community, providing opportunities for recreation, military training, economic development and much more. Airports are, in several cases, a symbol of hope for rural communities fighting for their economic life. It is difficult to quantify the value of these benefits, yet they are real, even if not always noticed, to the people who live and work in rural communities (Newkirk and Casavant, 2002).

It was also found that having a constrained or diminished airport would decrease the quality of health care, decrease the odds of a viable economic future, reduce the ability of local, state and federal agencies to respond to disasters and emergencies, lower the viability of rural businesses, and lower the image these communities have of themselves. Overall, a quality airport gives a rural community a belief that its mobility is efficient and that further community growth will come with time.

Iowa's system of publicly owned airports provides a variety of passenger services. These airports serve local, regional and national markets while playing an important role in attracting business and industry to the state. Through a public input process it was determined Iowans want more and better commercial air service, more focus on regional airport development, and more safety improvements. As a result, investment guidelines which support the aviation plan's overall theme have been developed for Iowa's aviation system (IA Department of Transportation, 1997).

The public input process indicated the Department of Transportation, as an investment partner with federal agencies and local governments, should focus on supporting an effective system of regional airports while ensuring the preservation of efficient service and safety at all airports. The regional airports (defined by geography, service area, and jurisdictional control and management), in conjunction with the commercial service airports, would aid economic development on a broad basis by ensuring all areas of the state have top-quality airport facilities and access to services. Promoting this system of airports and the linkages they provide to all parts of the nation ensures a sound basis for Iowa's aviation future. Investments in these airports and the state's other airports will focus largely on improving commercial air service for Iowa residents (IA Department of Transportation, 1997).

3.2 Performance Measures

Data analysis tools are often used to develop a broader understanding of transportation system performance within an assigned area. Montana's mobility gap methodology, developed by LSC Transportation Consultants, Inc. (2001), is such a tool. This mobility gap methodology identifies the amount of service required in order to provide equal mobility to persons in households without a vehicle as to those in households with a vehicle. The trip rates for households with vehicles serve as the targets for those households without vehicles.

The Montana Rural Passenger Needs Study used household daily trip rates from the 1995 National Personal Transportation Survey (NPTS) which are generated for households with and without automobiles. The 1995 NPTS data set was used to produce trip rate goals for transit-dependent services. The categories were broken out by MSA Urban (those areas within a Metropolitan Statistical Area), MSA Non-urban (those areas within a MSA but not urban, and Not MSA (non-urban or rural areas). The non-MSA areas are defined as those that have a population of less than 1,000 persons per square mile (LSC Transportation Consultants, Inc., 2001). Discussion among the study's advisory committee members and the LSC Team led to applying a weighted value to the NPTS trip rates.

A highlighted note within the study explained that upon further review of the readily available census data, the most appropriate data for use in generating goal trip rates was the age of the householder by vehicle availability in urban and rural areas. Data from medium-sized communities was found to be inaccurate and not readily available. The target trip rates generated for each county were reflective of these limitations.

The mobility gap methodology was intended for use by officials from Montana agencies and jurisdictions using readily available data sources. Projecting future needs, demand, and operational requirements were the goals of the mobility gap methodology. Because household sizes are different for households with and without vehicles, the LSC team developed an approach which adjusted for the difference in household sizes. This approach starts with the person-trip rate from the NPTS for those living in zero-vehicle households and those living in households with vehicles. The weighted household size was calculated by dividing the expanded total number of people represented in the survey by the expanded number of households represented in the survey (LSC Transportation Consultants, Inc., 2001).

Household trip rates were calculated by multiplying the person-trip rate by the household size. In order to adjust for the difference in household sizes, the person-trip rates for both households with and without vehicles were multiplied by the household size of households without vehicles. The household size of households with vehicles was not included in the calculations. This provides a household rate of zero-vehicle households as if they had vehicles, but with the same household size. The weighted trip rates were used to calculate the mobility gap for Montana counties (LSC Transportation Consultants, Inc., 2001).

After determining the trip rates for households with and without vehicles, the difference between the rates was defined as the mobility gap with the equation:

((Trip Rate (HH w/Auto) – Trip Rate (HH w/out Auto) = Mobility Gap)).

These rates were again broken down by age (15-64 and age 65+). The gap between the trip rates would be the amount of transit service needed to allow equal mobility between households with zero vehicles and households with one or more vehicles. A larger mobility gap was found in the rural part of Montana when compared to the location within a metro service area but not located in an urban area. This study concluded its mobility gap analysis by multiplying the mobility gap calculation by the number of households without autos. This equation determined the trip needs to be served by a transit agency for a particular area. The mobility gap approach established a level of transit need for communities. A policy issue remains - how much of this unmet need should related programs be designed to satisfy? The mobility gap calculation was performed for all of the counties in Montana (LSC Transportation Consultants, Inc., 2001).

Other studies do not use the mobility gap as explained above. Most studies looked at current raw data and compare it to past results. For example, if passenger boardings at airports have fallen in recent years, there is assumed to be a problem with the state's aviation plan and steps need to be taken to correct the perceived problem. Similar methodology was used to distinguish problems concerning bus transit, rail transit and pedestrian and bicycle modes of travel. Louisiana's passenger needs plan is an example of a study that looked in depth at specific counties to determine specific issues that each community faces. This case study approach provided more specific answers for individual community leaders in an attempt to target specific services to meet unmet needs.

3.3 ITS Development

Over the last 10 years, the U.S. Department of Transportation has made the application of ITS technologies a high priority across modes. It has been especially interested in its use regarding traffic congestion, highway safety, and in a variety of areas in public transit. Relative to public transit, ITS can range from on-board video surveillance systems to smart card fare boxes. On-board equipment monitors and computers are also included within the range of ITS. Currently ITS is being implemented throughout the United States within numerous travel modes designed to increase mobility for passengers along with improved efficiency for the specific travel mode.

The state of Vermont developed a statewide ITS strategic plan to guide the state in deploying ITS technologies. The plan helped identify ITS applications that are most relevant to the unique nature of the state of Vermont and the needs of its travelers. In addition, the plan will ensure that ITS deployment is conducted in an incremental, integrated fashion and in conformity with the National ITS architecture. The plan is designed to reflect the character of Vermont, with its rural environment, natural beauty, harsh winter climate, and flourishing tourism industry (University of Vermont, 2002).

The study's steering committee, headed by the Vermont Agency of Transportation (VTrans) recommended that three short-term project areas should be studied. These included Advanced Traffic Management Systems (ATMS), Advanced Traveler Information Systems (ATIS), and Safety-related Projects. A list of projects was recommended under each of these general areas.

The ATMS project involved the establishment of a statewide Transportation Management and Information Center (TMIC). The TMIC acts as the primary point of coordination for managing transportation resources. The center is responsible for the collection, fusion, analysis and dissemination of information on the status of the transportation system, focusing first on the interstate and major arterials network. The center receives its information from a number of sources, including roadside traffic detection devices, roadway weather information systems, links to emergency management centers, and motorists' reporting of unusual events. The center also receives information on any scheduled road construction work from the appropriate departments (University of Vermont, 2002).

The ATIS project aimed at developing a statewide information system for Vermont for disseminating the information being collected by the TMIC, as well as other information collected from other sources. Steps for deploying this system were taken under the umbrella of two major ITS initiatives: (1) the Tri-State Rural Advanced Traveler Information System project and (2) the Connect Vermont Project. The first was a regional ITS project that included the three northern New England states (Vermont, New Hampshire, and Maine). The overall project

included 10 modules implemented in three phases over a six-year time frame. Key participants of the steering team included the departments or agencies of Transportation and Tourism from the participating three states. The technology vendor was Castle Rock Consultants (University of Vermont, 2002).

Under the safety-related projects, two main projects were identified. Both were considered stand-alone projects geared towards the rural sections of Vermont. The Downhill Truck Speed Warning System was designed to improve driver safety by warning the truck driver of potential collisions and rollovers. The speed warning system uses a combination of radar gun and weigh-in-motion technology to determine the safe descent speed for trucks for a designed curve and downgrade. The Portable Traffic Management System represented an integration of existing and emerging traffic management technologies into a complete portable traffic control system for use in managing traffic during major events and around work zones (University of Vermont, 2002). This system is portable, wireless and able to withstand the elements within the work zone.

South Dakota developed its own rural ITS deployment plan in 2001. The plan was put into motion to achieve several objectives:

- Describe the current rural ITS environment in South Dakota,
- Develop a strategic direction for ITS activities in South Dakota,
- Propose a coordinated program of rural ITS projects that address the needs of transportation users and those of government and public agencies,
- Define an organization and management framework for accomplishing the ITS projects, and
- Develop materials to effectively communicate findings to representatives of state government and other public agencies in South Dakota.

(Castle Rock Consultants, 2001).

The approach to developing the ITS deployment plan was facilitated by an advisory committee, which provided direction and review of all the products developed throughout the process. The approach was based on addressing the needs of agencies with transportation-related interests and the traveling public. Consideration of needs, issues, and opportunities to improve safety and rural transit were underlying elements throughout the project. In order to develop a deployment plan several key steps had to be taken. First, a user needs assessment was performed. Second, the current ITS environment in South Dakota was documented to gain a better understanding of potential shortfalls in regard to technology. Third, a strategic direction was established based on current ITS environment findings. Finally, projects were recommended for deployment within the overall plan (Castle Rock Consultants, 2001).

The vision developed for the South Dakota Rural ITS program was that the South Dakota Department of Transportation in cooperation with other public and private agencies will build an integrated, rural ITS program. This program will enhance the safety and mobility of the traveling public on South Dakota's roads and stimulate the economic condition of the state through the application of advanced technologies (Castle Rock Consultants, 2001). This vision led to the development of the deployment plan and, most significantly, to the identification of projects for further consideration.

The study sought to develop projects that benefit a number of stakeholder agencies. ITS is an area where a number of agencies can benefit from advanced technologies through coordination. Projects that have been proven successful in other areas were also given great consideration. There was found to be little use in duplicating research which had already led to successful

implementation of technologies. Cost-effective projects were found to be important as well. The most logical ITS choices involved methods of attaining the same results, but requiring less funding to do so. An emphasis was placed on solutions that would make the most efficient use of resources. Finally, projects that emphasized safety were found to be of greater significance. South Dakota is a geographically large, sparsely populated state. Traveling between towns can involve a one-hundred mile trip and the safety of rural travelers that spend a great deal of time on the road posed a unique problem that ITS projects would aim to address (Castle Rock Consultants, 2001).

3.4 Improved Mobility through Coordination

The Iowa Department of Transportation conducted a study in 2003 regarding the coordination of public transit services and school transportation. This study described the efficiencies that could be obtained by coordinating transit management and maintenance systems in the areas of school transportation, public transit, and other forms of public transportation. The Center for Transportation Research and Education (CTRE) studied these issues and prepared the final report. CTRE conducted a survey of the 35 transit agencies in Iowa and school districts served by public transportation agencies to determine the extent of possible coordination. Findings showed that 23 transit agencies coordinate in some manner with more than 45 school districts (Andrle et al., 2003).

The report highlighted three main types of coordinated resources including capacity, specialized vehicles equipped to serve passengers with disabilities, and infrastructure through which savings can occur. Capacity is the measure of seating room on a vehicle. Transit ridership often experiences sharp, directional peaks, leaving unused capacity available in the off-peak direction. Des Moines is a successful example of a community which has used this off-peak capacity for school transportation. Because 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 be coordinated also. Iowa has some cases of transit-school coordination using this model (Andrle et al., 2003).

Almost all regional transit systems carry students with disabilities for at least one school district in rural areas. They use the lift-equipped buses which are already operated for transit service. This relieves the school districts of buying special-purpose vehicles for a small number of students. Another form of coordination in rural areas is the use of transit buses to carry school children that live in locations difficult to serve with larger school buses. The regions' transit buses provide a subscription service for these students, typically saving the school district the cost of another bus and driver (Andrle et al., 2003).

Table 3.1 presents the estimated net public savings on operating costs for the nine case study transit systems researched in this study. The total net public savings from coordination was found to be at least $1,201,000 per year.

Table 3.1 Estimated Net Public Savings from Coordination

	Savings from coordination
Des Moines	$400,000
Five Seasons (Cedar Rapids)	$325,000
Iowa City	$60,000
Ames	$13,000
Marshalltown	$12,000
Ottumwa	$64,000
Fort Dodge	$30,000
NEICAT	$27,000
Vehicle Capital Savings	$270,000
Total net public savings	**$1,201,000**

Source: Andrle et al., 2003

The study found that the greatest barrier to coordination, in the eyes of the public, was the perceived relative safety of school buses and transit vehicles. Safety data indicates that both services are excellent, but the issue becomes complicated by the many combinations of vehicle types and operating environments. Many school districts operate sedans, vans, sport utility vehicles, and four types of school buses while transit agencies operate at least three classes of transit vehicles throughout a wide variety of street conditions. It was important to consider the applicable vehicle safety standards and operating conditions when evaluating safety issues while keeping strict records of driver qualifications for both school and transit buses as well.

CTRE found that coordination occurs when circumstances offer a win-win opportunity and managers are willing to work together. Typically this occurs when a public transit agency has capacity and vehicles that meet a school district's specific needs. Both transit and school bus managers are aware of their cost of operation. When either faces a service requirement that would require adding buses or staff, they will look to other providers and develop a cost-effective solution (Andrle et al., 2003).

3.5 Summary

Personal mobility issues are unique not just to states, but to specific locations within state borders. This diversity makes modeling the use of other state mobility practices difficult to duplicate in North Dakota. However, other studies do provide baseline techniques which can be used, in theory if not further, to develop modeling applications for North Dakota's future personal mobility needs. Specific modal research provides insight that may steer the future direction of this current research through to fruition. Advanced technologies and coordination efforts also provide benchmarks for North Dakota to consider as it moves toward setting new mobility goals throughout the state. The following chapter will highlight passenger service information in North Dakota while developing system profiles and evaluating system performance.

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Major Literature Review Resources

Central Indiana Suburban Transportation and Mobility Study
http://ai.org/dot/div/planning/Mobility_Study.pdf

Primarily urban & suburban – limited applicability to ND.

Coordination of Transit and School Buses in Iowa
http://publications.iowa.gov/archive/00001108/01/CoordinationFinalReport.pdf

Focus is on school buses; Iowa does have a legislated coordination mandate.

Determining Infrastructure Needs for Rural Mobility (Washington State)
http://www.wsdot.wa.gov/aviation/planning/RuralAPStudyJuly02.pdf

Focus is on airports; limited applicability to ND study.

Development of ITS Strategic Plan for Vermont
http://www.aot.state.vt.us/planning/VITSFR.htm

Focus is on ITS applications.

Eastern Colorado Mobility Study
http://www.dot.state.co.us/EastCOMobilityStudy/FinalReport.htm

Focus is on freight; no applicability to ND passenger study.

Louisiana Statewide Passenger Transportation Plan
http://www.uno.edu/~itpic/presentations/surfacepassplan.pdf

Good comparable – recommends area-wide public service in each parish.

Minnesota Statewide Transportation Plan
http://www.dot.state.mn.us/information/plans/20yearplan/plan.html

Covers all transportation; limited application to rural mobility – recommends outcome that "transit-dependent and transit-choice customers will have access to transit options."

Mobility Information and Resources (Texas Transportation Institute)
http://mobility.tamu.edu/ums/resources.stm

Link to other miscellaneous sites.

Montana Rural Statewide Passenger Needs Study
http://www.lsccs.com/projects/MDT/transitneeds.htm

Good comparable – uses "mobility gap" to estimate demand and establish service goals.

South Dakota Rural ITS Deployment Plan
http://www.state.sd.us/Applications/HR19ResearchProjects/Projects%5CSDExecutiveSummary.pdf

Focus is on ITS applications.

2001 National Household Transportation Survey
http://www.bts.gov/publications/national_household_travel_survey/highlights_of_the_2001_national_household_travel_survey/ and
http://nhts.ornl.gov/2001/html_files/what_can_website_do.shtml

4. Existing Means of Personal Mobility

A necessary component of the mobility needs assessment process is the identification of existing means of personal mobility. This chapter inventories all the major modes of personal travel available in North Dakota.

As is the case elsewhere, not all North Dakotans have access to all means of personal mobility. Therein lays the need to inventory available means of mobility, identify segments of the population which do not have access to adequate levels of mobility, and develop means satisfying unmet needs.

North Dakotans have 12 fundamental ways to get where they want or need to go for employment, medical appointments, school, social/recreational activities, etc. These means of personal mobility include:

- Private automobile
- Friends & family
- Carpools / vanpools
- School buses
- Intercity commercial bus services
- Taxi services
- Passenger trains
- Air passenger service
- Public transportation
  - Fixed route city bus services
  - Dial-a-ride / paratransit services
  - Other publicly supported services
- Other client-specific transportation
  - Nursing home buses
  - Developmental disabilities service providers
  - Ambulance services - ground & air
  - Volunteer drivers of private automobiles
  - Special purpose shuttles
- Car rental, charter buses, & air taxi services
- Pedestrian and bicycle transportation

There may be other ways that North Dakotans use to get from place to place, but the preceding list includes the primary modes available to facilitate personal mobility.

The following sections describe services currently available to North Dakotans via each of the mobility options outlined above. This information is presented from a state-level perspective but much of the data is also specific to various cities, counties, and regions. Additional local service information is available in the 2004 report, "Enhancing Passenger Mobility Services in North Dakota through Increased Coordination" (Small Urban & Rural Transit Center, 2004).

4.1 Private Automobiles

According to the 2000 Census, 87.7 percent of North Dakotans age 16 and older depend on private cars, trucks, or vans to commute to work; 77.7 percent ride alone while 10.0 percent rideshare. Only 0.4 percent use public transportation, including taxicabs. Virtually all of the remainder either walk to work (5.0%) or work at home (6.0%) (U.S. Census Bureau, 2004).

In 2002, North Dakota had an estimated population of 634,000. Based on 2000 census demographics, approximately 80 percent of these residents (507,000) were old enough to legally acquire a driver's license. With the actual number of licensed drivers at 456,300, approximately 90 percent of the state's residents who were old enough to acquire a driver's license were, in fact, licensed to drive.

With 580,000 licensed passenger vehicles (cars, pick-ups, etc.) in the state in 2002, there were approximately 1.27 licensed vehicles in North Dakota for every licensed driver. 2000 census data indicates that the average North Dakota housing unit had a total of 1.93 vehicles available for use. Counties with fewer than average vehicles per household are listed below in Table 4.1.

Table 4.1 Counties with Fewer than Average Licensed Vehicles

County	Vehicles / Household
Benson	1.89
Burleigh	1.90
Cass	1.78
Grand Forks	1.78
Ramsey	1.80
Rolette	1.78
Sioux	1.70
Stark	1.89
Stutsman	1.91
Ward	1.89
Williams	1.90

Source: North Dakota State Data Center, 2003

As Table 4.1 indicates, 11 counties have a lower-than-average number of vehicles per household. All eight of the state's regional centers are located in counties on this list; the three remaining counties on the list are the home to one of the state's Indian reservations (North Dakota State Data Center, 2003).

An important consideration concerning mobility is the number of housing units in the state that do not have any licensed vehicles, thereby reducing the household's immediate access to private transportation. In 2000, there were 257,152 housing units in North Dakota. Of these units, 17,030 did not have any vehicles available for use. This equals 6.6 percent of the state's housing units. Percentages vary widely from as low as zero in Billings County to 12.4 percent in Sioux County. Nationally, approximately 7.9 percent of all households do not have a vehicle (National Household Travel Survey, 2001). North Dakotans do, therefore, have greater direct access to personal automobiles than average U.S. residents.

As was the case with vehicles per household, the largest number of households without any licensed vehicles tends to coincide with the location of the state's largest cities and Indian reservations. Table 4.2 identifies counties which have more than 400 households without licensed motor vehicles:

Table 4.2 Counties with Over 400 Households without Vehicles

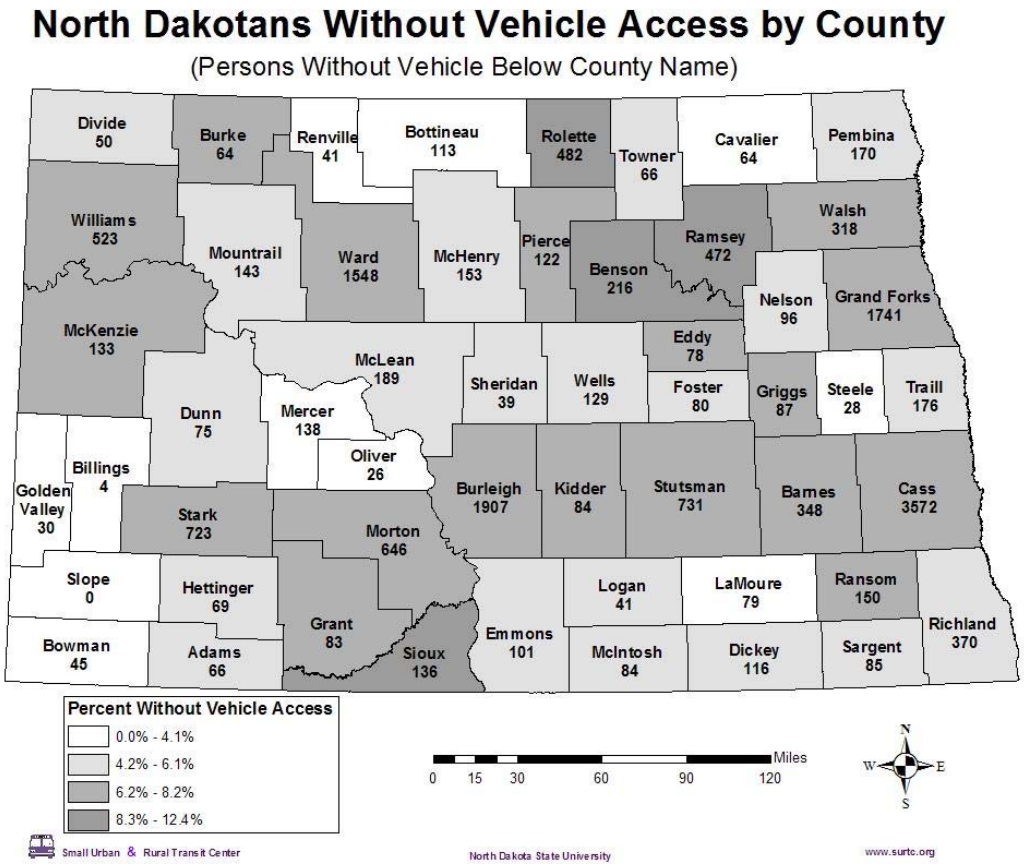
County	Households without Vehicles	Percent without Vehicles
Burleigh	1,907	6.9%
Cass	3,572	7.0%
Grand Forks	1,741	6.8%
Morton	646	6.5%
Ramsey	472	9.5%
Rolette	482	10.6%
Stark	723	8.1%
Stutsman	731	8.2%
Ward	1,548	6.7%
Williams	523	6.5%

Source: North Dakota State Data Center, 2003

Twenty-five of North Dakota's 53 counties have fewer than 100 households without a licensed vehicle (North Dakota State Data Center, 2003). There is, therefore, a relatively light concentration of related needs.

According to the 2000 Census, the average household in North Dakota had 2.41 residents. With 17,030 households having no vehicles available for use, it is estimated that approximately 41,000 North Dakotans do not have direct access to private automobile transportation. This equals about 6.5 percent of the state's population (U.S. Census Bureau, 2000).

Figure 4.1 presents information on the degree to which counties have housing units with no licensed motor vehicles.



Source: North Dakota State Data Center, 2003

Figure 4.1 North Dakota Households without Vehicle Access

4.2 Private Automobiles – Family & Friends Transportation

No specific data is available concerning the percentage of personal mobility needs that are satisfied by transportation provided by personal automobile operated by someone outside the individual's immediate household. Considerable related data indicates, however, that a significant amount of transportation is provided to non-drivers by "family and friends."

As indicated earlier, approximately 41,000 North Dakotans do not have direct access to a personal automobile. Nationally, non-drivers make an average of 2.6 trips per day. Applying this average to North Dakota, residents of households without vehicles make 106,600 trips per day, far in excess of the aggregate ridership of the state's public transportation services.

The 2001 National Household Travel Survey indicates that personal vehicles transport an average of 1.63 people per mile traveled. Conversely, vehicles being used for work and work-related trip carry only 1.14 and 1.22 passengers per mile, respectively. Other trips (personal, church, school, social, etc.) typically involve from 1.76 to 2.05 passengers per vehicle mile. Nearly 49 percent of all trips made with personal automobiles involve multiple passengers (National Household Travel Survey, 2001).

Many of these non-driver vehicle occupants are likely to be members of the driver's household. It is assumed, however, that many of the personal trips being made by members of households without vehicles are via personal automobiles being operated by "family and friends." If this is the case, a significant portion of North Dakotans' personal mobility needs are being satisfied in this manner.

4.3 Carpools & Vanpools

Ridesharing via carpools and vanpools is a way to increase mobility and reduce transportation costs, pollution, traffic and parking congestion, etc. Ridesharing is most frequently practiced in urban areas where commuting costs include toll roads and parking fees and where express lanes are available for multi-passenger vehicles. In rural areas like North Dakota where toll roads, air pollution, and traffic congestion are relatively non-existent, ridesharing is more likely to occur when fuel costs rise significantly and/or where long distance commutes are common.

Despite the lack of many of the incentives that urban areas experience, ridesharing can be an effective way to address mobility problems faced in rural and small urban areas, especially in instances where long commutes are common and where traditional transit systems are nonexistent. Typical North Dakota examples include:

Commute Origin – Destination	**Employment**
Bismarck-Mandan to Beulah	Energy Production
Outlying areas to Grafton	Marvin's Windows
Fargo-West Fargo to Wahpeton	ProGold & Others
Outlying areas to Valley City	Ag-Air Manufacturing
Neighboring communities to Gwinner	Bobcat Ingersoll-Rand
Bismarck-Mandan to Ft. Yates	Sitting Bull College

Ridesharing undoubtedly does take place in many of these and other situations. There is not, however, an organized state effort to promote ridesharing to encourage conservation, reduce pollution, and increase personal mobility.

Such a program did exist in North Dakota in the late 1970s through the mid-1980s. The program involved the North Dakota Highway Department (now the Department of Transportation) and the State Energy Office / Federal Aid Coordinators Office (now part of the Department of Commerce). The Highway Department used federal highway monies to make interest-free loans to individuals who, in turn, purchased vans to be used for vanpooling. The owner of the vehicle operated the vanpool and collected monthly fees from riders. Rider fees were used to repay the vehicle loan and to cover operating and maintenance costs. Loan payment schedules were set for four years or 100,000 miles, whichever came first. Between 30 and 40 vanpools were eventually established but the program was discontinued when interest declined, along with fuel costs and interest rates.

Vanpool programs such as the one that existed in North Dakota are still in operation in many parts of the country. Some of these programs are promoted by state Departments of Transportation while others are sponsored by local metropolitan transit systems or metropolitan planning organization. There are also commercial entities which help organize vanpools and provide needed vehicles.

The federal government has also taken steps to create additional incentives to promote ridesharing. Employers, for example, may pay employee vanpool costs as a benefit. While this incentive may be offset with a corresponding reduction in salary, both the employee and the employer benefit by avoiding related payroll taxes.

Employees who have access to "flex comp" programs may also realize new ridesharing benefits by paying a major portion of their commuting costs via their employer's "flex comp" program. This approach allows commuting costs to be paid with pre-tax dollars and effectively reduces commuting costs by 25-30 percent.

While there is not an organized state-wide 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.

4.4 School Buses

More than 106,000 of North Dakota's 634,000 residents are school age children (kindergarten through high school) who attend public schools. A major portion of the transportation needs of these children involve travel to and from school and school-related activities. School buses satisfy a large portion of these needs and may, therefore, rank second to only private automobiles in terms of providing for the personal mobility needs of North Dakotans.

In 2004, there were 213 school districts in North Dakota. All but 12 small districts provided some form of direct transportation services for students. Of the twelve districts that did not have district operated transportation, seven provided financial support to families that transport students to and from school.

With a state land mass of 70,665 square miles, the average school district encompasses nearly 332 square miles. Actual sizes vary greatly, however, with the Minot Air Force Base district having only 7 square miles while the McKenzie County district covers 1,450 square miles.

According to the North Dakota Department of Public Instruction (DPI), there are nearly 2,300 school buses in the state. Of this total, 123 are handicapped accessible. Except for the addition of special education-related equipment in recent years, the number of buses in the state has remained relatively stable (North Dakota Department of Public Instruction, 2001-02).

North Dakota school buses have an average capacity of nearly full-size 42 passengers. Of the 2,300 school buses in North Dakota, 1,854 are traditional coaches with average capacities of 49.8 to 52.4, respectively. The remaining 443 buses are special-use vehicles with smaller capacities.

DPI reports that North Dakota school buses traveled 23.6 million miles in 2003. They transported 43,249 students at a total cost of $32.9 million or $1.35 per mile. State government paid 55 percent of these costs; the remainder was paid by local school districts (North Dakota Department of Public Instruction, 2004a).

The cost of school bus transportation increased by 21 percent from 1995 to 2003 (from $26.3 million to $31.9 million). This increase came despite an 8 percent decline in the number of

students being transported (from 47,105 to 43,249) and a 2 percent decline in the number of miles traveled (from 24.2 million to 23.6 million).

State funding to support local school transportation remained fairly constant at between $17.1 million and $17.9 million from 1995 to 2003. Disbursements to local school districts have been formula-driven based on miles traveled and rides given.

Enrollment in public schools declined from nearly 114,000 students in 1999 to just over 101,000 in 2004. DPI projects that state-wide enrollments will decline to 89,000 by 2010 and to approximately 77,700 by 2016. Approximately 43 percent of all students are transported to and from school by their respective district (North Dakota Department of Public Instruction, 2004b).

Student populations are also becoming more concentrated. In 1989, the state's 15 largest school districts accounted for approximately half of the state's students. In 2004, half of North Dakota's public school students were concentrated in the eight largest school districts. Smaller districts are losing student populations at a faster than average rate.

Excluding the seven small, previously-discussed, districts that pay families to provide their own transportation and special purpose routes for special and vocational education, etc., the state's school districts operate a total of 1,182 bus routes. Of this total, 1,016 are rural routes and 166 are in-city.

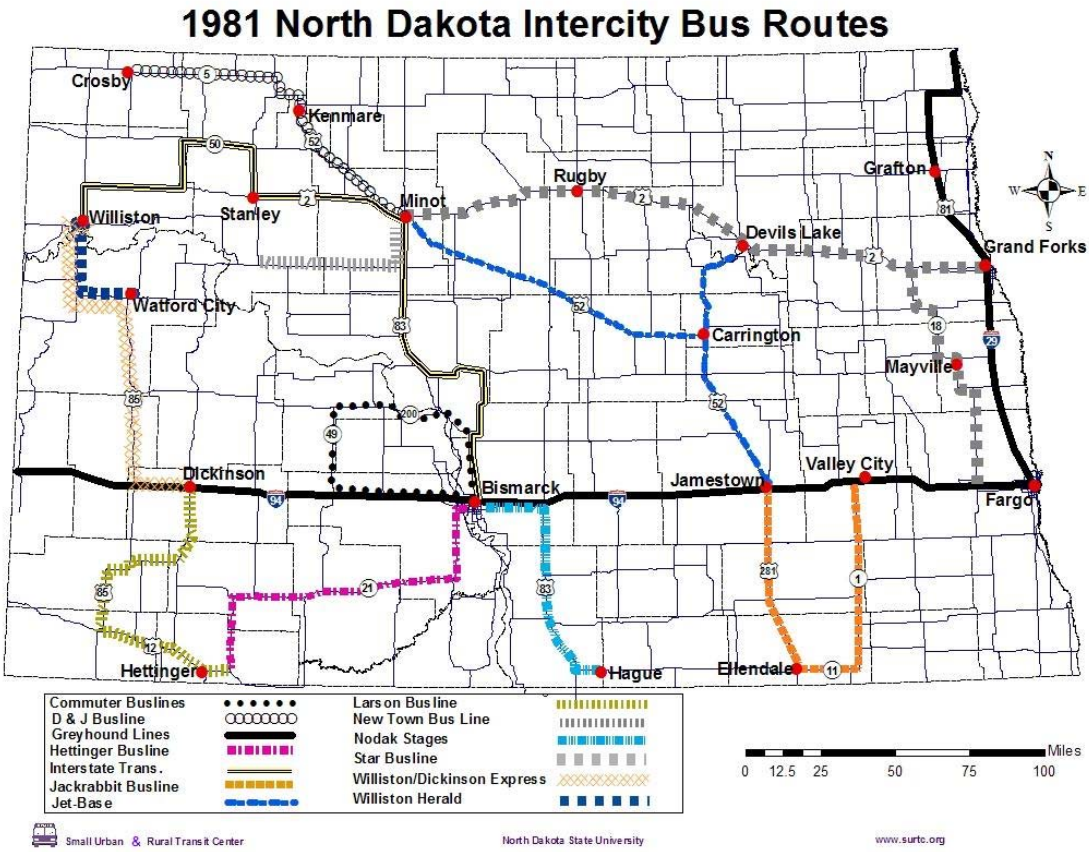
These 1,182 rural and in-city routes were operated an average of 354 times each, or twice a day for 177 days. Rural routes had an average length of 61 miles and transported an average of 29 students; the average maximum ride time equaled 61 minutes. DPI recommends that school districts route buses to limit student ride times to no more that one hour each morning and another hour in the afternoon. In-city routes had an average length of 10 miles and transported an average of 34 students; average maximum ride times equaled 25 minutes (North Dakota Department of Public Instruction, 2004c).

Given the fact that an average school bus has a capacity of more than 40 passengers and transports an average of less than 30 passengers per trip, North Dakota's existing fleet of school buses has the capacity to transport additional passengers.

Local school buses are typically used strictly to transport students. Local school districts may, however, allow these vehicles to transport non-students. However, doing so may raise liability concerns and related insurance issues.

4.5 Intercity Commercial Bus Services

The number of commercial intercity bus services in North Dakota has dropped significantly in the past 25 years. According to a North Dakota State Highway Department (N.D. Department of Transportation) report entitled "Inventory of Public Transportation in North Dakota," there were 12 intercity bus services operating in the state 1981. These carriers and their routes are identified in Figure 4.2. Services were available to 12 of North Dakota's 13 largest cities (Transportation Services Division, 1981).



Source: Inventory of Public Transportation in North Dakota, North Dakota State Highway Department, 1981

Figure 4.2 1981 North Dakota Intercity Bus Routes

There are four intercity bus companies operating in the state in 2005. While service is still available to 10 of the state's 13 largest cities, traveling by bus is no longer an option for residents of 19 cities with a population of 1,000 or more that had bus service in 1981. Cities which have lost intercity bus service since 1981 are listed in Table 4.3. All but two of these cities (Burlington and Casselton) lost population between 1981 and 2000.

There are another 15 North Dakota cities with populations of 1,000 or more which did not have intercity bus service in 1981 and which still do not have service in 2005. These cities include Belcourt (2,440), Beulah (3,152), Bottineau (2,336), Cavalier (1,537), Cooperstown (1,053), Hankinson (1,058), Hazen (2,453), Langdon (2,101), Lisbon (2,292), Park River (1,535), Rolla (1,417), Thompson (1,006), Wahpeton (8,586), Walhalla (1,057), and Wishek (1,122).

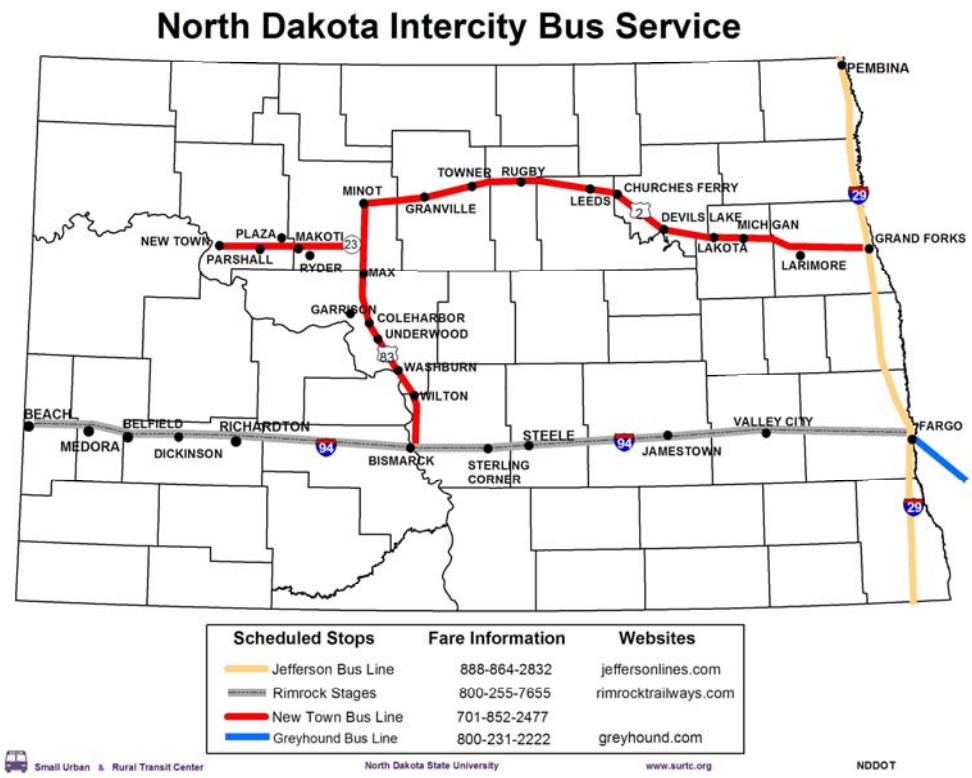
Table 4.3 Cities Which Lost Intercity Bus Service Since 1981
(Population of 1000 or More)

City	2000 Population	1981 Bus Operator
Bowman	1,600	Larson Bus Line
Burlington	1,096	Interstate Transportation, Inc.
Carrington	2,268	Jet-Base Shortway, Inc.
Casselton	1,865	Greyhound
Crosby	1,089	D & J Bus Line
Ellendale	1,550	Jack Rabbit Lines, Inc.
Grafton	4,516	Greyhound
Harvey	1,989	Jet-Base Shortway, Inc.
Hettinger	1,307	Hettinger Bus Line
Kenmare	1,081	D & J Bus Line
Linton	1,321	Nodak Stages, Inc.
Mayville	1,953	Star Bus Line
New Rockford	1,463	Jet-Base Shortway, Inc.
Oakes	1,979	Jack Rabbit Lines, Inc.
Stanley	1,279	Interstate Transportation, Inc.
Tioga	1,125	Interstate Transportation, Inc.
Velva	1,049	Jet-Base Shortway, Inc.
Watford City	1,435	Williston Herald
Williston	12,512	Interstate Transportation, Inc.

Source: Small Urban & Rural Transit Center, 2005

U.S. Department of Transportation's Bureau of Transportation Statistics ranks North Dakota last among the 48 continental states in terms of rural intercity bus coverage. According to the Bureau's April 20, 2004, report on "Scheduled Intercity Transportation: Rural Service Areas in the United States," 56.4 percent of North Dakota's rural residents live within 25 miles of a commercial bus service. Other low-ranking states include Nebraska (61.4 percent), South Dakota (65.7 percent), and Montana (68.6 percent). Nationally, 91.4 percent of the nation's rural residents live within 25 miles of a commercial intercity bus service (Bureau of Transportation Statistics, 2004).

The following paragraphs describe the four commercial bus services that are currently operating in North Dakota. The routes operated by these carriers in North Dakota are depicted in Figure 4.3.



Source: Small Urban & Rural Transit Center, 2005

Figure 4.3 North Dakota Intercity Bus Service

4.5.1 Rimrock Stages / Trailways Transportation System

Rimrock Trailways operates in North Dakota along Interstate Highway 94 between Fargo and Beach. Cities served include Fargo, Valley City, Jamestown, Steele, Sterling Corner, Bismarck, Richardton, Dickinson, Belfield, Medora, and Beach. Fargo is the eastern terminus for Rimrock's route; the western terminus is Billings, Montana. Rimrock operates one eastbound and one westbound bus daily.

Rimrock's route connects with Greyhound Lines, Inc., in Fargo and Billings to provide eastbound and westbound interstate service to Seattle, Minneapolis, Chicago, and a multitude of intermediate and more distant destinations. In some instances, schedule conflicts result in significant connection delays.

Rimrock's Fargo terminal also provides interline service with Jefferson Lines' north-south route along Interstate Highway 29. Northbound interline service via New Town Bus Line is available in Bismarck. Jefferson and New Town services are described in following subsections.

Rimrock has bus stops in 11 North Dakota communities. These bus stops and corresponding phone numbers are identified in Appendix B. Route and fare information is also available by phoning toll-free 1-800-255-7655 or by checking Rimrock's website at www.rimrocktrailways.com. Before August 2004, Rimrock's service territory in North Dakota was served by Greyhound Lines, Inc.

4.5.2 Greyhound Lines, Inc.

Greyhound Lines, Inc. serves strictly the city of Fargo. Daily service is available from Fargo to points east along Interstate Highway 94 to Minneapolis and points beyond. The Fargo terminal serves as an interchange point for Greyhound, Rimrock, and Jefferson Lines.

Greyhound has operated in North Dakota for more 70 years, but in June of 2004 it announced that it would discontinue service to all North Dakota cities except Fargo. This action was a part of a major restructuring which eliminated service to 260 communities in an area that reached from Chicago to Seattle and from Nebraska to the Canadian border. Greyhound also indicated that this was the first in a multi-year process to streamline its operations and to bring profitability to the company. Greyhound indicated that it had produced a profit in only three of the previous 18 years.

Greyhound route and fare information is available by phoning 1-800-231-2222 or by checking the carrier's web-site at www.greyhound.com.

4.5.3 Jefferson Lines

Jefferson Lines operates along the I-29 corridor between North Dakota's borders with Manitoba and South Dakota. This Jefferson Lines route extends north to Winnipeg and south to Kansas City and more distant points. Fargo, Grand Forks, and Pembina are in-state stopping points.

Jefferson operates one northbound and one southbound bus daily between Fargo and Winnipeg and two northbound and two southbound runs between Fargo and points south.

Jefferson Lines also provides daily bus service between Grand Forks and Minneapolis via Bemidji and Brainerd, Minnesota.

Until August 2004, this Minnesota route was operated by Greyhound. The route was discontinued as a part of the restructuring that was discussed in the preceding subsection. The State of Minnesota subsequently announced that it would provide Jefferson Lines with a Federal Transit Administration Section 5311 subsidy to insure continued service.

Jefferson Lines bus stops and corresponding phone numbers are presented in Appendix B. Route and fare information is also available by phoning toll-free 1-800-451-5333 or by checking Jefferson's web-site at www.jeffersonlines.com.

4.5.4 New Town Bus Line

New Town Bus Line operates along U.S. Highway 2 between Grand Forks and Minot in the northern tier of North Dakota and along U.S. Highway 83 between Minot and Bismarck in the central part of the state. New Town Bus Line also runs between Minot and New Town. In addition to local service, New Town Bus Line provides travelers with connections to destinations served by Rimrock Trailways via its Bismarck terminal and Jefferson Lines via its Grand Forks terminal.

New Town Bus Line runs one eastbound and one westbound trip daily between Minot and Grand Forks. Regular depot service or "flag/call" stops are provided to the intermediate cities/locations of Granville, Towner, Rugby, Leeds, Churches Ferry, Devils Lake, Lakota, Michigan, and Larimore.

New Town Bus Line operates one northbound and one southbound trip per day between Bismarck and Minot. Regular and "flag/call" stops are provided to the intermediate cities of Wilton, Washburn, Underwood, Coleharbor, Garrison, and Max.

Roundtrip service is also provided daily Monday through Friday between Minot and New Town. "Call stop" service is provided to the intermediate cities of Ryder, Makoti, Plaza, and Parshall.

In 1981, New Town Bus Line's current routes were operated by three different carriers. New Town Bus ran between Minot and New Town, Star Bus Line operated between Grand Forks and Minot, and Interstate Transportation Company, Inc. operated between Bismarck and Minot. New Town Bus Line eventually initiated operations between Grand Forks and Minot and between Minot and Bismarck when Star and Interstate ceased operations.

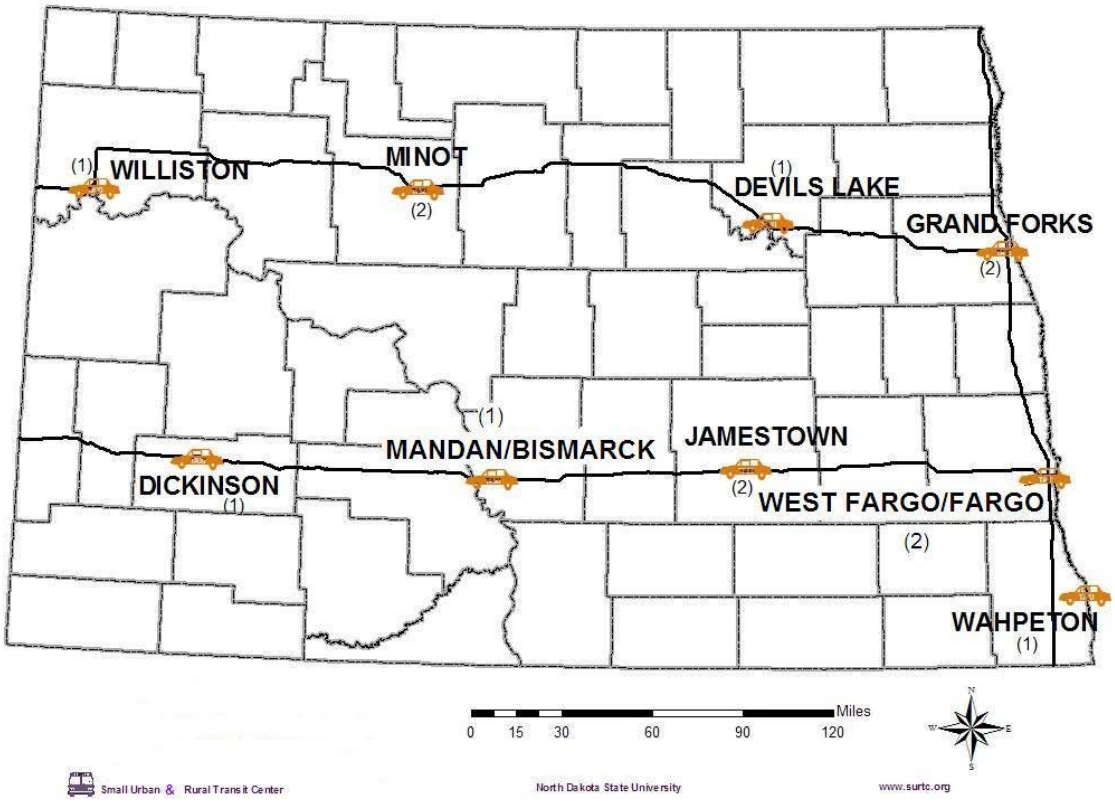
New Town Bus Line is a private, for-profit business but it does receive more than $100,000 per year in Federal Transit Administration Section 5311 financial support via programs administered by the North Dakota Department of Transportation.

New Town Bus Line's 23 bus stops and corresponding phone numbers are listed in Appendix B.

4.6 Taxi Services

There are 14 taxi cab operators in North Dakota. They all operate in cities with populations of 5,000 or more. All of the 12 cities that have a population of 5,000 or more residents have commercial taxi service available. These cities are identified in Figure 4.4.

The number of cities with taxi services has remained constant since 1981 except for the fact that Valley City and Wahpeton now have local service; they did not in 1981 (North Dakota State Highway Department, 1981). The number of taxi services in has increased from 9 to 14 since 1981.



Source: Small Urban & Rural Transit Center, 2005

Figure 4.4 North Dakota Cities Offering Taxi Service

Many of the state's taxicab companies receive either direct or indirect financial assistance via Federal Transit Administration programs, some of which are administered by the ND Department of Transportation. In some cases this support helps finance day-to-day operations while in other cases it is strictly to help finance capital acquisitions (i.e. vehicle purchases). Related support may also come from the ND Department of Human Services for providing Medicaid-related transportation services. The availability of these forms of public financial support may explain, at least in part, the increase in taxi operators since 1981. Bismarck / Mandan's taxicab company operates both the local taxi service and the cities' local transit operation.

North Dakota's 14 taxi operators are identified in Appendix C along with related provider information.

There are also numerous limousine services available in communities around North Dakota. These commercial operators provide special event transportation for weddings, anniversaries, birthdays, bachelor parties, school dances, sporting events, etc. Services are usually provided in oversized luxury automobiles with passenger capacities of 5 to 15 people.

Limousine services that operate across state lines with vehicles having seven or more seats, including the driver, must obtain operating authority from the Federal Motor Carrier Safety Administration. For interstate carriers based in North Dakota, they must also register with the North Dakota Department of Transportation. There are approximately 20 North Dakota-based limousine companies that have interstate operating authority.

This type of licensed interstate limousine authority also encompasses a specialized form of operation that provides service on a contract basis for railroads. These companies use passenger vans to transport train crews between trains and motels or bases of operation. This type service is very specialized and is not available for use by the general public (Laqua, 2004).

There are no state licensing requirements for limousine services that operate strictly on an intrastate basis and there is, therefore, no related listing of North Dakota intrastate limousine operators. An Internet search reveals, however, that services are generally available from multiple operators in virtually all major cities and even in smaller communities such as New Rockford (population 1,463), Minto (population 657), and Kindred (population 614).

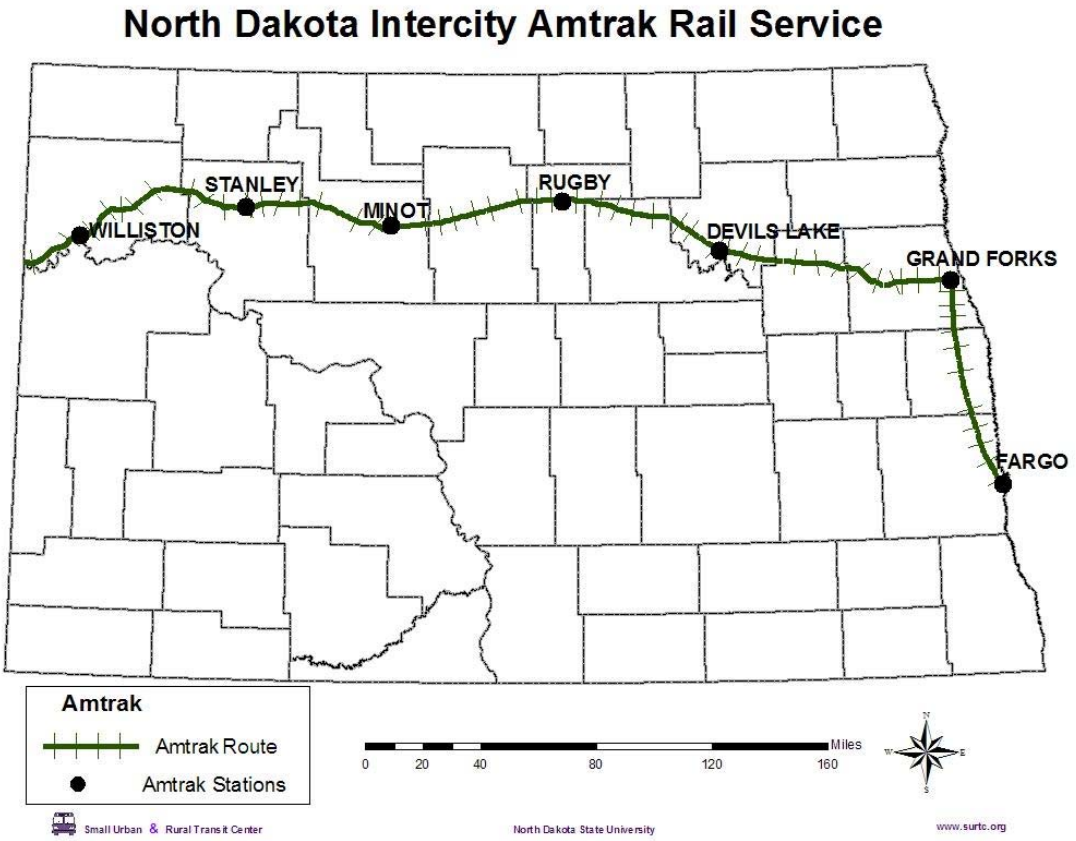
Limousine services typically operate on an hourly rate, often in the range of $75 to $175 or on a per-person basis with a set number of hours and a minimum number of riders (e.g. $25 per person for 6 hours with a 6 person minimum).

Given the costs associated with this type service, limousines are not associated with satisfying individuals' day-to-day personal mobility needs.

4.7 Passenger Trains

Amtrak (National Railroad Passenger Corporation) provides intercity passenger railroad services in eastern and northern North Dakota via its "Empire Builder" route. The Empire Builder route extends eastbound to Minneapolis and Chicago and westbound to Seattle and Portland. Service is provided once per day, both eastbound and westbound. Boarding and deboardings are permitted at the stations shown in Figure 4.5.

The number of stations in North Dakota has remained unchanged since at least 1981 and service levels have increased from daily during the summer months and three days per week during other periods to daily service on a year around basis (North Dakota State Highway Department, 1981).



Source: Small Urban & Rural Transit Center, 2005

Figure 4.5 North Dakota Intercity Amtrak Rail Service

Until the 1970s, North Dakota was served by the existing route across the eastern and northern portions of the state plus a route (Hiawatha) across the southern tier through Fargo, Jamestown, Bismarck, and Dickinson. Federal cost cutting measures caused the elimination of the southern route and have repeatedly threatened the "Empire Builder" route. For now, however, service continues. As indicated on Table 4.4, North Dakota and the entire Empire Builder route generated ridership increases of 4.6 percent and 5.1 percent, respectively, in Fiscal Year 2004.

Amtrak ticket and schedule information is available by calling 1-800-872-7245 or on Amtrak's web-site at www.amtrak.com.

Table 4.4 Amtrak Ridership Trends

	Ons	Offs	Total
FY00			
Devils Lake, ND	2,099	2,137	4,236
Fargo, ND	7,654	7,892	15,546
Grand Forks, ND	6,514	6,721	13,235
Minot, ND	13,443	13,464	26,907
Rugby, ND	2,439	2,360	4,799
Stanley, ND	1,063	1,158	2,221
Williston, ND	8,052	7,942	15,994
	41,264	**41,674**	**82,938**
FY01			
Devils Lake, ND	2,348	2,365	4,713
Fargo, ND	7,353	7,385	14,738
Grand Forks, ND	6,486	6,437	12,923
Minot, ND	13,163	13,006	26,169
Rugby, ND	2,689	2,615	5,304
Stanley, ND	928	1,176	2,104
Williston, ND	8,195	8,125	16,320
	41,162	**41,109**	**82,271**
FY02			
Devils Lake, ND	2,032	1,942	3,974
Fargo, ND	5,787	5,850	11,637
Grand Forks, ND	5,327	5,154	10,481
Minot, ND	11,087	11,435	22,522
Rugby, ND	2,067	2,112	4,179
Stanley, ND	964	1,148	2,112
Williston, ND	6,579	6,749	13,328
	33,843	**34,390**	**68,233**
FY03			
Devils Lake, ND	2,348	2,378	4,726
Fargo, ND	6,850	7,019	13,869
Grand Forks, ND	6,509	6,515	13,024
Minot, ND	13,771	13,722	27,493
Rugby, ND	2,462	2,478	4,940
Stanley, ND	1,213	1,465	2,678
Williston, ND	8,088	8,108	16,196
	41,241	**41,685**	**82,926**
FY04			
Devils Lake, ND	2,414	2,420	4,834
Fargo, ND	7,448	8,008	15,456
Grand Forks, ND	7,340	7,298	14,638
Minot, ND	13,443	13,464	26,907
Rugby, ND	2,725	2,808	5,533
Stanley, ND	1,175	1,513	2,688
Williston, ND	8,330	8,329	16,659
	42,875	**43,840**	**86,715**

Source: Amtrak, 2005

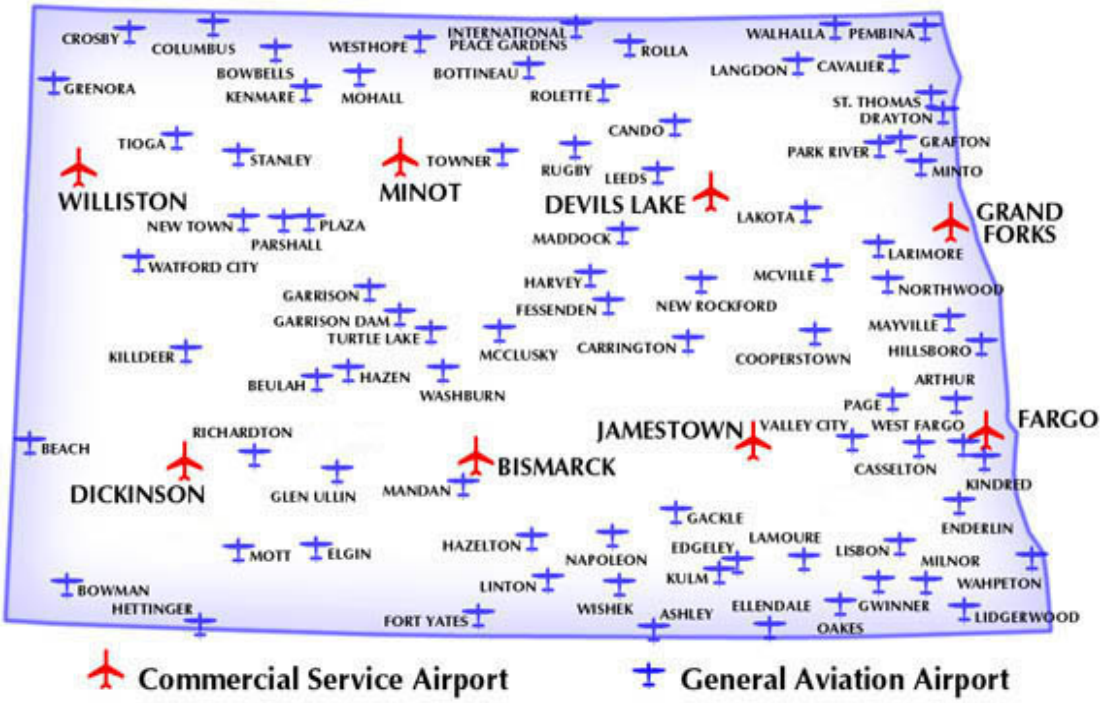
4.8 Air Passenger Transportation

Personal mobility includes three forms of air travel - travel by scheduled, fixed route airlines, travel via air taxi, and travel by private aircraft. The North Dakota Aeronautics Commission has conducted extensive research on air transportation in North Dakota and this study will not attempt to recite all the work done by the Aeronautics Commission. Rather, it simply calls attention to the work done by the Commission and focuses on information that pertains to personal mobility related to scheduled, fixed route air lines, taxi service, and personal aircraft. More detailed information on these and other air transportation matters is available from the Aeronautics Commission.

The U.S. Department of Transportation's Bureau of Transportation Statistics ranks North Dakota 45th among the 48 continental states in terms of rural air service coverage. According to the Bureau's April 20, 2004, report on "Scheduled Intercity Transportation: Rural Service Areas in the United States," 38.6 percent of North Dakota's rural residents live within 25 miles of a commercial airport. Other low-ranking states include Alabama (32.7 percent), Wyoming (35.3 Percent), Oklahoma (35.4 percent), Montana (40.6 percent), and South Dakota (42.7 percent). Nationally, 70.1 percent of the nation's residents live within 25 miles of a commercial airport (Bureau of Transportation Statistics, 2004).

According to the North Dakota Aeronautics Commission's website (www.state.nd.us/ndaero), there are 90 public airports in North Dakota. Eight of these airports support commercial, fixed route airlines; the remaining 82 are general aviation airports that are available for use by air taxi operators, private aircraft, etc. There are also 220 private airfields in North Dakota.

The number of commercial airports in the state has remained constant, due at least in part to federal "essential air service" funding provided to the airports 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. North Dakota's eight commercial airports, as identified in Figure 4.6, are located in the state's eight largest cities.



Source: North Dakota Aeronautics Commission, 2004

Figure 4.6 North Dakota Commercial and General Aviation Airports

Figure 4.6 also identifies the locations of North Dakota's 82 general aviation airports. According to the Aeronautics Commission, 63 of these airports have paved runways and 19 have grass runways.

Twenty of North Dakota's general aviation airports have closed since 1970. The 2001 *Economic Impact of Aviation in North Dakota* study prepared for the North Dakota Aeronautics Commission by the Upper Great Plains Transportation Institute cited low activity, poor runway conditions, high operating costs, and liability risks as major reasons for closure. The study also identified 15 additional general aviation airports as being "at risk" to future closure.

As indicated earlier, eight North Dakota communities have airports served by airlines that operate regularly schedule flights between these cities and regional hub airports. While the number of commercial airports in the state has remained constant, the number of airlines serving these communities has been in a state of change since at least 1987. These trends have followed the national, post-deregulation trend of major airlines discontinuing service in small markets and the related trend of regional carriers subsequently entering these markets.

The 2001 *Economic Impact of Aviation in North Dakota* study referred to above identified air carrier changes at each of the state's eight commercial airports between 1987 and 1999. Table 4.5 updates this information and summarizes changes in air carrier numbers between 1987 and 2004.

Table 4.5 Fixed Route Air Service Providers – 1987, 1994, 1999, & 2004

Airport	Year	Carriers Providing Service
Bismarck	1987	Northwest (1), Continental, and Delta
	1994	AirVantage, Frontier, GP Express, Northwest, and United Express (2)
	1999	Northwest (1) and United Express
	2004	Northwest (1), United Express (2), and Allegiant Air
Devils Lake	1987	Northwest (1)
	1994	United Express (2)
	1999	United Express (2)
	2004	Northwest (1)
Dickinson	1987	None
	1994	United Express (2)
	1999	United Express (2)
	2004	Great Lakes Airlines (3)
Fargo	1987	Continental, Northwest (1), and United
	1994	AirVantage, American, Frontier, Northwest, and United Express (2)
	1999	Northwest (1) and United Express (2)
	2004	Northwest (1) and United Express (2)
Grand Forks	1987	Northwest (1)
	1994	AirVantage, Frontier, Northwest (1), and United Express (2)
	1999	Northwest (1)
	2004	Northwest (1)
Jamestown	1987	Northwest (1)
	1994	United Express (2)
	1999	United Express (2)
	2004	Northwest (1)
Minot	1987	Continental and Northwest
	1994	AirVantage, GP Express, Northwest, and United Express (2)
	1999	Northwest
	2004	Northwest
Williston	1987	Northwest (1)
	1994	United Express (2)
	1999	United Express (2)
	2004	Northwest (1) and Great Lakes Airlines (3)

(1) Northwest includes partner carriers Big Sky and Mesaba
(2) United Express includes partner carriers Great Lakes, Air Wisconsin, Skywest, and / or Atlantic Coast
(3) Great Lakes Airlines issues joint fares with United & Frontier Airlines; Great Lakes previously operated as United Express in all markets.

Source: North Dakota Aeronautics Commission, 2005

Significant restructuring has taken place in the airline industry since it was deregulated in 1980. Generally, large national carriers have exited many small markets; in many instances they have been replaced with regional carriers that operate smaller aircraft. In other cases, national carriers have formed partnerships with smaller firms and provide seamless services with the smaller carriers delivering passengers into hub airports for travel beyond via the national carrier.

As the preceding list of airports and air carriers illustrates, North Dakota has not been immune from this trend. It appears, however, that the situation may be stabilizing. As of May 2004, there are 49 scheduled daily arrivals and departures by fixed route carriers at North Dakota's eight commercial airports.

Passenger boardings on scheduled, fixed route services have varied over the past 10 years. As Table 4.6 indicates, virtually all of North Dakota's commercial airports experienced boarding declines from 1994 to 1998. Since then, the airports at Bismarck, Dickinson, Fargo, Grand Forks, and Minot have produced steady or increased boardings. The most significant increases have occurred at Bismarck and Fargo. Bismarck boarding totals do not include those produced by Allegiant, which initiated service in 2004. Those totals will become available in the third quarter of 2005.

According to the 1981 North Dakota State Highway Department (N.D. Department of Transportation) report entitled "Inventory of Public Transportation in North Dakota," commercial airline boardings totaled 409,927 in 1980. Boardings, therefore, increased by nearly 33 percent from 1980 to 1994 and by more than 43 percent from 1980 to 2004.

Table 4.6 Yearly Boardings at Commercial Service Airports

YEAR	Bismarck	Devils Lake	Dickinson	Fargo	Grand Forks	Jamestown	Minot	Williston	TOTAL BOARDINGS
2004	150,415	2,946	5,081	256,004	89,301	2,495	74,085	6,144	**586,471**
2003	141,090	1,968	3,827	243,097	87,935	1,879	70,528	5,164	**555,488**
2002	139,343	2,129	2,911	230,406	86,573	2,166	70,571	4,163	**538,262**
2001	131,246	2,390	3,366	217,979	82,054	2,507	68,255	4,333	**512,130**
2000	134,483	2,396	3,921	230,969	86,868	2,600	72,330	4,718	**538,285**
1999	127,812	2,833	3,529	221,368	85,589	2,874	71,547	5,441	**520,993**
1998	121,972	2,123	3,883	192,732	84,086	3,475	69,223	6,191	**484,685**
1997	122,435	1,887	3,607	203,105	93,431	2,016	74,137	6,273	**506,891**
1996	137,515	3,811	4,323	216,333	92,583	2,581	75,603	8,800	**541,549**
1995	140,196	3,722	3,457	222,645	93,419	2,790	77,096	7,302	**550,627**
1994	131,641	3,812	3,568	212,663	100,569	3,219	81,765	7,006	**544,243**

Source: North Dakota Aeronautics Commission – February 2005

North Dakota's eight commercial airports are located in Bismarck, Devils Lake, Dickinson, Fargo, Grand Forks, Jamestown, Minot, and Williston. Information on each of these airports, including servicing airlines, destinations served, and the number of daily flights, is presented in Appendix D.

According to the U.S. Department of Transportation's Bureau of Transportation Statistics 2003 State Transportation Profile, there were 1,122 private pilots in North Dakota in 2001 and 1,434 licensed general aviation and air taxi aircraft (Bureau of Transportation Statistics, 2003). Information on air taxi services in North Dakota is presented later in this chapter.

4.9 Public Transportation

There are two basic forms of publicly financed ground transportation service in North Dakota – those available to the general public and those restricted to specific clientele groups. Some services, such as fixed route city bus services and local / regional dial-a-ride (paratransit) services, may be available to both while others may be restricted and therefore not available for use by the general public. These mobility modes and a description of services available in North Dakota are presented in the following subsections. A complete list of all of North Dakota's publicly financed fixed route and dial-a-ride / paratransit operations is presented in Appendix E.

Concerning the level of funding provided to support public transportation, a 1991 study entitled "Report on Intermodal Transportation in North Dakota" stated that ". . . funding support levels through federal sources have been steadily declining. . ." (Gillett and Elbert, 1991). This trend has, however, been reversed and federal support for transit has risen significantly since the early 1990s.

According to the National Transit Database, federal spending on transit increased from about $3.5 billion in 1990, to $6.5 billion in 2001 (Federal Transit Administration, 2002). In 2004, the FTA expected to have $7.266 billion available to support transit programs around the country (Federal Transit Administration, 2004c). As will be discussed later, a significant amount of additional federal support is also available for transportation via programs administered by federal agencies including the Departments of Health and Human Services, Education, Labor, Agriculture, Interior, and Veterans Affairs. State funding to support local transit services has also increased.

4.9.1 Fixed-Route City Bus Services

Fixed-route bus service is traditionally defined as regularly scheduled bus service over a specified route using vehicles with a capacity of 12 to 40 passengers. North Dakota's four largest cities (Fargo, Bismarck, Grand Forks, and Minot) operate fixed-route bus systems. Fargo's system includes service to West Fargo and Moorhead, Minnesota, Bismarck's system extends to neighboring Mandan, and the Grand Forks system includes routes in East Grand Forks, Minnesota. The systems in Fargo, Grand Forks, and Minot have operated for several decades while Bismarck's system initiated service in May 2004.

North Dakota's fixed-route city bus services are operated with funding provided by each community, the state, and the Federal Transit Administration (FTA). Because of their populations, federal capital and operating funds flow directly to the bus systems in Fargo, Grand Forks, and Bismarck. Minot's capital improvement grants come directly from the FTA while its FTA operating grants come via the North Dakota Department of Transportation.

Federal operating grants (FTA Section 5307 funds for Bismarck, Fargo, and Grand Forks and Section 5311 funds for Minot) require a 50 percent local match. Section 5309 funds are used for capital improvements; these grants require a 20 percent local match.

Projected FY 2004 federal and state operating grants for North Dakota's four fixed route city bus systems are present in Table 4.7.

FTA capital improvement grants for North Dakota's public fixed-route bus systems are expected to total $2.95 million for FY 2004 (Federal Transit Administration, 2004a).

Table 4.7 Projected Operating Grants North Dakota Public Fixed Route Bus Systems

City	FTA Funds	State Assistance (FY03)
Bismarck	$ 840,011 (FY04)	$145,806
Fargo	$1,487,689 (FY04)	$140,246
Grand Forks	$ 712,642 (FY04)	$104,174
Minot	$ 143,820 (FY03)	$ 49,432

Source: Enhancing Passenger Mobility Services in North Dakota through Increased Coordination. Small Urban & Rural Transit Center, 2004

Table 4.8 presents a brief summary of key operating statistics for the fixed-route bus systems in Fargo, Grand Forks, and Minot for fiscal year 2004. Bismarck's fixed-route system did not commence operations until May 2004. A more detailed summary of system operating statistics is present in Appendix F.

Table 4.8 Operating Statistics Fixed-Route Bus Systems, Fiscal Year 2004

City	Oper. Budget	Riders	Fares	Subsidy per Rider
Fargo	$1,945,645	572,694	$280,443	$2.91
Grand Forks	$ 682,384	195,717	$111,989	$2.91
Minot	$ 476,207	153,036	$ 54,542	$2.76

Source: Small Urban & Rural Transit Center, 2005

In comparison, the National Transit Database reports that in 2002 the average subsidy per passenger in urbanized areas with populations of less than 200,000 was $2.74. Subsidies per rider tend to increase as population densities decrease (Federal Transit Administration, 2004b).

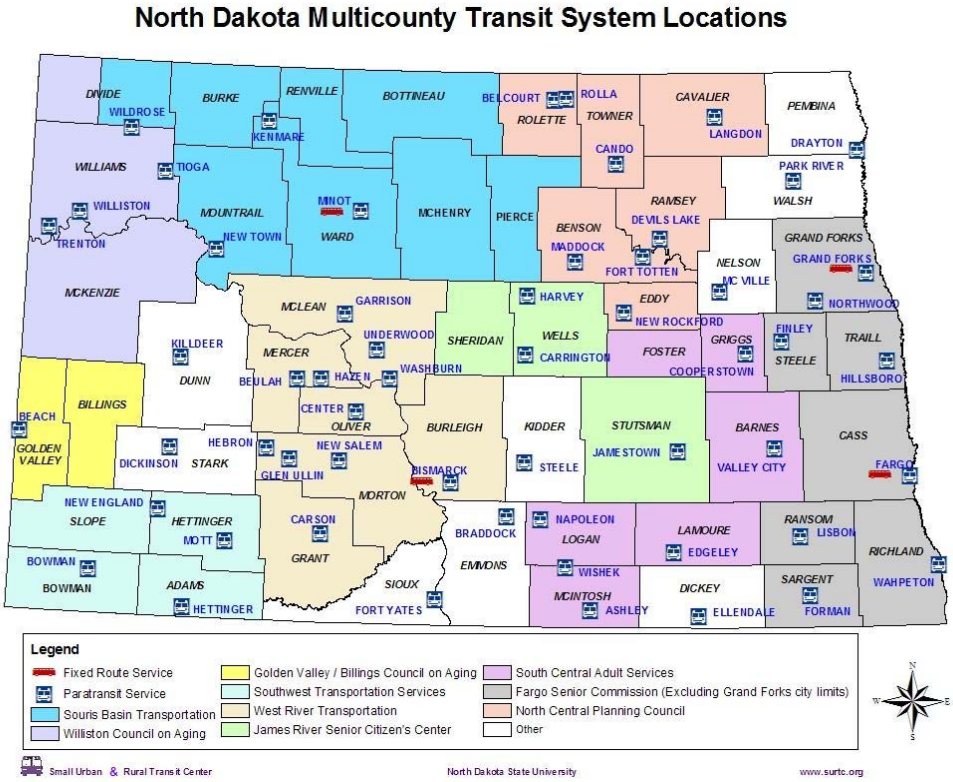
It should be noted that Minot's fixed-route bus system functions largely as a school bus system during the early morning and late afternoon. Traditional city-wide bus services are provided during the mid-day hours. This operating system facilitates student transportation and generates significant ridership which helps reduce the cost/subsidy per ride. Unlike the systems in Fargo, Grand Forks, and Bismarck, however, Minot's system is not designed to satisfy traditional commuter transportation needs.

4.9.2 Dial-A-Ride / Paratransit Services

Dial-a-ride or demand-response/paratransit bus services differ from fixed-route services in that they do not operate over a fixed route and they typically use smaller vehicles. These services often operate on an as-needed basis – almost like a taxi service. Unlike taxi services, however, the hours of operation may be limited and services may be restricted to specific clientele such as elderly or disabled.

There are 40 dial-a-ride / paratransit services in operation in North Dakota. As indicated earlier, a list of the existing services is presented in Appendix E. When combined with the fixed-route operations discussed earlier and the New Town Bus Line, which received federal operating support, there are 45 public transportation services in North Dakota; there were 55 in 1981 (North Dakota State Highway Department, 1981). While the number of operators has declined, primarily through consolidations, service levels have generally increased.

Some of these dial-a-ride services operate in conjunction with fixed-route bus systems in larger cities while others operate on a regional, multi-county basis. Some services operate strictly for the benefit of residents of single communities. Some coordinate with other area providers while others operate independently. These services are identified on the map in Figure 4.7; Appendices F & G provide a profile summary of each of these operations plus the fixed-route systems discussed in the preceding section.



Source: Enhancing Passenger Mobility Services in North Dakota through Increased Coordination. Small Urban & Rural Transit Center, 2004

Figure 4.7 North Dakota Multi-County Transit System Locations

The majority of these dial-a-ride services are either public or private, non-profit operations but some are commercial businesses which receive public operating subsidies. Most of these services are designed to transport elderly and disabled passengers but also provide transportation to the general public.

As Appendix G indicates, the percentage of subsidized operating costs varies greatly from one system to the next. On average, however, passenger fares cover only about 16 percent of the operating costs associated with a typical North Dakota dial-a-ride/paratransit service. The remainder of each service provider's budget is typically financed with support from the Federal Transit Administration (FTA), the state, the local community, and a variety of miscellaneous sources. In most cases, FTA and state funds are administered and dispersed by the North Dakota Department of Transportation (NDDOT). FTA funds may be available to cover up to 80 percent of capital improvement acquisitions (typically vehicles and buildings) and 50 percent of eligible operating costs.

Thirty-five of North Dakota's publicly supported passenger transportation systems receive operating support from the FTA's Section 5311 program. In 2004, program participants applied for nearly $927,000 in federal operating support (Section 5311) and nearly $42,000 for capital acquisitions (Section 5309). North Dakota also receives approximately $300,000 per year in FTA Section 5310 funding that is used primarily to purchase vehicles for elderly and handicapped transportation services.

State support for transit services is provided by a public transportation fund established by Chapter 39-04.2 of the North Dakota Century Code. Funding is generated via a fee on every motor vehicle license that is issued by the state. Monies generated go in to the public transportation fund that is administered by the NDDOT.

Public transportation fund monies are distributed to both the dial-a-ride/paratransit operators discussed in this subsection as well as to the fixed route city bus systems identified in the preceding subsection. The amount of money going to each eligible recipient is identified in Appendix G.

The public transportation fund was created by the 1989 Legislature. Prior to that time, there was no state support for the state's transit operations. The per license assessment was increased from $1 to $2 in 1997. The 2005 Legislature increased this fee to $3 per licensed vehicle effective August 1, 2005 (Senate Bill No. 2348).

With this fee increase, each of the state's 53 counties will see its annual state transit support payment increase from $12,200 to $18,300. If there is more than one eligible transit service provider in a county, this funding to divided equally among the operators.

In addition to these payments, each county is to receive approximately $1.50 per capita from the public transportation fund each year; the exact amount of these per capita payments depends on the amount of money that is in the fund each year. In 2003, per capita payments equaled $1.52 per county resident. In 2004, per capita payments declined to $1.40 per resident. Future per capita payments will depend on the number of motor vehicles licensed in the state each year. If there is only one service provider in the county, it receives all of the county's per capita money. If there are multiple services providers, the funds are distributed based upon each provider's annual elderly and handicapped ridership as a percentage of all such rides provided by all of the county's operators.

This funding mechanism had been generating approximately $1.5 million in annual collections. Collections had been declining, however, because of falling licensed vehicle numbers. It is expected that the 2005 fee increase will increase annual program funding to approximately $2.25 million. This money is important to local transit operators because it supports capital and operating needs and serves as a local match for federal transit grants.

Seven of the state's 40 paratransit systems receive operating support from the federal Older Americans Act Title III program administered by the North Dakota Department of Health (NDDHS). Fund disbursements for the transit portion of this program totaled $307,356 in fiscal year 2004; recipient agencies were required to provide a 15 percent non-federal cash match. To be eligible, service providers must provide supportive/nutritional services to people age 60 and older. North Dakota's Title III program has been relatively stable in recent years; no additional funds have been allocated to transit programs and the consolidation of existing service programs has been encouraged (Pfliger, 2005).

As discussed in the following subsection, transportation service providers are eligible to receive reimbursement for services provided if they are transporting Medicaid clients to related medical appointments and if the service provider is enrolled with NDDHS. A cross-check of public transit operations in North Dakota (Appendix E) and the operations which have received transportation-related reimbursement from Medicaid since 2002 (Appendix H) indicates numerous service providers have apparently not enrolled with NDDHS to be eligible to receive Medicaid reimbursement for services provided. Doing so may be financially beneficial for these service providers, thereby either reducing operating deficits or permitting service enhancements.

4.9.3 Other Publicly Supported Transportation Services

The Federal Transit Administration, within the U.S. Department of Transportation, has an annual budget of approximately $7.2 billion which is used to support transit services across the country. In addition to these FTA supported programs, there are numerous other sources of federal support for the provision of transportation services.

According to the U.S. General Accounting Office (GAO), there are 62 federal programs that fund transportation services. Some of these programs support transportation services available to the general public, like those discussed in the preceding subsections, but most are restricted to specific clientele groups.

In its June 2003 report entitled, "Transportation-Disadvantaged Populations," the GAO indicated that specific spending information was available on only 29 of these 62 federal transportation programs. These 29 programs incurred expenditures of $2.4 billion in fiscal year 2001. Fifty-two of the 62 programs are in the Departments of Health and Human Services (23), Labor (15), Education (8), and Transportation (6). Departments with a lesser role in transportation include Agriculture, Housing and Urban Development, and Interior (U.S. General Accounting Office, 2003).

Table 4.9 presents a list of transportation programs that the GAO identified as having spent more than $20 million in FY 2001. For the purposes of this study, Federal Transit Administration programs discussed in the preceding subsections on fixed route and dial-a-ride / paratransit were omitted from this list.

The narrative which follows this list describes each of these programs and the role that each plays in North Dakota's personal mobility system.

Table 4.9 Major Federal Transportation Programs
(Programs Spending $20 Million or More in FY 2001)

Program	Department	Target Population	Nat'l Spending
Medicaid - Access to Health Services	Health & Human Services Transit Subsidies	Low Income	$976.2 Million
Head Start - Purchase & Operate Vehicles; Contract for Service	Health & Human Services	Children from Low Income Families	$514.5 Million
Temporary Asst. for Needy Families / TANF - Any Reasonable Use	Health & Human Services	Low Income Families With Minor Children	$160.5 Million
Veteran's Benefits Access to Services Contract for Service & Mileage Reimburse	Veterans Affairs	Low Income and Disabled Veterans	$126.6 Million
Jobs Access & Reverse Commute Expand Public Transit Services	Transportation -	Low Income & Disabled	$ 85.0 Million
No Child Left Behind - Access to Education Contract for Service	Education	Students from Low Income Families	$ 84.6 Million
Older Amer. Act Access to Services; Contract for Service	Health & Human Services	Persons Age 60 or Over	$ 72.5 Million
Vocational Rehabilitation - Access to Rehab. & Employment; Transit Subsidies	Education	Persons with Impairments	$ 50.7 Million

Table 4.9 continued

Adaptive Equip. - Purchase / Adapt Personal Vehicles	Veterans Affairs	Disabled Veterans & Service Members	$ 33.6 Million
Job Corps – Access to Sites & Employ. Services; Buy Bus Tickets	Labor	Low Income Youth	$ 21.6 Million

Source: U.S. General Accounting Office, 2003

Via Executive Order No. 13330 dated February 24, 2004, President Bush ordered federal transportation agencies to identify and implement strategies for enhancing coordinated services across program and agency lines.

Medicaid. Medicaid is a federal program which provides health care for certain low income individuals. Primary beneficiaries include pregnant women, children and teenagers of low income parents, and low income people who are elderly, blind, or disabled. Each state is responsible for administering its own Medicaid program. North Dakota's program is administered by the North Dakota Department of Human Services (NDDHS). There are approximately 53,000 Medicaid recipients in North Dakota. This total represents about 8 percent of the state's population.

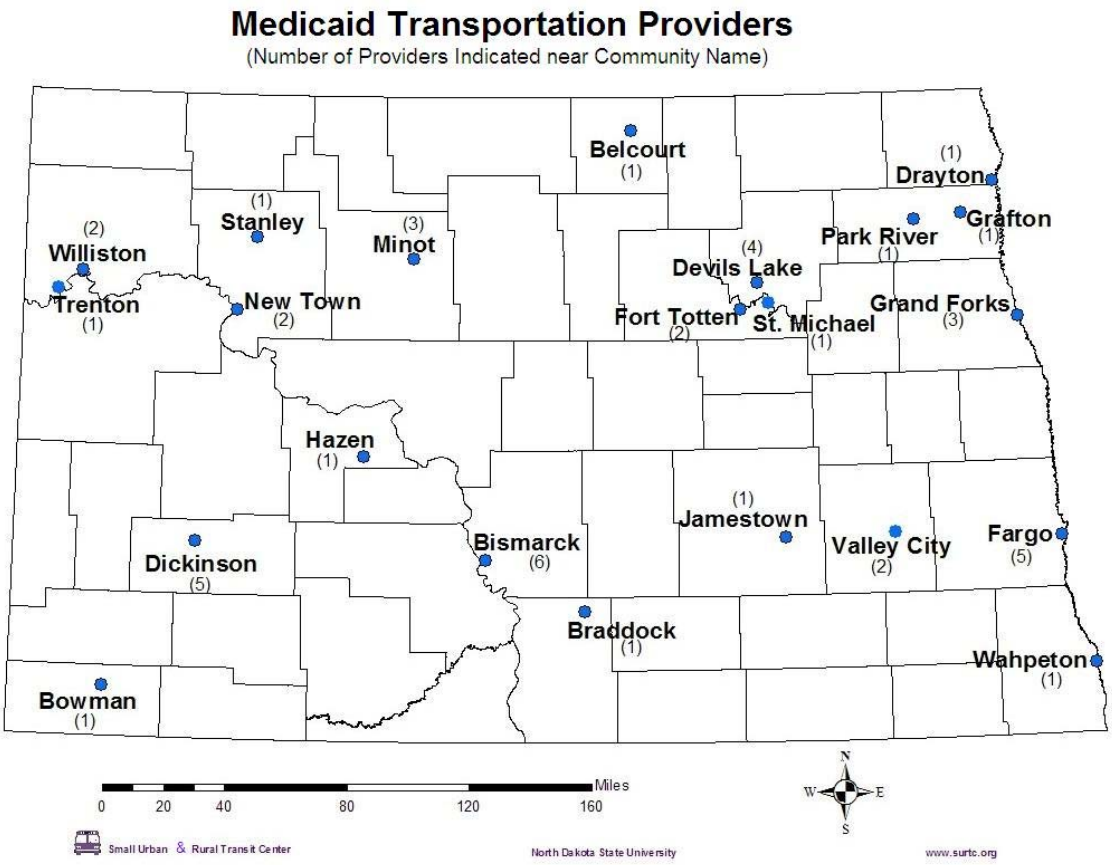
Federal regulation 42 CFR 431.53 requires that states provide assistance to insure that Medicaid recipients have transportation to and from medical appointments. Medicaid recipients and their families are expected to provide their own transportation if they are able to do so. Needs assessments and subsequent transportation services are handled by county social service offices.

Medical transportation may be to a nearby doctor but travel may also involve trips to more distant or even out-of-state locations for services that are not available locally. Related travel may be by bus, train, or air, depending on the medical needs of the traveler and available means of transportation. The cost of ambulance service may also be paid by Medicaid if a medical emergency exists.

When there is a proven need for transportation assistance, related services must be provided by an entity "enrolled" with NDDHS. Services are often provided by existing commercial operators, fixed-route bus systems, or local paratransit services but they may also be provided by individuals who have enrolled with NDDHS to provide Medicaid-related transportation services. Service providers are reimbursed based on a fee schedule established by NDDHS.

NDDHS records indicate that there are approximately 821 active Medicare transportation service providers that provide non-emergency medical transportation to Medicaid recipients. Fifty of these entities are commercial, public, or private, non-profit services; the remainder is individuals who provide occasional services to individuals in their area.

The location of the 50 primary services providers is presented in Figure 4.8. As this figure indicates, 47 of these providers are based in 16 North Dakota communities and three are based in communities in neighboring states. A list of these primary service providers, along with a list of ambulance services which received Medicaid payments in 2002, 2003, or 2004, is presented in Appendix H.



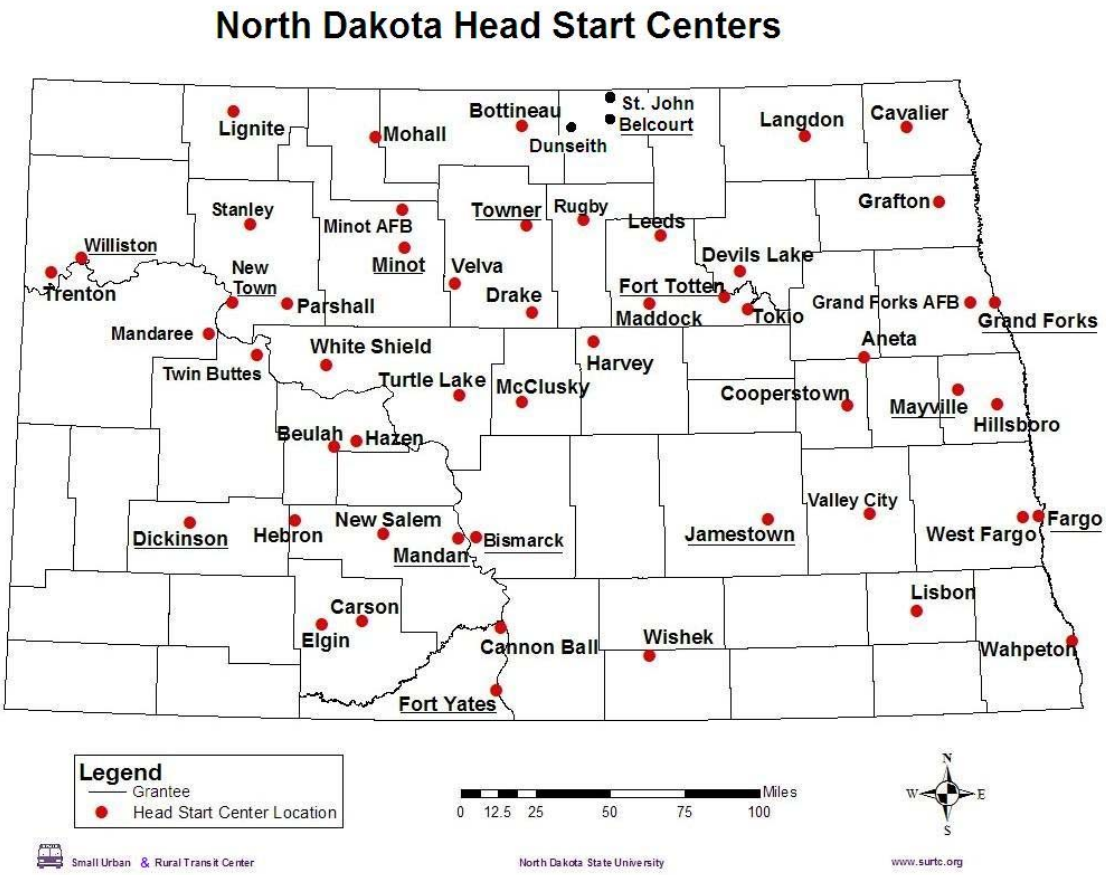
Source: Enhancing Passenger Mobility Services in North Dakota through Increased Coordination. Small Urban & Rural Transit Center, 2004

Figure 4.8 Medicaid Transportation Providers

NDDHS estimates that approximately $301,000 was spent on non-emergency, Medicaid-related transportation services in North Dakota in calendar year 2004. An additional $284,000 was spent on emergency ambulance services and related supplies (Gaardner, 2005).

Head Start. Head Start is a federal program designed to increase the social competence of children of low income families and children with disabilities. The program targets children ages zero through five, pregnant mothers, and their families. There were over 3,300 pre-school children and their families enrolled in Head Start programs in North Dakota in 2003 (North Dakota Head Start Association, 2004).

Federal Head Start monies flow directly from the federal government to local grantees. There are 14 grantees in North Dakota. These 14 grantees operate 71 Head Start centers in 59 communities around the state. The location of these centers is illustrated in Figure 4.9.



Source: A Connection for Families & Agencies', North Dakota Head Start State Collaboration Office, 2004

Figure 4.9 North Dakota Head Start Centers

Grantee organizations include a variety of entities including private non-profit organizations, tribal governments, a public school district, and a state university. NDDHS serves as a coordinator/collaborator to provide training and to help local sites comply with federal and state program guidelines. Federal funds cover 80 percent of program costs (North Dakota Department of Human Services, 2004).

According to the "School Transportation News" website (http://www.stnonline.com/stn/headstart/), more than 857,000 children were involved with the national Head Start program in the year 2000. More than 500,000 of these youth were transported to Head Start programs using 11,000 vehicles that were owned and operated by Head Start grantees nationwide.

With the help of NDDHS, North Dakota's Head Start grantees were surveyed to determine the number of vehicles that they operate, the number of trips provided, etc. Six of the state's 14 Head Start grantees responded. These six grantees operate 45 of North Dakota's 71 Head Start centers.

The transportation services offered by respondents vary widely from center to center. One grantee with 13 local sites indicated that it does not provide any transportation services while two grantees reported that they each operate 10 vehicles. Some grantees reported that there is some degree of coordination between their operations and local public busing programs and taxi operators. Other grantees reported there is currently no coordination between their transportation services and other local service providers.

As indicated earlier, federal Head Start monies flow directly from the federal government to local grantees. NDDHS has a state-level Head Start coordinator but the services provided are largely in the form of training and technical assistance vs. state-level oversight and compliance.

Temporary Assistance for Needy Families (TANF). TANF is a federal block grant program which provides states with money to operate state-directed social welfare programs. Among other things, TANF monies may be used to provide transportation assistance to help program participants travel to work or related training.

TANF funds are not used to directly subsidize transit system operations. Rather, TANF monies are typically paid to program participants to cover related costs. The national Center on Budget and Policy Priorities indicates that about two percent of the federal TANF budget is used to facilitate participant transportation (Coven, 2003).

As is the case with Medicaid, North Dakota's TANF program is administered by NDDHS. During the 12-month period which ended June 30, 2004, NDDHS estimates that approximate $1.27 million was expended to reimburse program participants for transportation-related expenses. In urban areas these costs might involve things like city bus tickets while in more rural areas they might involve fuel costs for personal vehicles (Hougen, 2005).

North Dakota has also used TANF funds to support U.S. Department of Transportation Jobs Access & Reverse Commute programs (this federal program will be discussed below). Using TANF funds to augment this program can effectively reduce the local cost of related services to zero. As is indicated below, however, this program has been relatively small in North Dakota.

Veteran's Benefits. The federal Department of Veterans Affairs (VA) operates a fleet of passenger vans in North Dakota to provide eligible veterans with free transportation to veteran medical centers for medical services. North Dakota's only VA medical center is located in Fargo; some veterans in western North Dakota do, however, receive services from a VA center located in Miles City, Montana. VA clinic services are also available in Bismarck, Grafton, and Minot.

The VA operates a fleet of 10 vehicles in North Dakota. These vehicles are based in Fargo, Lidgerwood, Jamestown, Bismarck (2), Dickinson, Cavalier, Minot, Stanley, and Williston. The Dickinson and Williston-based vehicles cover their communities and points west enroute to the VA center in Miles City. The other vehicles serve their immediate area and intermediate points enroute to Fargo. Services are also provided to the three clinic locations identified earlier. Each van has designated pick-up and drop-off points; riders are responsible for finding their own means of transportation to and from these points.

VA vans are typically purchased either with donations from businesses, local service organizations, or veterans groups or with proceeds from the Veterans of North Dakota Trust Fund. The vehicles are then turned over to the VA, which is responsible for their operation and related costs. These vehicles are not equipped with special accessibility features such as lifts or ramps and are operated by volunteer drivers.

The vans in Bismarck, Stanley, and Cavalier operate on a weekly basis while the others are all on an as-needed basis. Except for the van that is based in Stanley, all the vans make the round trip to Fargo and back in one day; the trip from Stanley to Fargo and return requires two days. The vans traveling to Fargo carry an average of about 200 passengers per month.

For routing purposes, the Cavalier van, for example, leaves Cavalier and stops at other designated points (e.g. Grafton and Grand Forks) on the way to Fargo. A Bismarck van will stop at designated points along Interstate 94 (e.g. Jamestown and Valley City) on the way to Fargo. The Jamestown van will run only if the Bismarck van is full. The Minot van is used primarily for trips to the Minot Air Force Base. Minot veterans who need a ride to Fargo use the Stanley-based van.

In addition to these van transportation services, the VA also provides commercial bus transportation and mileage reimbursement for low income veterans. Assistance is also available to help equip disabled veterans' personal vehicles with special accessibility and operating equipment (Famias, 2004).

Jobs Access & Reverse Commute. The federal highway TEA-21 program provides the Federal Transit Administration with funding, ". . . to develop transportation services designed to transport welfare recipients and low income individuals to and from jobs and to develop transportation services for residents of urban centers and rural and suburban areas to suburban employment opportunities." Program funds are administered by the FTA and are available for both capital and operating purposes. Sixty percent of the program's $85 million budget is designated for urban areas with populations of over 200,000; 20 percent is for urban areas of less that 200,000 and 20 percent is for non-urbanized areas. The Federal/local share is 50/50 (Federal Transit Administration, 2001).

In 2001, North Dakota received approximately $79,000 in program funds to purchase a vehicle and provide related transportation services on the Standing Rock Indian Reservation in Sioux County. Subsequent years' funding was denied and related services reportedly ceased.

The Fargo-Moorhead Council of Governments received a grant in 2004 for $98,000 to coordinate transportation services in the Fargo-Moorhead urban area and to work with area employers concerning the mobility needs of their low income employees.

No other areas in North Dakota are currently participating in this program. Job Service North Dakota does, however, utilize the federal Workforce Investment Act to help meet the employment-related transportation needs of dislocated workers and low income individuals. Program funds are used to help eligible individuals with job preparedness, job search, and training activities. Transportation assistance includes, among other things, funds for car repairs and public transit. Nearly 2,500 individuals from across the state were served by this program during the 12-month period ending June 30, 2004. Transportation-related assistance expenditures during this time period totaled more than $18,000 (Lacher, 2005).

No Child Left Behind. The federal No Child Left Behind Act (NCLB) was passed by Congress and signed into law in January 2002. The act represented a sweeping overall of the nation's elementary and secondary education systems.

According to the North Dakota Department of Public Instruction, NCLB funds may be used to provide transportation services. Corresponding decisions would be made at the local level but would be a part of plans that would be submitted for state review.

If NCLB funding was used to support transportation services, it would probably be used to transport students within a district, or even between districts, to gain access to eligible programs or services that are not immediately available in the school where the needy student is enrolled. NCLB funds could also be used for professional development purposes to either transport instructors to training programs or to bring presenters to local offerings.

Presently, no significant NCLB monies are being spent on transportation-related services in North Dakota (Gallagher, 2004).

Older Americans Act. As indicated in the preceding subsection on dial-a-ride/paratransit services, seven of North Dakota's dial-a-ride/paratransit services receive Older Americans Act Title III operating support in a program administered by the North Dakota Department of Human Services. Fiscal year 2004 funding totaled $307,356. Each of these operations also received Federal Transit Administration operating support via the North Dakota Department of Transportation. These Title III monies are used to support transportation services that provide eligible riders with access to community facilities, activities, and services.

Vocational Rehabilitation. NDDHS also administers North Dakota's vocational rehabilitation program. This program assists people with disabilities to help them achieve independence and employment by providing rehabilitation services. Eligibility is determined by vocational rehabilitation counselors located in North Dakota eight human service centers (Fargo, Jamestown, Bismarck, Dickinson, Grand Forks, Devils Lake, Minot, and Williston). Program monies, 80 percent of which are federal, may be used to help program participants travel to and from related services.

During the federal fiscal year which ended 9/30/04, $106,321 was expended in North Dakota to pay for transportation-related costs incurred to help program clients get to and from needed rehabilitation services. These payments were made on a client-by-client basis and did not go directly to, for example, existing transit operations. Typically incurred costs include the cost of bus tickets, travel reimbursement to family members who provide transportation, monthly gas cards for client-owned vehicles, etc.

Actual transportation-related program expenditures may vary greatly from one year to the next, depending on the needs of clients who are currently receiving vocational rehabilitation services (Wescott-Wetsch, 2005).

Job Corps. Job Corps is an education and vocational training program administered by the U.S. Department of Labor (DOL). The program is free to low-income students age 16-24 and helps them complete their high school education, learn a trade, and find employment. There are 118 Job Corps sites nationwide: these centers are operated by private contractors under agreements with the DOL. The program graduates approximately 70,000 students per year. Post-graduate assistance is provided for up to 12 months to help students with their job search, transportation, housing, health care, and other necessities (Job Corps, 2004).

North Dakota's only Job Corps campus is located in Minot. The center has the capacity to house and educate 250 students and typically runs at or near capacity. Each student's program is tailored to his or her needs and starts whenever the student arrives on campus. Programs typically entail on-site stays of 8-12 months.

Job Corps has four local service centers in North Dakota. These centers are located in Fargo, Bismarck, Grand Forks, and Minot. Each center serves its quadrant of the state and transports potential enrollees to Minot in U.S. government vehicles for campus visits prior to enrollment.

Once a student is enrolled, Job Corps will provide transportation assistance to help eligible students return home for monthly visits. Transportation via Job Corps vehicles will not be provided unless it involves at least three students. Transportation may also be provided by commercial bus and Amtrak.

Job Corps' fleet of vehicles is also used to provide local travel for purposes such as trips to job sites, recreation, miscellaneous appointments, etc. Job Corps has a fleet of 18 vehicles which includes passenger cars, mini-vans, full size vans, and 44 passenger buses (Schobinger, 2004).

Job Corps will also help graduates access post-graduation jobs via commercial modes of transportation. Commuting to and from these jobs does, however, become the responsibility of each individual.

4.10 Other Client-Specific Transportation

The preceding subsections of this chapter inventoried the majority of the mobility modes available to North Dakotans. Many of these modes are available to the public while others, such as private automobiles, are not.

There is, however, another sector of transportation services that is available on a restricted basis to specific clientele. These non-public forms of assisted transportation include services such as:

- Nursing homes,
- Developmental disabilities care facilities,
- Ambulance services - ground & air,
- Volunteer drivers of private automobiles, and
- Special purpose shuttles.

These personal mobility facilitators will be discussed and inventoried in the following subsections.

4.10.1 Nursing Homes

There are three types of licensed facilities in North Dakota that provide housing for senior citizens and physically disabled individuals. These facilities provide resident care that ranges from apartment-like living (assisted living facilities) to individual sleeping quarters with congregate meals (basic care facilities) to complete care for residents with long-term medical needs (nursing homes). Each of these various types of facilities operates under licenses issued by NDDHS.

The following table identifies how many of each of these facilities there are in North Dakota and the capacity of each type facility.

Table 4.10 Senior Citizen & Physically Disabled Housing

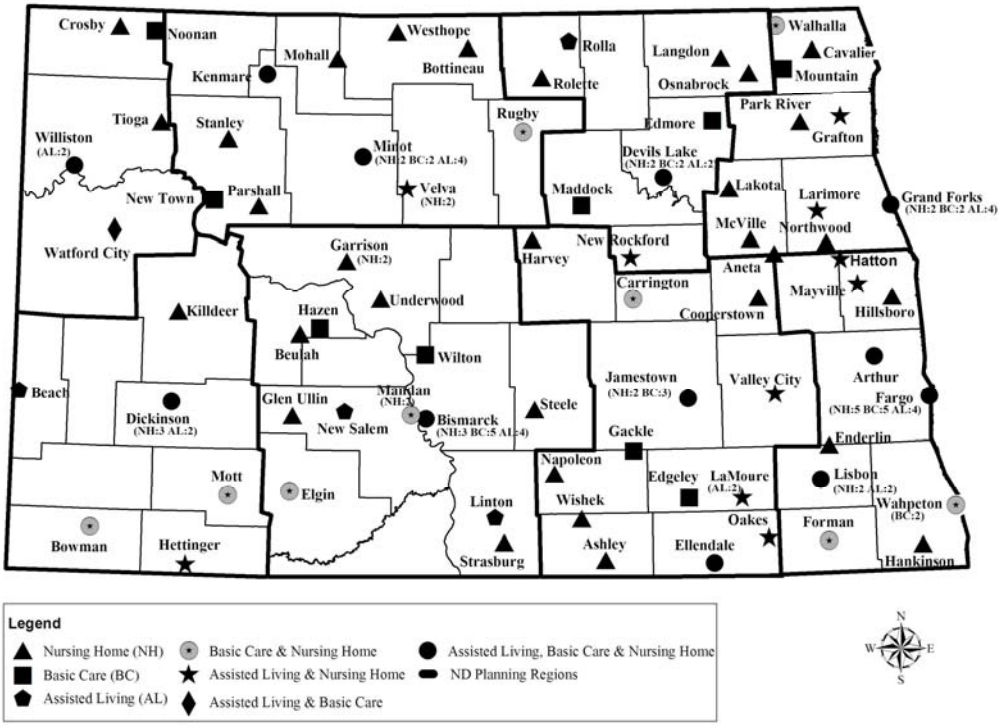
Type Facility	Licensed Facilities	Beds / Living Units
Basic Care	53	1,567
Assisted Living	43	1,403
Nursing Homes	80	6,442

Source: North Dakota Department of Human Services, 2004

The locations of these facilities are identified in Figure 4.10.

Nursing homes are required to provide non-emergency medical transportation services for their residents. There are no transportation-related requirements for other types of licensed senior housing facilities.

In an attempt to quantify transportation services that are provided to the residents of these various types of long term care facilities, licensees were surveyed to determine what transportation services are provided to residents. The overall response rate to this survey was 61.4 percent.



Source: Enhancing Passenger Mobility Services in North Dakota through Increased Coordination. Small Urban & Rural Transit Center, 2004

Figure 4.10 Nursing Home & Physically Disabled Housing

Table 4.11 on the following page identifies the county locations of all of North Dakota's licensed assisted living, basic care, and nursing home facilities. Vehicle numbers for each facility are based on survey responses. In summary, 61.4 percent of the licensed facilities responded to the survey and these respondents reported operating a total of 127 vehicles to transport their residents. Respondent nursing homes operate approximately three vehicles per home while basic care respondents reported operating an average of two vehicles per location. Assisted living respondents averaged half a vehicle per site.

The county-by-county information in Tables 4.12 and 4.13 is further tabulated to reflect regional totals as well as compilations for North Dakota cities with populations of 4,500 or more.

Table 4.11 Transit Vehicles Operated by Long-Term Care Facilities

		Assisted Living		Basic Care		Nursing homes	
	County	Facilities	Vehicles	Facilities	Vehicles	Facilities	Vehicles
1	Adams	1		1		1	
2	Barnes	1	1	1		1	2
3	Benson			1			
4	Billings						
5	Bottineau					2	5
6	Bowman			2		1	2
7	Burke						
8	Burleigh	4	3	5	5	3	5
9	Cass	5		6	1	6	4
10	Cavalier					2	3
11	Dickey	2		1		2	5
12	Divide			1		1	3
13	Dunn					1	2
14	Eddy	1				1	2
15	Emmons	1				1	1
16	Foster			1	1	1	0
17	Golden Valley	1	0				
18	Grand Forks	5	1	2	1	4	10
19	Grant			1		1	
20	Griggs					1	2
21	Hettinger			1		1	4
22	Kidder					1	
23	Lamoure	1		1		1	
24	Logan			1	2	1	1
25	McHenry	1				1	2
26	McIntosh					2	4
27	McKenzie	1		1	2	1	
28	McLean			1		3	3
29	Mercer			1		1	
30	Morton	1		1	2	4	2
31	Mountrail			1		2	
32	Nelson					3	2
33	Oliver						
34	Pembina			2		1	2
35	Pierce			1	2	2	
36	Ramsey	2		3		2	
37	Ransom	2		1	1	3	
38	Renville					1	2
39	Richland	1		2	1	2	

Table 4.11 continued

	County	Assisted Living		Basic Care		Nursing homes	
		Facilities	Vehicles	Facilities	Vehicles	Facilities	Vehicles
41	Sargent			1		1	2
42	Sheridan			1			
43	Sioux						
44	Slope						
45	Stark	2	0	2	2	2	3
46	Steele						
47	Stutsman	1		3		2	2
48	Towner			1		1	
49	Traill	2				3	4
50	Walsh	1				2	7
51	Ward	5	4	4	4	3	2
52	Wells					1	
53	Williams	2		2		2	3
	State Totals	**43**	**12**	**53**	**24**	**80**	**91**

Source: Small Urban & Rural Transit Center, 2004

Table 4.12 Regional Compilation Transit Vehicles Operated by Long-Term Care Facilities

Economic Planning Regions	Assisted Living		Basic Care		Nursing Homes	
	Facilities	Vehicles	Facilities	Vehicles	Facilities	Vehicles
Region I	3	3	4	2	4	7
Region II	6	4	6	6	11	11
Region III	3	0	5	0	8	6
Region IV	6	1	4	1	10	18
Region V	10	0	10	3	15	10
Region VI	5	1	8	3	12	16
Region VII	6	3	10	7	14	11
Region VIII	4	0	6	2	6	12
State Totals	**43**	**12**	**53**	**24**	**80**	**91**

Source: Small Urban & Rural Transit Center, 2004

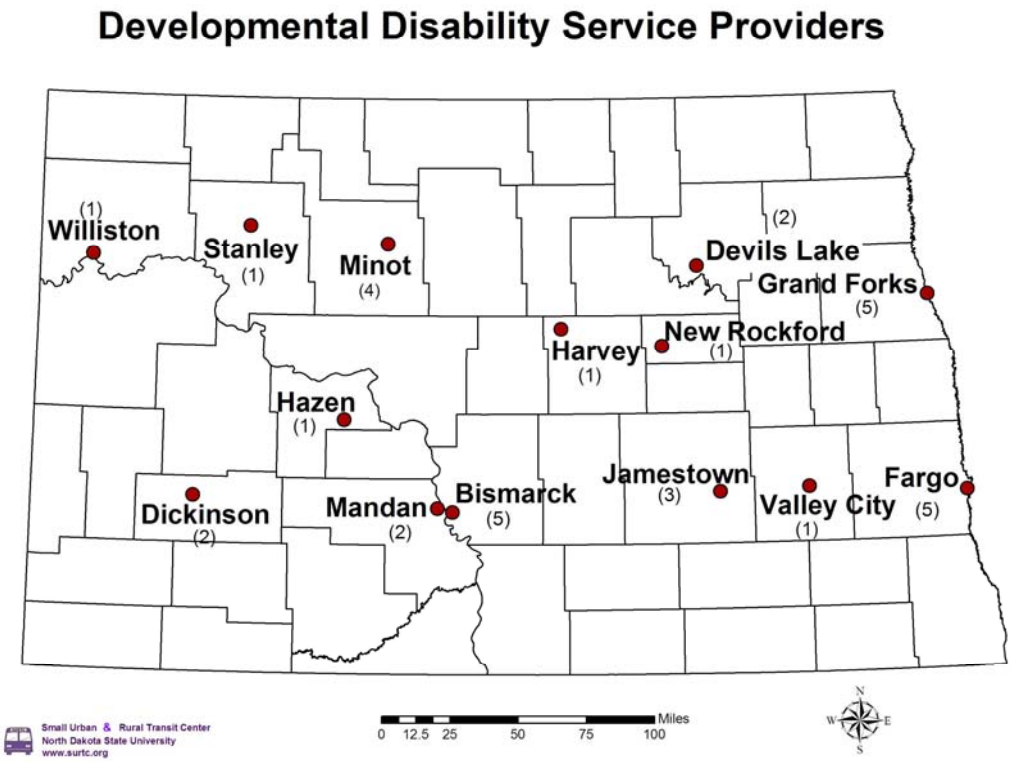
Table 4.13 City-by-City Compilation of Transit Vehicles Operated by Long-Term Care Facilities

Major Communities	Assisted Living		Basic Care		Nursing Homes	
	Facilities	Vehicles	Facilities	Vehicles	Facilities	Vehicles
Bismarck	4	3	5	4	3	5
Beulah-Hazen	0	0	1		1	
Devils Lake	2	0	2		2	0
Dickinson	2	0	2	2	2	3
Fargo	4	0	5	1	5	2
Grand Forks	4	1	2	1	2	3
Jamestown	1	0	3		2	2
Mandan	0	0	1	2	2	0
Minot	4	4	2	2	2	2
Wahpeton	0	0	2	1	1	
West Fargo	0	0	0	0	0	0
Williston	2		1	0	1	3
State Totals	**22**	**8**	**26**	**13**	**23**	**20**

Source: Small Urban & Rural Transit Center, 2004

4.10.2 Developmental Disabilities Service Providers

NDDHS also licenses entities to provide residential services to developmentally disabled individuals in North Dakota. As of August, 2004, there were such 34 entities in the state. The location of these providers is depicted in Figure 4.11. These service providers operate a total of 101 residential group homes in North Dakota. Approximately 775 developmentally disabled individuals reside in these group homes. NDDHS estimates that licensees provide residential services for an additional 1,000 developmentally disabled individuals who live outside group homes. Many of these group homes provide transportation services for their residents and other clients.



Source: North Dakota Department of Human Services, 2004

Figure 4.11 Developmental Disability Service Providers

Group home operators receive Medicaid reimbursement through NDDHS for services provided. Each licensee purchases its own vehicles and amortizes related expenses into its operating budget, along with vehicle operating costs. The exact amount that is paid for transportation services is unknown since related costs are built into each licensee's overall cost of doing business. These costs are subject, however, to review and approval by NDDHS (Hendrickson, 2004).

All of North Dakota's developmental disabilities service providers were surveyed as a part of this study effort. Survey questions focused on the types of transportation services that are being provided, the number of clients served, and the number of trips provided.

Twenty-nine of North Dakota's 34 licensees responded to this survey (85 percent response rate). These survey respondents operate 74 of the state's 101 group homes and provide 3,995 clients with residential and other services. Most group homes have at least one vehicle at the home for resident/client use; the homes' vehicles are capable of satisfying the majority of their needs. Group homes do not keep a record of trip purposes. Many indicated, however, that employment and medical trips are the most frequented trips. Respondents indicated that they operate a total of 156 vehicles to provide transportation services to their clients.

A county-by-county listing of the location of reported developmental disability vehicles is presented in Table 4.14 on the following page. Tables 4.15 and 4.16 present regional totals and a subsequent listing which identifies vehicle locations by major city.

Table 4.14 Transit Vehicles Operated by Dev. Disabilities Facilities

	County	Development Disabilities	
		Facilities	Vehicles
1	Adams		
2	Barnes	1	23
3	Benson		
4	Billings		
5	Bottineau		
6	Bowman		
7	Burke		
8	Burleigh	5	15
9	Cass	5	43
10	Cavalier		
11	Dickey		
12	Divide		
13	Dunn		
14	Eddy	1	
15	Emmons		
16	Foster		
17	Golden Valley		
18	Grand Forks	5	11
19	Grant		
20	Griggs		
21	Hettinger		
22	Kidder		
23	Lamoure		
24	Logan		
25	McHenry		
26	McIntosh		
27	McKenzie		
28	McLean		
29	Mercer	1	2
30	Morton	2	6
31	Mountrail	1	7
32	Nelson		
33	Oliver		
34	Pembina		
35	Pierce		
36	Ramsey	2	
37	Ransom		
38	Renville		
39	Richland		
40	Rolette		
41	Sargent		
42	Sheridan		
43	Sioux		
44	Slope		
45	Stark	2	14
46	Steele		
47	Stutsman	3	19
48	Towner		
49	Traill		
50	Walsh		
51	Ward	4	23
52	Wells	1	7
53	Williams	1	5
	State Totals	**34**	**175**

Source: Small Urban & Rural Transit Center, 2004

Table 4.15 Regional Compilation
Transit Vehicles Operated by Dev. Disabilities Facilities

Economic Planning Regions	Development Disabilities	
	Facilities	Vehicles
Region I	1	5
Region II	6	30
Region III	3	0
Region IV	5	11
Region V	5	43
Region VI	4	49
Region VII	8	23
Region VIII	2	14
State Totals	**34**	**175**

Source: Small Urban & Rural Transit Center, 2004

Table 4.16 City-by-City Compilation
Transit Vehicles Operated by Dev. Disabilities Facilities

Major Communities	Development Disabilities	
	Facilities	Vehicles
Bismarck	5	15
Beulah-Hazen	1	2
Devils Lake	2	0(NR)
Dickinson	2	14
Fargo	5	43
Grand Forks	5	11
Jamestown	3	19
Mandan	2	6
Minot	4	30
Wahpeton	0	0
West Fargo	0	0
Williston	1	5
State Totals	**30**	**145**

Source: Small Urban & Rural Transit Center, 2004

4.10.3 Ambulance Services – Ground & Air

As is the case with nursing homes and developmental disabilities service providers, NDDHS also licenses North Dakota's ground and air ambulance services. In some communities these are commercial operations while in others they are nonprofit entities staffed primarily with volunteers.

As of August 2004, NDDHS licensed 140 ground ambulance services; 135 of these services were based in North Dakota while five were based in communities just outside the state's borders. A map showing the location of licensed ground ambulance services is presented in Figure 4.12.

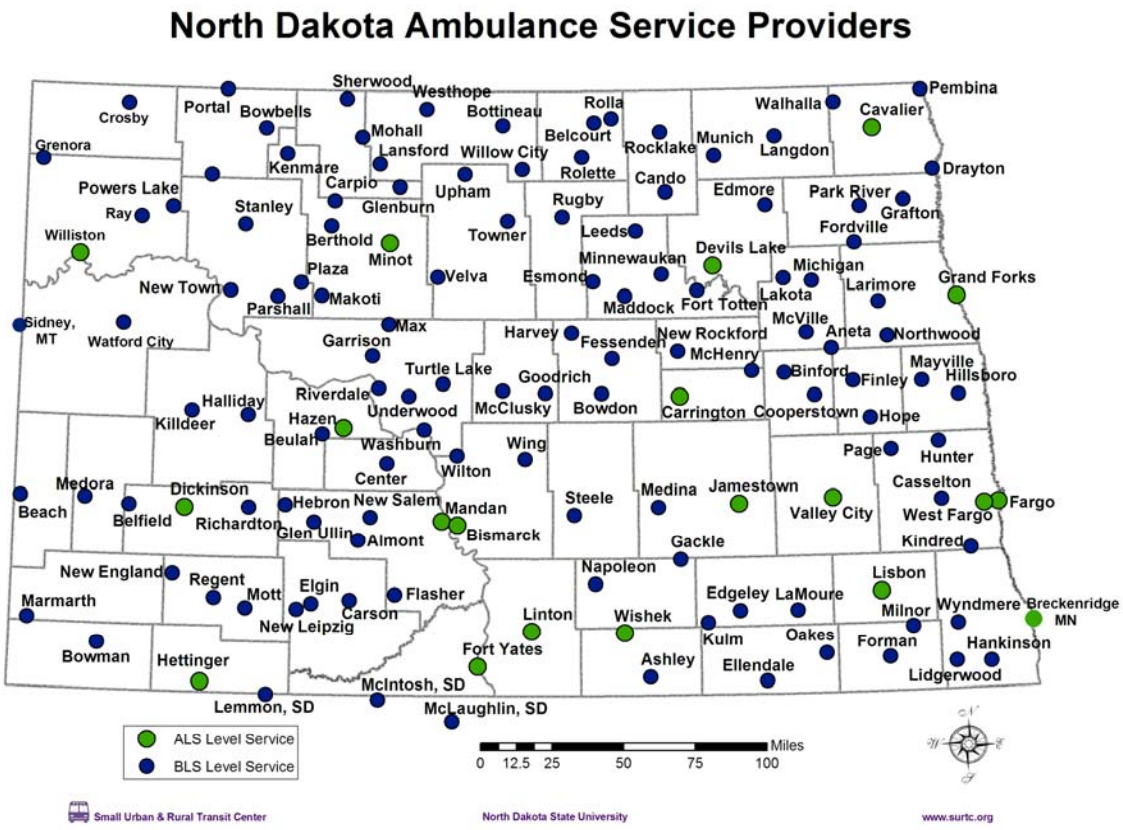


Figure 4.12 North Dakota Ambulance Service Providers

North Dakota's 140 ground ambulance services operate a total of 288 vehicles. Licensees in large communities such as Fargo may operate 10 or more vehicles while the state's smallest services may only have one vehicle. Most licensees do, however, have two vehicles available to provide emergency medical trips to area residents.

There are 45 hospitals in North Dakota; 18 of the state's 53 counties do not have a local hospital. Ambulance trips may, therefore, be quite long. Having a second service available for emergency service is considered important.

Of North Dakota's ambulance services, 121 are licensed to provide "basic life support" services (BLS); the remaining 19 provide "advanced life support" services. BLS service vehicles must be staffed with an emergency medical technician (EMT) and a driver who is trained in cardiopulmonary resuscitation. It is estimated that more than 90 percent of the state's EMTs are volunteers. NDDHS estimates that North Dakota's licensed ground ambulance services provide more than 50,000 emergency trips per year.

NDDHS also licenses air ambulance services. As of August 2004, there were four entities licensed to provide air ambulance services in North Dakota. These services are based in Fargo, Bismarck, Minot, and Aberdeen, South Dakota. Emergency services may be provided between

points in the state or to more distant medical facilities in locations such as Minneapolis or Rochester, Minnesota (Myer, 2004).

Given the fact that there are 144 ground and air ambulance services licensed by NDDHS and only 126 ambulance services have requested Medicaid-related transportation reimbursement since 2002 (see Appendix H), there are apparently ambulance services that have not enrolled with NDDHS to receive Medicaid reimbursement for services provided. Doing so may be financially beneficial for these service providers.

4.10.4 Volunteer Drivers of Private Automobiles

Volunteer driver programs have the ability to satisfy transportation needs in areas where population densities do not warrant programs with dedicated vehicles and salaried drivers. Volunteer driver programs can also augment local transit and paratransit services.

Volunteer driver programs can be operated by local transit services but they may also be organized and operated by civic-minded businesses or as faith-based initiatives operated by local churches. Riders may be charged for services according to an established fee structure or services may be provided on a donation basis. Drivers are typically reimbursed for vehicle operating costs, incurred meal costs, etc.

Regional focus group meetings were held throughout North Dakota as a part of the 2004 transportation coordination study that SURTC conducted for the North Dakota Department of Transportation. These meetings revealed that there are a small number of volunteer programs around the state that assist local residents with their transportation needs. These programs focus on assisting specific clientele groups within their respective communities.

One such program is Faith in Action in Pembina County. This program focuses on taking mobility disadvantaged residents to medical facilities in nearby Grafton and Grand Forks for medical appointments.
Valley City's Road to Recovery program is geared for cancer treatment patients. This program's volunteer drivers take local cancer patients to Fargo for radiology and chemotherapy treatments.

In Benson County, the Go For It program on the Spirit Lake Reservation helps meet the local transportation needs of TANF recipients. In the Fargo area, Cass County Social Services uses volunteers to get children to Grand Forks to visit parents who are hospitalized or in alcohol treatment.

Liability insurance is a concern which must be addressed by volunteer driver programs. Volunteer drivers must have personal automobile insurance which satisfies prescribed state standards. This insurance may cover vehicle and property damage claims which result when the vehicle is being used to provide services on behalf of the sponsoring organization. This insurance may also cover personal injury claims for both the volunteer driver and riders. Exclusions may apply, however, if riders are being charged for services, if vehicle use for volunteer services is extensive, or if damage or injury claims exceed prescribed limits.

Program operators and volunteer drivers should not automatically assume that the drivers' personal automobile insurance will provide adequate coverage in case of an accident, especially if a fee is charged for the ride or even if the driver is reimbursed for expenses. It may be

appropriate for program operators to consult with their insurance agent concerning supplemental insurance to provide related coverage for volunteer drivers.

4.10.5 Special Purpose Shuttles

Several forms of special service shuttles operate in North Dakota. These shuttle services take a variety of forms including:

- Local transportation services provided by motels to their guests;
- Local and intercity pick-up and return services offered to medical clients;
- Transportation offered by child care facilities, colleges, & universities;
- Child transportation services related to YMCA-type functions;
- Local and regional transportation related to Visitor & Convention Bureau activities; and
- Gambling casino excursion trips.

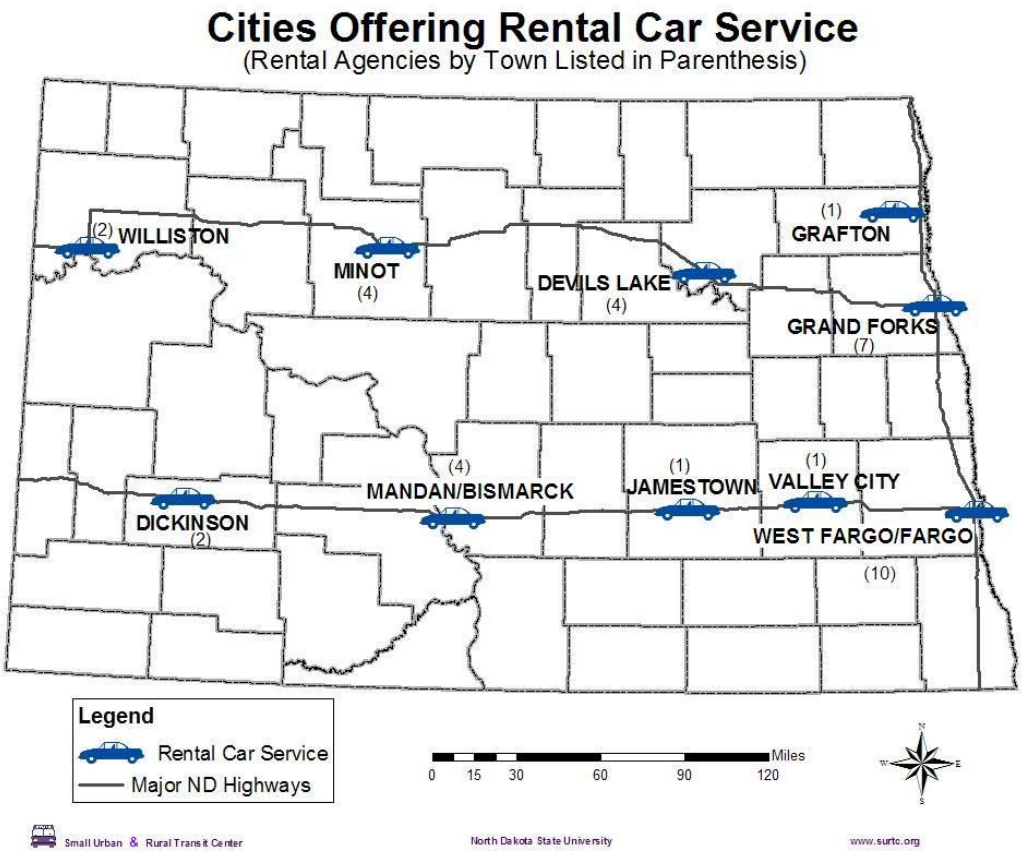
Some of these services may be provided on a contract basis by licensed charter bus operators or limousine services while others may be in-house operations. These services are very specialized and client-specific. They involve a very limited clientele and do not address personal mobility needs of the general public.

4.11 Car Rental, Charter Buses, & Air Taxi Services

Vehicle rental services, both car and bus, are available in many North Dakota cities. These modes of travel are typically utilized when individuals or groups do not have access to other forms of transportation or when other forms of transportation do not provide the required degree of flexibility.

4.11.1 Car Rental Services

Car rental services are typically located at airport terminals but some of these commercial enterprises are located away from airports or in communities that are not served by commercial airlines. Appendix I identifies 35 car rental services located in 12 of North Dakota's largest cities; others, to the extent that they exist, may be found in local telephone directories. The location of existing car rental companies is presented in Figure 4.13.



Source: Small Urban & Rural Transit Center, 2005

Figure 4.13 Cities Offering Rental Car Services

4.11.2 Charter Bus Services

Charter bus services are much like car rentals except the vehicles have greater capacities than cars or vans and come with drivers. Services provided may be in school-type coaches or in over-the-road transit buses. Transportation may be of a local nature for conventions, etc. or for long-distance trips or tours.

Charter bus companies are typically based in larger cities but they have the flexibility to pick-up and transport groups to and from virtually anywhere that is accessible by road. Therefore, all cities in North Dakota have relatively easy access to charter bus services, either as a trip origin, destination, or intermediate stopping point.

There were 17 charter bus operators in North Dakota in 1981; there are 10 today (North Dakota State Highway Department, 1981). While this number has remained fairly constant in recent years, there is significant pressure on operators due to high vehicle and operating costs and competition within the industry. New coaches cost more than $400,000 and insurance costs can approach $14,000 per vehicle per year.

The 10 charter bus companies that are located in 9 North Dakota cities or in bordering Minnesota communities are listed in Appendix J.

4.11.3 Air Taxi Services

Air taxi services are certified and regulated by the Federal Aviation Administration and are commonly referred to as on-demand charter operations. These operators are typically based at one of the state's eight commercial service airports but services are offered with origins and/or destinations at any of the state's eight commercial service and 82 general aviation airports.

Presently there are 10 licensed air taxi services (Federal Aviation Administration "135 Operators") in North Dakota. According to the North Dakota State Highway Department (N.D. Department of Transportation) report entitled "Inventory of Public Transportation in North Dakota," there were 29 such services in the state in 1981. According to the North Dakota Aeronautics Commission; further declines in operator numbers are anticipated, because of increased regulatory requirements and rising insurance costs (Federal Aviation Administration, 2004).

A list of North Dakota's 10 air taxi services is presented in Appendix K.

4.12 Pedestrian and Bicycle Transportation

Walking and bicycling are efficient modes of travel. Their viability is dependent on, among other things, the distances involved, the physical abilities of the traveler, weather, and related transportation facilities. As indicated in an earlier section, 2000 Census data indicates that 5 percent of all North Dakotans walk to work and that another 0.8 percent commute by some means other than by car or transit (partially by bicycle). By contrast, only 0.4 percent commute by public transportation, including taxicab. While these modes of travel are likely to be seasonal given North Dakota's sometimes harsh winter weather, adequate pedestrian and bikeway facilities promote both utilization and user safety during major portions of the year.

The Federal Highway Administration (FHWA) has adopted a policy statement concerning bicycle and pedestrian ways. The policy provides that corresponding facilities shall be included in all new and reconstruction roadway projects in urban areas unless doing so is prohibited by law, the cost would be excessively prohibited, or there is an indicated absence of need (Federal Highway Administration, 2004).

FHWA requires that related bicycle and pedestrian facilities included in roadway projects be designed in a manner that is consistent with commonly used guidelines and standards such as the Association of State Highway and Transportation Officials (AASHTO) "Guide for the Development of Bicycle Facilities" (1999). Related facilities may include features such as extra-width traffic lanes, designated lanes, sidewalks/shared use paths, accessibility curb-cuts, ramps, cross walks, traffic control devices, etc. Many of the amenities that are needed to encourage pedestrian and bicycle travel are also required by the Americans with Disabilities Act (American Association of State Highway and Transportation Officials, 1999).

As a part of the NDDOT urban, long-range planning process, each of the state's urban areas is required to consider bicycle and pedestrian traffic when building or upgrading arterial streets and roadways that are a part of the state or federal highway system. Cities included in this process are listed in Table 4.17.

Table 4.17 Communities with Urban Bicycle & Pedestrian Planning

City / County	2000 Population
Bismarck/Burleigh	55,532
Devils Lake/Ramsey	7,222
Dickinson/Stark	16,010
Fargo/Cass	90,599
Grafton/Walsh	4,516
Grand Forks/Grand Forks	49,321
Jamestown/Stutsman	15,527
Mandan/Morton	16,718
Minot/Ward	36,567
Valley City/Barnes	6,826
Wahpeton/Richland	8,566
West Fargo/Cass	14,940
Williston/Williams	12,512

Source: North Dakota Department of Transportation, 2004

AASHTO's design standards also apply to federally supported construction projects that are located outside the urban areas identified above.

AASHTO categorizes bicyclists as advanced, basic, or children. Individuals who use bicycles for commuting are considered advanced riders who are capable of sharing arterial roadways with vehicular traffic. Transportation planners must consider the level of bicyclists who will be using a facility when preparing corresponding designs. AASHTO has design standards for each of the types of bicycle roadways identified above.

Facilities should also be designed with anticipated levels of pedestrian traffic in mind. Unless constrained by available space or unreasonable costs, higher levels of usage warrant greater accommodations.

This study will not attempt to inventory available pedestrian and bicycle routes in North Dakota because these routes typically include all of these state's roadways. It is worth noting, however, that planning for pedestrian and bicycle facilities is a part of the planning process undertaken by NDDOT and each of the state's largest cities.

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5. Public Transit Trends and Performance

Mobility options available to North Dakotans, ranging from the private vehicle to local and regional public transportation, human service transportation, and commercial intercity air and surface transportation, were described in the previous chapter. The description of each type of service includes significant data on the quantity of service provided, the extent to which it is used, and some financial information on the providers. In addition, the appendices to this study include listings of services and providers known to exist in North Dakota at the time of this study. Of particular interest to this study is the data presented in Appendices F and G that includes profiles of the state and federally funded public transit providers and operating and financial data for 2004. This inventory of existing mobility options represents the best and most up-to-date information on transportation in North Dakota.

This chapter analyzes trends and performance information for a portion of the providers for which data is available – the fixed-route and demand-responsive transit systems supported in part by state and federal transit funds. Data on these providers is the most complete of all providers since the NDDOT and USDOT require regular reporting by grantees that can be used for the needed analysis. By analyzing these trends and making some observations about the performance of individual systems we can make judgments as to the adequacy of existing services and identify untapped capacity that can be used to provide additional mobility. More will be said later about the availability and accuracy of data. Recommendations for future data collection are included in Chapter 8.

5.1 Public Transit Trends

Public transit service has grown significantly in North Dakota over the past six years. Tables 5.1 - 5.3 summarize key operating and financial statistics for all public rural and urban transit systems for fiscal years 1999 through 2004. As can be seen, the total number of vehicle miles of service has grown 29.1 percent over these six years. Most of the growth occurred in the four urban systems (49 percent). Rural systems grew to a lesser extent (12.1 percent). Likewise, ridership has grown statewide but not by as much as vehicle miles. Overall, ridership increased by about 11 percent. Ridership in urban areas went up by about 23 percent while ridership in rural areas declined by 10 percent. The growth in vehicle miles of service without a comparable growth in ridership resulted in a decline in system efficiency for both urban and rural services as measured by passenger trips per vehicle mile.

These divergent trends between urban and rural areas in terms of ridership and service highlight several mobility challenges facing North Dakota and other states. First, in urban areas ridership did not grow as fast as the number of miles of service offered. The likely explanation of this phenomenon is that transit systems expanded their services into lower density, less productive areas to meet more mobility needs. However, the new services did not result in the same level of ridership intensity. Likewise, in rural areas the transit systems offered more service, but actually lost ridership over the six-year period. These statistics are consistent with the observations of the steering committee and the demographic data presented earlier in this report. In many rural areas, population is declining and the already sparsely populated areas are becoming even more difficult to serve efficiently with public transit. Further, to meet the mobility needs of those individuals with no other mobility options, transit providers are traveling more miles with fewer passengers to connect residents to health care and other high priority services.

Over the six-year period, significantly more resources were provided to public transit systems as measured by operating expenses and number of vehicles. The number of vehicles grew by nearly 22 percent with the greatest growth in rural areas. Operating expenses also increased. Some interpretation is needed to judge the growth in expenditures, especially for the urban areas. The 1999 expense data is skewed by a one-time increase in operating expenses reported by one of the urban providers (Bis-Man Transit).

A comparison of 2000 to 2004 data shows expenses increasing by 11 percent, about the same rate as the number of vehicle miles of service. Likewise, the trend in operating expense per vehicle mile must be adjusted to exclude 1999 urban data. Doing so suggests that operating expense per mile for urban systems remains about the same in 2004 as in 2000. This situation can perhaps be explained by economies of scale in operations in that systems can add services without greatly increasing fixed expenses so that the cost per unit of service remains relatively constant though some costs such as fuel and wages increase. Rural systems experienced an 8.6 percent increase in cost per mile, a very modest increase over a six-year period.

The last two columns of Tables 5.2 and 5.3 show the percentage of each financial and operating statistic accounted for by urban and rural systems in 1999 and 2004 and reveals the relative shifts in service accounted for by the two types of systems. Over the six years, a slightly higher percentage of total public transit system expenditures have occurred in rural areas, but urban areas account for a greater percentage of ridership and vehicle miles of service.

Several key conclusions can be reached from the data in these tables. First, public transit services in North Dakota have increased over the past six years in both urban and rural areas. Second, increased service, as measured by vehicle miles, has resulted in more ridership, but not in proportion to the increase in service or expenditures. Finally, the costs of providing service in North Dakota have increased, but only at a modest rate suggesting that transit systems are controlling costs and that service expansions require marginally less expenditure per mile of service than the average for a system.

Table 5.1 North Dakota State-Funded Public Transit System Trends 1999-2004 – All Systems

Statistic	Fiscal Year 1999	2000	2001	2002	2003	2004	% Change 1999-2004
Total Operating Expense	$8,581,508	$8,325,472	$9,347,616	$9,538,081	$8,548,680	$9,247,966	7.8%
Total One-Way Passenger Trips	1,604,114	1,585,393	1,632,608	1,616,737	1,684,236	1,784,139	11.2%
Total Vehicle Miles	3,391,477	4,022,726	4,041,318	4,168,659	4,151,943	4,404,743	29.9%
Total Vehicles	219	223	229	235	245	267	21.9%
Expense/Passenger Trip	$5.35	$5.25	$5.73	$5.90	$5.08	$5.18	-3.1%
Expense/Vehicle Mile	$2.53	$2.07	$2.31	$2.29	$2.06	$2.10	-17.0%
Passenger Trips/Vehicle Mile	0.47	0.39	0.40	0.39	0.41	0.41	-14.4%

Source: Small Urban & Rural Transit Center, 2005

Table 5.2 North Dakota State-Funded Public Transit System Trends 1999-2004 – Rural Demand Responsive Systems

Statistic	Fiscal Year						% Change 1999-2004	1999 % of Total	2004 % of Total
	1999	2000	2001	2002	2003	2004			
Total Operating Expense	$2,749,365	$3,603,831	$4,045,080	$3,880,321	$3,192,928	$3,345,422	21.7%	32.0%	36.2%
Total One-Way Passenger Trips	570,330	554,029	569,156	539,125	492,986	511,906	-10.2%	35.6%	28.7%
Total Vehicle Miles	1,757,486	2,072,622	2,215,606	2,185,305	1,725,888	1,969,865	12.1%	51.8%	44.7%
Total Vehicles	137	144	151	153	142	156	13.9%	62.6%	58.4%
Expense/Passenger Trip	$4.82	$6.50	$7.11	$7.20	$6.48	$6.54	35.6%		
Expense/Vehicle Mile	$1.56	$1.74	$1.83	$1.78	$1.85	$1.70	8.6%		
Passenger Trips/Vehicle Mile	0.32	0.27	0.26	0.25	0.29	0.26	-19.9%		

Source: Small Urban & Rural Transit Center, 2005

Table 5.3 North Dakota State-Funded Public Transit System Trends 1999-2004 Urban Systems

Statistic	Fiscal Year						% Change 1999-2004	1999 % of Total	2004 % of Total
	1999	2000	2001	2002	2003	2004			
Total Operating Expense	$5,832,143	$4,721,641	$5,302,536	$5,657,760	$5,355,752	$5,902,544	1.2%	68.0%	63.8%
Total One-Way Passenger Trips	1,033,784	1,031,364	1,063,452	1,077,612	1,191,250	1,272,233	23.1%	64.4%	71.3%
Total Vehicle Miles	1,633,991	1,950,104	1,825,712	1,983,354	2,426,055	2,434,878	49.0%	48.2%	55.3%
Total Vehicles	82	79	78	82	103	111	35.4%	37.4%	41.6%
Expense/Passenger Trip	$5.64	$4.58	$4.99	$5.25	$4.50	$4.64	-17.8%		
Expense/Vehicle Mile	$3.57	$2.42	$2.90	$2.85	$2.21	$2.42	-32.1%		
Passenger Trips/Vehicle Mile	0.63	0.53	0.58	0.54	0.49	0.52	-17.4%		

Source: Small Urban & Rural Transit Center, 2005

5.2 Transit System Performance Evaluation

Performance evaluation is a key activity of both transit system management and policymaking and needs to be a part of a mobility plan such as the one presented here for North Dakota. Tracking key indicators allows both managers and policymakers to determine how well existing policies meet stated goals and provides insights into the likely success of future policies and service changes. Therefore, this section of the report summarizes key performance data for North Dakota's public transit providers.

Data availability and accuracy is a major hurdle to be overcome when appraising service performance. This is certainly true in the case of North Dakota's transportation services. As indicated in the previous section of this chapter, reliable data is not available for all transportation services, even those receiving public funding, because funding agencies have different reporting requirements and different definitions of terms and data elements These agencies have also placed relatively little emphasis on auditing and training to improve data accuracy. Therefore, as was the case in the first section of this chapter, the performance evaluation is limited to the approximately 50 providers that receive state and federal transit funds and report data to NDDOT.

Transit services can be evaluated on a number of attributes generally falling in the categories of efficiency and effectiveness. Efficiency indicators measure how well a transit system uses the inputs it receives (operating funds, vehicles, hours-of-service) and is measured with indicators such as expense per mile or hour of service. Effectiveness, on the other hand, is a measure of how well the transit system meets its goals in terms of quality of service, overall ridership, or ability to meet the needs of specific population groups. Another group of indicators especially relevant for this study measures the payoff from public funding and the equity of funding between providers and users as measured by subsidies per passenger trip and the share of the costs borne by the passenger.

Once calculated, performance indicators can be evaluated using one or more of three approaches. The first is time-series analysis where a performance indicator for a system for one time period is compared to the indicator for the same system over different time periods. This approach allows conclusions to be made in regard to the direction of change in performance, but says not about performance as compared to other systems or any industry standards that may exist. The other two approaches are peer comparisons, where an indicator for one system is compared to similar systems, and a comparison of a system's performance to industry standards or regulatory guidelines.

Time-series comparisons are the easiest to perform because there is no need to determine which systems are peers, and concern about comparability of data from year to year within a system should be less than comparability to other systems that may define data elements differently or collect the data in a different way. Time-series comparisons are best used by individual systems to manage and evaluate their own progress. Peer comparisons or comparisons to standards, while more difficult, are probably the most useful approaches in the context of this mobility study.

Unfortunately, data is not available to calculate many of the indicators important to public transportation. Two key missing data elements are vehicle hours of service and information on system reliability that might include on-time performance or breakdowns. In addition, there is some evidence that even given the best efforts of NDDOT staff to obtain accurate information from grantees, some of the data is incorrect. The most likely reason for this inaccuracy is a lack of clear definition of data elements and specific training on how to collected and report the information. Nevertheless, even given these limitations, useful performance information can be obtained for the data reported to the state.

Table 5.4 presents 2004 data on seven performance indicators reflecting three major attributes of the transit services and reports these indicators for each of the systems receiving public funding. A complete listing of the 2004 data is included as Appendix E. The indicators are divided into three categories including: efficiency, service fit, and subsidy policy. As indicated above, data availability greatly limited the indicators that could be presented and the ones listed are only a small sample of ones that would be desired for a complete analysis, yet they provide information that will be useful in formulating the North Dakota mobility policy.

5.2.1 Efficiency Indicators

Three efficiency measures were calculated using 2004 data. The first, expense per mile, measures the cost-efficiency of the system in producing a mile of public transit service. The average value for rural systems was $1.79 with a range in values of from 40 cents to more than $6 per mile. Urban systems ranged from $1.78 to $3.15/mile and are generally more costly to operate than rural systems because of the operating environment where congestion and frequent stops results in average speeds slower than in rural areas and the higher expenses associated with operating larger vehicles.

The range in expense per mile for rural systems points out the data accuracy problem mentioned previously. Properly determined operating expenses per vehicle mile for rural systems are most likely in the $1.25 - $2 per mile range, not 40 cents or $6.03 – the extremes reported in Table 5.4.

The most likely cause of the low cost per mile (Sitting Bull College) is an over-reporting of miles because this system also reports an average of 39,400 miles per vehicle, nearly 2.5 times the rural average. Likewise, the highest cost per mile (Kenmare Wheels) is likely due to an under reporting of miles because its miles per vehicle statistic is just over 3,000 miles, one-fifth the state average. NDDOT has made efforts to verify the accuracy of the data reported and the data appears to improve in accuracy over the past five years. However, more needs to be done to assure the usefulness of the information for grant administration purposes and for performance evaluations. Specific recommendations to improve the usefulness of the data are included in Chapter 8.

Table 5.4 Performance Indicators for North Dakota Public Transit Systems (Fiscal 2004)

	Efficiency Indicators			Service Fit Indicators		Subsidy Policy Indicators	
PROVIDER	**Expense/ Mile**	**Expense/ Psgr Trip**	**Vehicle Miles/Vehicle**	**Psgr Trips/Vehicle**	**Psgr trips/veh mile**	**Fares as % of Exp**	**Subsidy/trip**
Dickey County Trans	$1.70	$5.71	20,416	6,058	0.297	8.10%	$5.24
Dunn County Trans.	$1.73	$19.81	9,209	804	0.087	8.90%	$17.60
Elder Care-Dickinson	$2.25	$6.46	18,132	6,333	0.349	11.68%	$2.91
Emmons Co. Trans	$1.86	$15.74	12,604	1,486	0.118	16.13%	$10.39
Fargo Senior Comm. (7 providers):							
5a. Fargo/West Fargo	$1.29	$4.55	16,237	4,608	0.284	20.16%	$3.16
5b. Cass County	$1.00	$10.71	21,737	2,029	0.093	9.34%	$9.66
5c. Ransom County	$1.64	$16.93	12,552	1,216	0.097	10.41%	$14.05
5d. Richland County	$2.15	$8.56	4,686	1,178	0.251	9.21%	$7.76
5e. Sargent County	$1.27	$44.31	14,908	427	0.029	8.92%	$36.14
5f. Steele/GF Counties	$1.94	$30.68	28,919	1,830	0.063	9.23%	$27.55
5g. Traill County	$1.34	$22.26	13,466	808	0.060	5.37%	$20.86
Glen Ullin Trans.	$1.37	$11.03	5,564	690	0.124	24.60%	$7.12
Golden Valley Trans.	$1.35	$53.24	15,602	395	0.025	9.85%	$49.27
Handiwheels-Fargo	$1.42	$6.15	22,578	5,216	0.231	59.35%	$0.86
Hazen, City of	$2.28	$2.97	7,864	6,042	0.768	29.57%	$0.94
James River Transit	$2.30	$6.27	15,796	5,806	0.368	34.12%	$2.15
Kenmare Wheels/Mls	$6.03	$2.26	3,045	8,148	2.676	7.67%	$2.04
Kidder-Emmons Co.	$0.96	$4.88	26,133	5,126	0.196	10.47%	$3.87
Minot Comm/Aging	$2.04	$6.02	27,497	9,296	0.338	16.58%	$1.81
Nelson Co. Trans.	$1.63	$11.06	15,639	2,299	0.147	8.40%	$8.29
North Central Planning - Devils Lake (9 providers):							
15a. Benson County	$1.02	$7.28	11,381	1,594	0.140	14.66%	$5.53
15b. Cando Seniors	$3.62	$4.67	3,854	2,986	0.775	15.75%	$4.03
15c. Cavalier County	$2.96	$5.53	6,768	3,618	0.535	22.50%	$3.74
15d. Eddy County	$5.52	$8.48	3,828	2,491	0.651	6.92%	$7.88
15e. Nutr United-Rolla	$1.60	$6.43	7,400	1,836	0.248	4.63%	$5.59

Table 5.4 continued

	Efficiency Indicators			Service Fit Indicators		Subsidy Policy Indicators	
PROVIDER	**Expense/ Mile**	**Expense/ Psgr Trip**	**Vehicle Miles/Vehicle**	**Psgr Trips/Vehicle**	**Psgr trips/veh mile**	**Fares as % of Exp**	**Subsidy/trip**
Pembina County	$2.11	$18.68	10,908	1,230	0.113	7.49%	$16.12
Sitting Bull College	$0.40	$9.09	39,400	1,716	0.044	27.78%	$8.71
Souris Basin Trans	$2.24	$8.57	10,375	2,715	0.262	7.78%	$7.64
South Central Trans.	$1.43	$7.93	12,341	2,222	0.180	14.58%	$4.65
Southwest Trans	$1.75	$3.03	11,120	6,417	0.577	5.70%	$2.77
Three Affiliated Tribes	$1.71	$32.95	6,734	350	0.052	0.00%	$34.23
Tioga Seniors	$1.22	$4.62	8,699	2,297	0.264	27.87%	$2.14
Trenton Indian Srvs.	$4.21	$6.93	4,285	2,599	0.607	1.20%	$6.85
Walsh Co Trans	$1.64	$8.50	22,799	4,408	0.193	11.33%	$6.29
West River Trans	$2.54	$6.92	7,796	2,860	0.367	13.36%	$5.26
Wildrose Seniors Trans	$1.21	$10.23	3,214	380	0.118	0.00%	$9.56
Williston Council Aging	$3.01	$5.57	3,137	1,693	0.540	12.94%	$4.92
SUB TOTAL - GROUP	$1.70	$6.54	12,628	3,281	0.260	16.41%	$4.27
Jamestown Taxi	$1.39	$5.56	28,816	7,191	0.250	63.96%	$1.13
Lake Region Taxi-NorthCentral	$3.43	$6.72	9,000	4,588	0.510	18.61%	$3.55
Mercy-Williston Taxi	$3.79	$5.17	3,120	2,289	0.734	11.12%	$3.51
Bis-Man Transit	$1.78	$6.57	23,912	6,459	0.270	24.43%	$3.23
Fargo, City of	$3.15	$4.19	30,315	22,805	0.752	17.49%	$2.27
Grand Forks, City of	$2.33	$4.90	21,250	10,091	0.475	14.30%	$2.53
Minot, City of	$2.47	$3.09	11,444	9,119	0.797	12.42%	$1.25
GRAND TOTALS	**$2.10**	**$5.18**	**16,497**	**6,682**	**0.405**	**17.63%**	**$2.91**

Source: Small Urban & Rural Transit Center based on Fiscal 2004 Reports filed by Grantees with North Dakota Department of Transportation, 2005.

Operating expense per one-way passenger trip is the second efficiency statistic reported. Again, there are concerns about data accuracy because the range of values is significant – from just over $2 per trip to more than $50 per trip. It is difficult to determine if individual system values are reasonable simply by comparing them to averages because the type of service provided by the system will greatly influence a statistic such as the expense per passenger trip. For example, if a system provides many short local trips then the expense per passenger trip number will be significantly lower than a system where long trips to distant medical facilities for one or two persons is a major part of their service offering. However, the statewide averages will give some indication of performance.

The final efficiency indicator, vehicle miles per vehicle, indicates how much a vehicle is used and gives some indicator of the excess capacity that may exist within a system if the number of miles is relatively low. Again, there appear to be data collection problems for some systems where the values seem exceedingly high or low, but the data reported is very instructive. For example, consider if a vehicle is used eight hours a day, five days a week, and averages 16 miles per hour then a vehicle would travel 32,640 miles per year. The average for rural systems is just over one-third that level.

Recognizing that a system likely counts spare vehicles in its total count and also vehicles that are only used for peak or special occasions, the average number of miles for a high-use system would probably be less than the 32,640 figure. Systems that only report usage of 5,000 miles per vehicle undoubtedly have vehicles that are parked much of the time and therefore represent a resource for additional mobility. The rural average for this statistic is 12,628 miles per vehicle while the urban average is nearly double that amount except for the City of Minot that has a much lower average than the other urban systems because its service is primarily one of transporting school pupils.

In addition to supporting the observation that great excess capacity now exists in North Dakota's rural transit systems to provide more rides, the vehicle mile per vehicle statistic suggests that the state's investment in vehicles is being underutilized. Most of the vehicles used by rural systems have a federally determined useful life of four to five years and 100,000 miles. Obviously vehicles that are used 5,000 or even 15,000 miles per year will deteriorate from age before they are driven their useful miles.

One of the benefits of implementing the recommendations of the recent NDDOT – SURTC coordination study would be to identify customers that could use rides during times when vehicles are idle. This effort would increase both vehicle utilization and personal mobility across the state.

5.2.2 Service Fit Indicators

Table 5.4 also summarizes two "service fit" indicators. These indicators attempt to report on how well the service (vehicle miles or vehicles) is used by riders (one-way passenger trips). The passenger trips/vehicle statistic is particularly instructive. First, as a point of comparison, consider that if a system transports one person per vehicle hour, a low productivity figure, then a system average of 2,080 passengers per vehicle per year would result. The average for rural systems is about three times this figure suggesting either more hours of service than the five-day-a-week, eight-hour day, or higher ridership productivity in terms of passengers per hour.

Again, the type of service provided and the environment within which the systems operate will greatly influence the passengers per vehicle statistic. Nevertheless, it would seem that there are

significant opportunities to improve system productivity and provide more rides if systems that now average less than say 2,000 passengers per vehicle (again, less than one passenger trip per vehicle hour) could increase utilization even up to the current state average.

5.2.3 Subsidy Policy Indicators

The final two indicators reported in Table 5.4 measure two aspects of transit system financial support; namely the percentage of expenses covered by fares and the subsidy per rider. The first statistic reflects transit system policy as to the portion of the operating cost that is expected to be borne by the passenger (or third-party funding agency). The other indicator, subsidy per trip, indicates the extent to which state, federal, and local government sources are required to pay for individual trips.

As with the other measures, care must be taken in interpreting the results given likely problems with the data. For example, systems vary in what they report as fare income. Sometimes payments from human service agencies are counted as fares from their client passengers, while other times it is counted as subsidy. With that said, the data for 2004 indicates that riders paid anywhere from none of the costs to nearly two-thirds the cost of the trips with about one-sixth being the average for both rural and urban areas. The subsidy per trip, a statistic closely correlated with the fare percentage indicator varies from less than $1 per trip to nearly $50 per trip with an average of $4.27 in rural areas to less than $2.50 per trip in urban areas. Again, the type of service needs to be considered when evaluating the appropriateness of the differences in this indicator.

5.2.4 Conclusions on Performance Indicators

This section of the chapter reports on several performance measures for North Dakota's public transit providers. Because of problems with data availability and lack of confidence in the accuracy of some data, few strong conclusions can be reached from this analysis. The most important conclusion and recommendation resulting from this analysis is that the NDDOT should consider adopting an expanded data-reporting requirement and providing the necessary guidance and training to help systems not only report more accurate information, but also develop their own evaluation processes to help them improve their operations. SURTC, either directly or through the RTAP program, can help with this effort. Doing so should help generate more reliable data that could be used to develop peer comparisons and guide state policy. Similar efforts should be undertaken by other agencies that support transit services with public funds.

In addition to the observations on the data, several other conclusions can be reached from this analysis. For example, the performance of North Dakota's public transit systems varies significantly and does so to an extent that cannot just be explained by different operating environments. Additionally, the vehicle miles per vehicle and passenger trips per vehicle statistics suggest that many systems are underutilizing the capacity they now have. That capacity could be directed toward more mobility for residents of their service areas. Also, many of the current grantee providers offer "niche" services to selected geographic areas or client groups. If a more coordinated and comprehensive approach to public transportation were applied in these areas, the same vehicles could be more fully used to meet additional mobility needs. Additional funds to pay for fuel and driver time would be required, but many of the resources for improved mobility are already in place.

6. Base Levels of Required Service and Gaps in Existing Systems

The primary purpose of this study is to provide North Dakota state and local policy makers and transportation administrators insights on the current state of personal mobility enjoyed by North Dakota residents and related recommendations to enhance personal mobility. The first five chapters of this report presented background data on the current situation in North Dakota, including an analysis of the demographic factors influencing mobility and an inventory and assessment of existing transportation services. This chapter will identify gaps in existing personal transportation systems and formulate recommendations which, if implemented, will help satisfy many of the unmet mobility needs of state residents.

Chapters 4 and 5, along with the appendices to this report, present a complete picture of North Dakota's existing personal mobility resources. As previously noted, however, the lack of reliable data prevents the development and presentation of an accurate depiction of current conditions and service operations. Consequently, one of the most challenging aspects of this chapter's gap analysis is the formulation of what should be considered the desired level of service that should be available in various portions of the state.

As reported in Chapter 3, one approach that has been used in other states to identify mobility gaps is to compare the household trip rates of households with personal vehicles to trip rates in households without personal vehicles. The difference in travel between households with vehicles and those without is assumed to be the gap in desired vs. actual travel. This approach is based on the assumption that households without vehicles need to make as many trips as those with vehicles.

Such an analysis assumes that the only reason a household without vehicles makes fewer trips than those with vehicles is the availability of vehicles and that persons without vehicles really want or need to make the same number of trips. Such conclusions require many assumptions that may not be supportable. Furthermore such a gap approach assumes that it would be good public policy to attempt to provide transportation comparable to private transportation choices. Because of the inherent flaws with this approach, SURTC researchers chose to take a different approach to estimating personal mobility gaps.

The steering committee spent a significant amount of time wrestling with the issue of how much mobility is needed and the role that government, especially state government, should play in assuring this mobility. The committee recognized that most individuals adequately meet their mobility needs using private vehicles for local transportation and these same vehicles or intercity bus, rail, and air carriers for distant trips. Based on availability, convenience, and cost-effectiveness, even households with access to private vehicles occasionally make use of school bus transportation and other public transportation options.

The committee also recognized that mobility needs varied by geographic area of the state, personal characteristics, and trip purposes. Further, the range of options available to improve mobility varied by region of the state and by trip purpose. Therefore, the committee found it helpful to first list the array of considerations influencing mobility presented in Table 6.1 and then used them to develop the desired levels of mobility.

Table 6.1 Personal Mobility Considerations

Geographic Areas		Demographic Groups
Rural Areas		Pre-School Children
Cities Under 1,000		School Children K-8
Cities 1,000 – 4,499		School Children 9-12
Cities 4,500 – 20,000		Adults
Cities Over 20,000		Disabled
		Minorities
		Senior Citizens
Trip Purposes	**Service Levels & Quality**	**Available Modes**
School	Availability (Yes or No)	Taxi
Extracurricular	Frequency (Days & Times)	Fixed Route Bus
Work	Reliability	Public Dial-A-Ride
Shopping	Cost	Special Needs Bus
Church	Local Only	Intercity Bus
Social/Recreational	Travel within Region	Train
Routine Medical	Intercity / Between Regions	Airline Service
Emergency	Interstate	Car Rental
Other	Modal Connections	Volunteer Drivers
	Other	Ambulance
		Personal Auto
		Other

Using this list of mobility considerations, a framework for proposing service levels was devised and approved by the steering committee. This framework attempted to specify base levels of public transportation services that should be available in each area of the state for various trip purposes, and for several modes of local transportation. In addition to this matrix, the committee also developed suggested goals for intercity services. Each of these suggested mobility targets is discussed in the next section of this chapter.

6.1 Base Level Transportation

Personal transportation is a means by which people accomplish objectives such as employment, education, health care, and recreation. Except for Sunday drives and cruises, transportation does not confer benefits in its own right. Rather, demand for transportation is considered to be a derived demand. Therefore, when considering goals for personal mobility, the framework within which these goals must be formulated is a much broader one reflecting other social and economic policies.

Public transportation is important because it insures access to jobs, heath care, nutrition, social services, and other activities that maintain or enhance quality of life. Individuals with ready access to private transportation use personal vehicles to achieve mobility; individuals who cannot afford a vehicle or are unable to drive, because of age or disability, are not afforded the same quality of life. Consequently, a statement of the personal mobility goals for North Dakota must be couched in terms of these other objectives.

After much discussion, the steering committee concluded that one over-riding goal of the mobility study should be to recommend ways to make it possible for North Dakotans to live wherever they want in the state and to be able to remain in their home and community for as long as they wish. To make this goal a reality requires that individuals have access to jobs, education, medical services and other community support services via private or public transportation options. Therefore, some form of public transportation needs to be available in all areas of the state so that individuals without access to private vehicles can maintain their residences and still access services.

The steering committee also recognized that the demand for transportation, especially in rural areas, is so sparse that providing desired services would not always be possible. In reality, not all of the transportation services that are desired are affordable, either by individuals or sponsoring governmental agencies. In an attempt to strike a balance between the goal of providing enough mobility to support other societal goals (e.g., allowing a person to live where they choose as long as they are able) and realistic funding limitations which constrain public transportation service expansion, the steering committee agreed on a base service level that affords all areas some form of public transportation and encourages higher levels of service in more densely populated urban areas. Table 6.2 shows the base level service matrix suggested by the steering committee.

Table 6.2 Mobility Goals: Base Level Government-Supported Services for Various Demographic Groups and Geographical Areas

Demographic Group / Geographic Area	**Pre-School**	**Grades K-12**	**Adult**	**Seniors Age 60+**	**Low Income**	**Disabled**
Rural Areas & Cities Under 4,500	Head Start & Emerg.	School & Emerg.	Weekly Dial-A-Ride & Emerg.	Weekly Dial-A-Ride & Emerg.	Weekly Dial-A-Ride, Medicaid, TANF, & Emerg.	Weekly Dial-A-Ride, Voc. Rehab. & Emerg.
Cities 4,500 – 20,000	Head Start, Taxi, & Emerg.	School, Taxi, & Emerg.	Daily Dial-A-Ride, Taxi, & Emerg.	Daily Dial-A-Ride, Taxi, & Emerg.	Daily Dial-A-Ride, Taxi, Medicaid, TANF, & Emerg.	Daily Dial-A-Ride, Taxi, Voc. Rehab. & Emerg.
Cities Over 20,000	Head Start, Fixed Route, Taxi, & Emerg.	School, Fixed Route, Taxi, & Emerg.	Daily Fixed Route, Taxi, & Emerg.	Daily Fixed Route, Taxi, & Emerg.	Daily Fixed Route, Taxi. Medicaid, TANF, & Emerg.	Daily Dial-A-Ride, Fixed Route, Taxi, Voc. Rehab. & Emerg.

The designation of different service levels for three sizes (and densities) of communities recognizes that larger urban areas can support more cost-effective transportation services than rural areas and that some types of service, e.g., fixed-route bus service, are only viable in large, densely populated areas. Likewise, taxi services are only viable if a sufficient population lives within a relatively small geographic area. The most significant differences in the recommended base service levels for the three geographic classifications is that rural areas and cities under

4,500 population are targeted for weekly dial-a-ride services, whereas daily dial-a-ride and taxi services are recommended for cities between 4,500 and 20,000. Cities over 20,000 should have daily fixed-route, dial-a-ride, and taxi services.

The columns in Table 6.2 divide transportation services based on demographic categories that are closely tied to transportation needs. Two categories of youth are recognized, preschool youth that need transportation to Head Start programs and emergency medical transportation, and primary and secondary aged students that may need school bus transportation and emergency transportation. Four categories of adult transportation needs are identified including three categories of individuals that fall into a category of what are considered "transportation disadvantaged" including: senior citizens, low income individuals, and disabled persons. General purpose transportation in the form of dial-a-ride and fixed route bus services are proposed to meet these adult needs.

The levels of service recommended in Table 6.2 are called "base level services" and are far from ideal in terms of providing comprehensive mobility solutions for all individuals. Weekly dial-a-ride services are of little benefit to a rural resident needing transportation to three-times-a-week dialysis treatments or an employee that needs a daily ride to work. Nevertheless, this weekly service can serve as a safety net for some needs such as non-emergency medical appointments or connections to other transportation services.

It should also be noted that the services identified in the grid are primarily government-supported services. Some of these services are supported by state agencies such as the North Dakota Departments of Transportation and Human Services. Other services (commercial, faith-based, etc.) may be required to provide higher levels of service.

Many of the services identified in the goals grid are already being provided in North Dakota. As indicated in Chapter 4, for example, there are 140 ground ambulances services licensed to operate in the state. School transportation services are almost universally available in North Dakota and there are more than 800 entities registered to provide Medicaid-related transportation services. All four of the state's largest cities also already have fixed-route bus systems in place. In some instances, however, services would need to be initiated to provide the levels of services prescribed in the goals grid. Furthermore, not every service identified in the grid would require a free standing service provider. One provider may, for example, be able to provide all the dial-a-ride services required to serve rural areas and small cities in an entire county.

The previous discussion applies to mobility goals for local transportation services. In addition, personal mobility includes access to intercity services such as commercial intercity bus, commercial air service and rail passenger service. Even in more densely populated states than North Dakota, these services are generally available only at population centers so universally accessible intercity services is an unrealistic goal. The steering committee adopted a goal of having intercity services accessible at the state's eight regional hub cities and further that some form of public transportation should be available to connect all areas of the state with these regional services.

As in the case of the local transportation services, the frequency and connections provided by intercity bus, rail, and air service are necessarily limited because most services are provided by for-profit firms and the demand densities present in North Dakota limit the amount of financially self-sustaining service that can be provided. Even in the case of quasi-public rail service, Amtrak's need to control deficits limits the frequency of service that it provides. Level of service

information on North Dakota's intercity service providers was presented in Chapter 4. Specific recommendations concerning these services are presented in Chapter 8.

6.2 Gap Analysis

The next step in formulating a personal mobility plan for North Dakota is to compare existing private and public mobility resources to the targeted service levels described earlier in this chapter. The difference between existing and targeted service levels can be considered the gap that needs to be closed to achieve desired levels of personal mobility.

To perform the gap analysis, the inventory information presented in Chapter 4 and the appendices was used to identify whether cities and counties in the state received the base level of service recommended. Service area descriptions included in the profiles were used to determine if a city or county had the suggested level of service. Likewise, inventory information on intercity services as reported in Chapter 4 was used to reach conclusions on regional and intercity mobility levels.

In terms of intercity transportation, all eight of North Dakota's hub cities have surface and air transportation options available for area residents. Seven of the eight hubs have intercity bus service and five hubs have passenger rail service. All eight hubs have scheduled air passenger service.

Unfortunately, the future of all of these services is tenuous. Greyhound's departure from virtually all of its North Dakota market in mid-2004 is reflective of the state of the interstate bus industry. Amtrak is constantly targeted for federal budget cuts which would threaten its route through North Dakota. Similar federal budget cuts could threaten "essential air service" to the communities of Devils Lake, Dickinson, Jamestown, and Williston.

Intercity connectivity is vital to the mobility of North Dakotans. Specific recommendations concerning this connectivity and each of the modes identified in the preceding paragraph are presented in Chapter 8.

Local transportation services such as the weekly and daily dial-a-ride services and fixed-route bus services are theoretically available in accordance with the recommended base level of service based on the designated service areas of the state's public transportation providers. However, the reality of the situation is that many providers limit their services to a few local communities or specific corridors so that many communities and rural residents may not have weekly access to service and residents of small and even larger cities will have only limited destination options.

The community meetings conducted as part of the North Dakota Coordination Study revealed many examples where individuals or human service agency representatives reported transportation needs that were not or could not be met by existing providers. The intent of the coordination plan recommendation to create regional coordinating organizations was to provide local communities with a way to identify and respond to the most pressing of these needs by reconfiguring or expanding existing services.

Since all areas of the state appear to have at least the potential for receiving the base level of service, additional analysis was performed to identify measurable differences in the services as now offered. Table 6.3 presents the results of this analysis.

Table 6.3 Service Level Characteristics by County and Multi-County Service Areas – Passenger Trips per Capita Arranged by Quartile

	2000 Pop	Square Miles	Vehicle Miles Traveled	One-way Passenger Trips	Passenger Trips/ Capita	Vehicle Miles/ Square Mile	Vehicle Miles/Capita
Cass County (excluding Fargo & West Fargo)	17,599	1,465	21,737	2,029	0.12	14.84	1.24
Lowest Quartile(trips/capita)							
Sargent County	4,366	867	29,816	854	0.20	34.39	6.83
Dunn County	3,600	2,082	9,209	804	0.22	4.42	2.56
Golden Valley Transportation	2,812	2,156	31,204	790	0.28	14.47	11.10
Pembina County	8,585	1,122	21,817	2,461	0.29	19.45	2.54
Richland County	17,998	1,446	23,430	5,891	0.33	16.21	1.30
Ransom County	5,890	864	25,103	2,431	0.41	29.05	4.26
Second Lowest Quartile							
Walsh County	12,389	1,294	45,598	8,817	0.71	35.24	3.68
Eddy County	2,757	644	3,828	2,491	0.90	5.94	1.39
Williston Area (4 providers)	25,498	5,009	46,371	23,085	0.91	9.26	1.82
Benson County (NCP)	6,964	1,439	45,523	6,377	0.92	31.63	6.54
Rolette County (2 providers)	13,674	939	47,351	12,749	0.93	50.41	3.46
Total Souris Basin (3 providers)	53,805	11,990	150,777	51,247	0.95	12.58	2.80
Second Highest Quartile							
West River Transportation Area (4 Providers)	53,740	10,276	143,903	53,518	1.00	14.00	2.68
Dickey County	5,757	1,142	20,416	6,058	1.05	17.88	3.55

Table 6.3 continued							
	2000 Pop	**Square Miles**	**Vehicle Miles Traveled**	**One-way Passenger Trips**	**Passenger Trips/ Capita**	**Vehicle Miles/ Square Mile**	**Vehicle Miles/Capita**
Cavalier County	4,831	1,510	13,535	7,237	1.50	8.96	2.80
Stark County	22,636	1,340	108,792	37,996	1.68	81.16	4.81
Highest Quartile							
Kidder-Emmons County Area (2 providers)	7,084	2,988	77,473	13,223	1.87	25.93	10.94
Towner County	2,876	1,042	7,707	5,972	2.08	7.40	2.68
Sioux County	4,044	1,128	197,000	8,582	2.12	174.60	48.71
James River Senior Citizens Area (2 providers)	28,720	4,595	215,592	72,440	2.52	46.92	7.51
Ramsey County-Devil's Lake Area (2 providers)	12,066	1,301	90,283	33,868	2.81	69.40	7.48
Southwest Transportation Services	9,317	4,509	55,601	32,087	3.44	12.33	5.97
Large Cities							
Fargo/West Fargo Area (2 providers)	105,539	45	803,033	580,560	5.5	17,750.51	7.61
Handiwheels			45,157	10,431			
City of Fargo			757,876	570,129			

Table 6.3 continued							
	2000 Pop	**Square Miles**	**Vehicle Miles Traveled**	**One-way Passenger Trips**	**Passenger Trips/ Capita**	**Vehicle Miles/ Square Mile**	**Vehicle Miles/Capita**
City of Grand Forks			680,000	322,899			
Fargo Senior Commission Steele/Grand Forks			28,919	1,830			
City of Minot	36,567	15	194,541	155,018	4.24	13,352.16	5.32
Average Rural					1.18	31.84	6.44
Max Rural					3.44	174.6	48.71
Min Rural					0.12	4.42	1.24

Source: Small Urban & Rural Transit Center, 2005

Table 6.3 lists 25 single county and multi-county service providers along with the four large city transit services. Population, area in square miles, vehicle miles of service provided in 2004, and reported ridership are included for each area. Three service level indicators are then calculated including one-way trips per capita, vehicle miles per square mile and vehicle miles per capita. The first of these indicators reflects the usage of the transit systems; the last two are measures of the amount of service provided.

Compiling Table 6.3 required a number of assumptions about service areas for each of the state's public transit grantees. Also, because ridership and service data are not available for individual counties or cities served by a single operator of multi-county services, it was not possible to tabulate data for individual counties. Further, in cases such as Cass County where several providers operate in overlapping services areas, it was not possible to clearly identify ridership in each area; thus, the statistics for rural Cass County is particularly subject to error.

Despite all these qualifications, the data reveals a number of important characteristics of public transportation in North Dakota. First, the amount of service provided, as measured by vehicle miles per square mile or per capita, varies significantly from area to area. The Golden Valley Transportation System provides more than 11 miles of service per capita as compared to Richland County where residents receive just over one mile of service per resident. As would be expected, the urban systems offer more service per capita or square mile than the rural systems. Care must be taken in interpreting this service level data because the distances involved in trips provided in rural western counties is likely to exceed those in eastern and more densely settled areas so that the miles per capita may just reflect very long rides over sparsely populated areas to reach needed services.

Perhaps the most useful indicator presented in Table 6.3 is the statistic on one-way trips per capita which indicates how much the transit systems were used by their customers. A survey by the Community Transportation Association of America reveals that the average number of trips provided by rural transit systems in areas with service is about two trips per capita. Studies in individual states reflect a similar result. Urban systems average four to five rides per capita.

To help understand the variation in the usage of transit in North Dakota, the 24 rural systems were grouped into four quartiles based on this one-way trips per capita statistic. Note that the ridership rate in the Southwest Transportation Services area is 17 times that of Sargent County and that half of the rural systems provide less than one ride per capita. One might suspect that areas with low ridership might be areas with high vehicle ownership rates. However a comparison with the data presented in Chapter 2 fails to confirm this correlation. A more likely explanation is that in areas with high ridership per capita, the transit systems offer a higher quality and quantity of service with some of the highest ridership-per-capita systems being the most coordinated ones.

The conclusion to be reached when combining the analysis presented in Table 6.3 with the base service matrix is that even though all areas of the state have public transportation services that meet the base level specifications on paper, the actual service provided to residents varies significantly. Further, in many areas of the state the level of service would appear to be lower than national averages and lower than might be possible if additional organizational and financial resources were applied. Specifically, mobility, as measured by one-way trips per capita, would likely increase if the recommendations of the coordination plan were implemented so that more needs would be met by using existing resources more effectively and that services be expanded to offer greater mobility to residents. The final section of this chapter provides some estimates on the cost of increasing levels of service in rural North Dakota to targeted levels.

6.3 Cost and Other Implementation Issues

At this point the obvious question is: What will it cost to close the gap between existing and targeted levels of service? Unfortunately, there is no easy or precise answer to this question and, furthermore, increasing mobility through improved public transportation requires more than money. The remainder of this chapter discusses these implementation issues and offers a range of cost estimates for achieving base levels of service.

As a starting point in the discussion of implementation, it must be recognized that local transportation is not a mandated service by or for any level of government. Whether a community has local public transportation and the quality and quantity of service provided is determined locally. The state and federal government can offer generous matching funds for capital and operating assistance, but the decision to have a service is a local one.

The organizational structure used to manage a system is also a local option. Some transit programs are a part of other human service agencies, some are single-purpose nonprofit corporations, and others are departments of local government or special purpose government agencies. The nature of public transit in a community is as much a function of history and personalities as it is technical analysis or legislation. The wide range of transit services in North Dakota attests to this situation.

The local option for public transportation is the norm around the country and there is little likelihood or need to change this arrangement. Therefore, when formulating a state plan to increase mobility, implementation strategies need to be couched in terms of incentives and support, not mandates.

As indicated above, money is not the only ingredient to a successful public transit system. At least three other factors must be present for a public transportation program to thrive and meet local mobility needs.

The first ingredient to a successful system is a local leader, a mover and shaker who has the vision of what the transit system can become and the skills and connections to make it happen. For an area without transit, this leader must come from the community; for an ongoing system it can be the manager, a board member, or a key contributor to the financial support of the system.

In addition to the leader, a transit system must have a sound technical plan and strong, expert management to implement the plan. A key feature of the North Dakota Coordination Plan recommendations addresses these two requirements by requiring a regional planning effort to identify unmet needs and available capacity and resources. In addition, the coordination study recommended that a skilled coordinator be employed in each region to implement improved service through existing programs or new ones.

The final ingredient for a successful transit system is money, both for capital and operating expenses. The next section of this chapter presents a range of estimates for capital and operating expenses required to achieve base levels of service. Although the performance analysis in Chapter 5 identified substantial unused resources as measured by low mileage utilization of some agencies' vehicles, more funds for driver wages, fuel and maintenance will be required to expand service to targeted levels.

6.4 Operating and Capital Cost Estimates

Meeting the base mobility service levels proposed in this plan will require an expansion of public transportation services, primarily in rural areas. Based on the data presented in Table 6.3, the amount of service offered as measured on a per capita basis, varies greatly around the state. Some areas have very little service while others have daily service to most parts of their service areas. The reasons for these differences include the history and purpose of each system, available funding (especially local matching funds), and the goals of the local community and existing providers. Whatever the history, the goal of this study and the companion coordination study, is to identify ways to increase mobility options available to North Dakotans and to recommend realistic ways to accomplish these changes.

The best way to determine the cost of expanded services that would increase mobility in a particular county or region is to conduct a detailed planning study involving all of the stakeholders in the region, including a technical analysis of demand factors and options to enhance the services of existing providers. The coordination planning effort envisioned in the coordination study would result in such detailed plans. Nevertheless, because the financial requirements of this mobility plan are a necessary element of the final analysis and recommendations, another approach is needed.

Table 6.4 lists the 24 rural service areas (counties or multi-county areas) that were used in the earlier analysis presented in Table 6.3. It restates vehicle miles per capita statistics in ascending order.

This statistic is a measure of the intensity of public transportation service offered in a region adjusted for population. Generally a higher number indicates that more frequent services and greater coverage areas are included in regions with high values. However, a high value might also indicate a very small population that requires very long trips as would be expected in the sparsely populated western part of the state. Nevertheless, very low vehicle miles per capita statistics suggest that many mobility needs are not being met by the existing service and that service expansion may be warranted. Therefore, one way to estimate the service expansion required to meet base mobility needs and then to project the capital and operating expenditures required to achieve this higher service level would be to project increased miles of service for those systems that offer low levels of service.

As can be seen from Table 6.4, the average number of vehicle miles provided per capita in rural areas in 2004 was 4.72, while the range in values was from 1.30 to nearly 50. Fourteen of the 24 systems offer less than 5 vehicle miles of service per capita while six provide more than 7 rides per capita. The systems that provide these high levels of service are generally thought to have well-developed systems that offer a relatively high level of service to their residents. Therefore, a target of 7.0 was selected to represent a high target level service while 5.0 was selected to reflect only a modest service increase, but one that would provide significantly more mobility if the resources were directed towards the most underserved areas.

Table 6.4 Rural Transit Service Areas by Vehicle Miles per Capita

	2000 Population	Vehicle Miles	Vehicle Miles/Capita
Richland County	17,998	23,430	1.30
Eddy County	2,757	3,828	1.39
Williston Area (4 providers)	25,498	46,371	1.82
Pembina County	8,585	21,817	2.54
Dunn County	3,600	9,209	2.56
West River Transportation Area (4 Providers)	53,740	143,903	2.68
Towner County	2,876	7,707	2.68
Total Souris Basin (3 providers)	53,805	150,777	2.80
Cavalier County	4,831	13,535	2.80
Rolette County (2 providers)	13,674	47,351	3.46
Dickey County	5,757	20,416	3.55
Walsh County	12,389	45,598	3.68
Ransom County	5,890	25,103	4.26
Stark County	22,636	108,792	4.81
Southwest Transportation Services	9,317	55,601	5.97
South Central Transportation	28,687	172,768	6.02
Benson County (NCP)	6,964	45,523	6.54
Sargent County	4,366	29,816	6.83
Ramsey County-Devil's Lake Area (2 providers)	12,066	90,283	7.48
James River Senior Citizens Area (2 providers)	28,720	215,592	7.51
Nelson County	3,715	31,278	8.42
Kidder-Emmons County Area (2 providers)	7,084	77,473	10.94
Golden Valley Transportation	2,812	31,204	11.10
Sioux County	4,044	197,000	48.71
Totals	**341,811**	**1,614,375**	**4.72**

Source: Small Urban & Rural Transit Center, 2005

Table 6.5 presents the results of the operating expense calculations for three levels of service expansion. In each portion of the table, the first column of figures (Column 1) shows the 2004 values for the rural transit systems. Column 2 shows the additional mileage and expenses associated with increasing the number of vehicle miles per capita to the target level for systems that provided less than that in 2004. For example, 14 systems provided less than 5 vehicle miles of service per capita, so the vehicle miles of service for these 14 providers was increased to the 5 level while ones that provided more than 5 vehicle miles of service per capita were left unchanged. A similar approach was taken for the 15 providers that offered less than 6.0 miles of service per capita, and the 18 that provided less than 7 miles per capita.

The 2004 average operating expense for rural providers was approximately $1.70 per vehicle mile so this figure was used to estimate operating expenses. Columns 2 and 3 of Table 6.5 show the increase in miles and expenses and the total miles and expenses while Column 4 shows the percentage increase in these values as compared to 2004 actual data. As Column 4 indicates, total miles operated increase from between 31 and 62 percent while total expenses are estimated to increase from 26 to 51 percent under various service scenarios.

A key implementation issue for this mobility plan is funding. As Table 6.5 indicates, expanding rural services to targeted levels have associated operating fund requirements ranging from $853,983 to $1,720,476 annually. As is the case in virtually all states, a lack of funding is one of the major barriers to expanding rural transit services in North Dakota.

Traditionally, operating expenses are covered by a combination of fares and public support from state, federal and local governments. To provide some indication of how much funding each of these sources might be required to add to implement each of the three expanded service options, Table 6.6 shows the relative shares based on 2004 sharing arrangements. While there is some optimism that federal funding for rural transit will increase substantially, additional state and local funding levels are more difficult to predict. Furthermore, significant increases in Older Americans Act Title III funds, as depicted in Table 6.6, are considered unlikely. More discussion of funding options will be required before any of these service expansion options can be implemented.

In addition to ongoing operating expense increases, service expansion will require additional vehicles. Precise estimates of capital requirements are not possible without detailed system-level operating plans because, as discussed in Chapter 5, many systems seem to have significant excess vehicle capacity (as reflected in the low average annual miles per vehicle reported to the NDDOT). Nevertheless, for purposes of discussion, approximate vehicle requirements were projected assuming average vehicle acquisition costs of $60,000 and 20,000 miles of operation per vehicle per year. Table 6.7 shows the capital expense projections based on these assumptions.

Table 6.5 Estimated Operating Expenses for Expanded Mobility Options

Assuming 5.0 Vehicle Miles Per Capita				
	Column 1 Current (2004)	**Column 2 Increase**	**Column 3 Total**	**Column 4 % Change**
Population	341,811	No Change	341,811	0.00%
Vehicle Miles	1,614,375	502,343	2,116,718	31.12%
Miles/Capita	4.72	5.00	6.19	31.12%
Op. Exp./Veh. Mi.	$1.70	$1.70	$1.70	0.00%
Total Operating Expense	**$3,345,422**	**$853,983**	**$4,199,405**	**25.53%**
Assuming 6.0 Vehicle Miles Per Capita				
	Current (2004)	**Increase**	**Total**	**% Change**
Population	341,811	No Change	341,811	0.00%
Vehicle Miles	1,614,375	736,680	2,351,055	45.63%
Miles/Capita	4.72	6.00	6.88	45.63%
Op. Exp./Veh. Mi.	$1.70	$1.70	1.7	0.00%
Total Operating Expense	**$3,345,422**	**$1,252,356**	**$4,597,778**	**37.43%**
Assuming 7.0 Vehicle Miles Per Capita				
	Current (2004)	**Increase**	**Total**	**% Change**
Population	341,811	No Change	341,811	0.00%
Vehicle Miles	1,614,375	1,012,045	2,626,420	62.69%
Miles/Capita	4.72	7.00	7.68	62.69%
Op. Exp./Veh. Mi.	$1.70	$1.70	1.7	0.00%
Total Operating Expense	**$3,345,422**	**$1,720,476**	**$5,065,898**	**51.43%**

Source: Small Urban & Rural Transit Center, 2005

Table 6.6 Increases in Funding Shares Required for Expanded Mobility Options

		Additional Service Options		
Source	**2004 Share**	**5.0 miles/capita**	**6.0 miles/ capita**	**7.0 miles/ capita**
Fares	18.0%	$153,717	$225,424	$309,686
Federal	21.7%	$185,314	$271,761	$373,343
State	33.4%	$285,230	$418,287	$574,639
Older Americans Act	9.1%	$77,712	$113,964	$156,563
Other Federal	1.0%	$8,540	$12,524	$17,205
Local	6.9%	$58,925	$86,413	$118,713
Other	9.9%	$84,544	$123,983	$170,327
Total	100.0%	$853,983	$1,252,356	$1,720,476

Source: Small Urban & Rural Transit Center, 2005

Table 6.7 Estimated Capital Expenses for Additional Vehicles

	Additional Service Options		
	5.0 miles/capita	**6.0 miles/ capita**	**7.0 miles/capita**
Additional Vehicles	25	37	51
Cost Per Vehicle	$60,000	$60,000	$60,000
Total Capital Cost	$1,500,000	$2,220,000	$3,060,000

Source: Small Urban & Rural Transit Center, 2005

6.5 Conclusion

The gap analysis of the public transportation services available in rural areas of North Dakota suggests opportunities to increase the coverage areas and frequency of service to meet the mobility goals set out in this study. Specific recommendations for how to enhance rural mobility, as well as recommendations for urban and intercity transportation services, are presented in Chapter 8.

7. Applications of Intelligent Transportation System (ITS) Technologies

Intelligent Transportation Systems (ITS) are defined by ITS America (2005) as a broad range of wired and wireless communications-based information, control and electronics technologies. When integrated into the transportation system infrastructure, and in vehicles themselves, these technologies help monitor and manage traffic flow, reduce congestion, provide alternate routes to travelers, enhance productivity, and save lives, time and money.

ITS technologies such as computerized dispatching, routing and vehicle location improve the internal efficiency of transportation services and the reliability of these services. Others, such as Web-based real-time information on vehicle location and schedules can help users efficiently learn about the availability of needed public transit services. Many ITS technologies are in use throughout the United States. The following discussion highlights existing ITS technologies used in North Dakota along with recommended improvements to the current system based on ITS deployments in other states.

7.1 Existing ITS in North Dakota

Weather plays a major role in influencing the ITS technologies deployed in North Dakota. Examples of these technologies include road weather information systems (RWIS), dynamic message signs (DMS), a traveler information Web page and automated bridge anti-icing systems. School bus routing software is being used by larger North Dakota school districts and smartcard fare boxes have been deployed by public transit agencies.

The past couple of years have seen increased focus on urban transportation issues with continuing growth in the state's urban centers. Applications targeting urban travelers include video technologies for traffic signal operations, dedicated Web pages and highway advisory radio for construction projects and video surveillance available for viewing on the Web for area drivers. Many of these technologies have been deployed in a fragmented manner. As needs arose, field devices were installed. Only one or two applications can be considered a true system, where a system is defined as an integrated set of technologies, functions, etc. (Smadi and Miner, 2004). Existing ITS technologies specific to personal mobility needs in North Dakota are highlighted in the following discussion.

7.2 Smartcard Fare Boxes

A smartcard is a plastic credit-card-sized card containing a small chip that includes a microprocessor and memory. Gold contacts allow other devices to communicate with it. A smartcard can contain more data than a magnetic strip and can be programmed to reveal only relevant information. With respect to transit, for example, it will be able to store ride and rider information. When a smartcard is purchased, the number of rides is programmed into the card along with rider demographic information. Rides are then subtracted from the card every time it

is used. Encryption techniques secure the data and the processor allows it to be programmed for different applications. Fixed-route transit systems in Fargo and Bismarck use smartcard fare boxes (Figure 7.1).

7.3 Dynamic Message Signs

Dynamic message signs (DMS) can be deployed using various technologies and are capable of displaying a limited number of messages or a fully customized message using various fonts and colors. The NDDOT owns approximately 15 portable DMS throughout the state (Figure 7.1). They are used for construction and maintenance purposes during the summer months and for winter storm warnings and road closures during the winter months. DMS locations during the winter season were identified through coordination with the NDDOT districts to provide the most practical information to drivers about road closures. Concrete pads were constructed outside road shoulders to provide appropriate surfaces for the signs during winter months (Smadi and Miner, 2004).

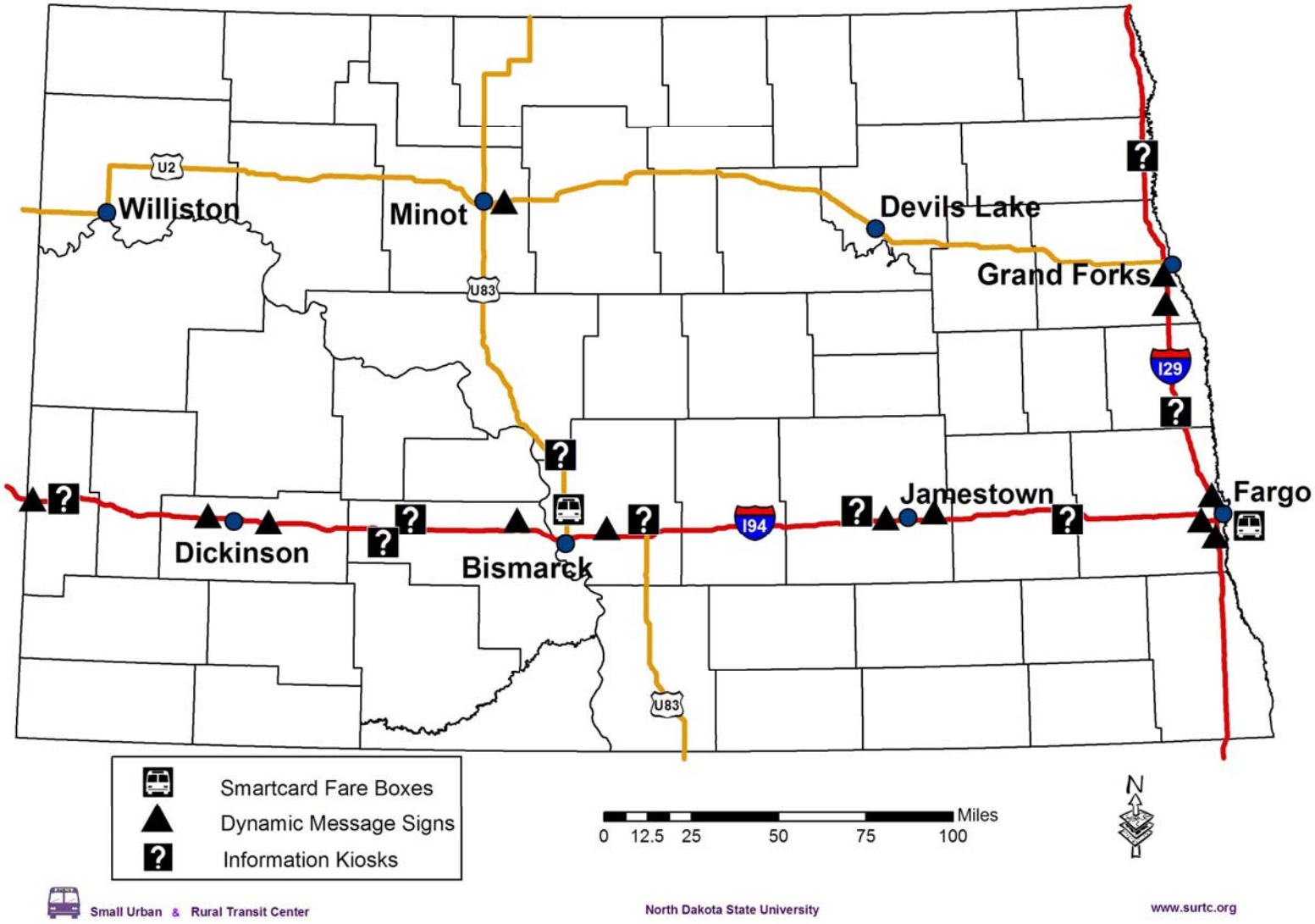
7.4 Traveler Kiosks

NDDOT has contracted with a private company to install traveler service kiosks at high volume rest areas in North Dakota. The kiosks are computer terminals that provide a variety of information and allowing users to view road and weather conditions on the NDDOT webpage. There are 13 kiosks across the state. Figure 7.1 shows the locations of information kiosks, fixed-route transit systems using smartcard fare boxes, and dynamic message signs in North Dakota.

7.5 NDinfo.org

An ITS technology that was introduced to the public in November of 2004 is NDinfo.org. NDinfo.org is designed to be North Dakota's information hub linking people to services, organizations and events in their community. This comprehensive system provides a one-stop Internet shop for all information on public transportation systems and service providers in the state. The system is able to plan an entire trip itinerary with transfer locations, fares, schedules, walking directions and maps based on trip origin and destination for most users. The system is also able to provide information on the connections between fixed-route transit systems and shuttle or intercity services.

Users who are unfamiliar with service providers in their destination community can click on the desired location on a map and get a list of service providers complete with their contact and service information. The system is available to a variety of customers, ranging from transit riders within the state to dispatch centers and social service agencies. In addition, visitors from outside the state can plan trips within North Dakota coordinating services provided by airports, train and bus stations. The long-term goal of the system is to allow users to reserve trips on-line and provide them with the option to pay for the trip with a smartcard accepted by transit systems in North Dakota.



Source: Small Urban & Rural Transit Center, 2005

Figure 7.1 ITS Technology Locations

7.6 Travel Management Technologies

Travel management technologies such as the video surveillance installations at the I-29/I-94 interchange in Fargo were among the first in North Dakota. This system used wireless communication to transmit a video feed to the NDDOT Fargo District located just over one mile north of the location. Snapshots from the four cameras were available on a Web page developed specifically for providing traveler information during the I-29 reconstruction project in Fargo, which started in 2000. The NDDOT's main road and weather information Web page was also linked to the cameras. The surveillance system was replaced in 2003 with four machine vision (video) detectors and one surveillance camera. The upgrade was designed to allow the NDDOT to collect traffic data (traffic volume, occupancy, and speed on a lane-by-lane basis) using the video detectors while preserving the surveillance function (Smadi and Miner, 2004).

7.7 Traffic Signal Coordination

Traffic signal coordination is another ITS technology used in North Dakota. The NDDOT owns and operates traffic signals on state highways in the smaller urban areas and on the interstate system, mainly for management of ramp operations. The NDDOT is working with Fargo to develop coordinated traffic signal corridor plans that will improve traffic operations. Most of the signals operate on preprogrammed coordination plans according to the time of day. Communications to the controllers consist of either a phone drop or fiber connection to NDDOT's District office, allowing timing to be changed from either the district office or the central office in Bismarck (Smadi and Miner, 2004).

7.8 511 Traveler Information

The 511 traveler information system is available throughout North Dakota. "511" is a nationally designated number for traveler information on road and traffic conditions. North Dakota's 511 system grew from the state's previous #SAFE system which provided information to travelers via cellular phones (Smadi and Miner, 2004). The new 511 system became operational in February 2003 and covers the entire state with route-specific weather/road information.

7.9 Web Pages

The NDDOT has a Web page to provide travelers with road information. Over the years both the design of the Web page and the information available have been greatly improved. The web page is now a direct link from the NDDOT homepage and more options are available for users retrieving relevant information. A color-coded state map is the main source of information; it illustrates road and driving conditions statewide. Driving conditions range from good (no restrictions) to road closed because of poor weather conditions due to snow, ice, floods, etc.

7.10 Miscellaneous ITS Technologies

Other ITS technologies deployed in North Dakota include highway advisory radio (HAR), traffic data collection, public transit AVL, and a bridge anti-icing system. HAR is a low power AM frequency radio transmitter strategically located to provide information to motorists. HAR messages provide more information than what is displayed on a DMS, and the station can be heard within a couple miles of the transmitter. Signs are placed along roadways to inform drivers of the station's radio frequency. More than 50 automated traffic recorders are in use throughout the state as well. Because of the advanced age of the current recorders and their increased maintenance requirements, the state has been exploring new technologies to support traffic data collection (Smadi and Miner, 2004).

Fargo Metro Area Transit (MAT) has global positioning system (GPS) equipment on its fixed-route vehicles. This equipment allow for the monitoring of busy stops and bus locations at any given time. Fargo MAT will be installing automatic vehicle location (AVL) equipment on its paratransit vehicles in the near future. This will enable them to locate their buses at any time and monitor speed along with other characteristics. Finally, one bridge in North Dakota currently uses an anti-icing system. This system will be explained in further detail in the following section.

7.11 Improving North Dakota ITS

The following discussion highlights ITS technologies that have been developed in states throughout the United States and may be applicable in North Dakota. Implementations range in cost and scope, but provide useful insight for future ITS deployments in North Dakota.

The Vermont ITS strategic plan (University of Vermont, 2002) included a transit tracking technology package. This market package provides for an automated vehicle location (AVL) system to track transit vehicles' real time schedule adherence and updates the transit system's schedule in real-time. Vehicle position may be determined either by the vehicle (e.g., through GPS) and relayed to the system office or may be determined directly with communication devices. These devices include a two-way wireless communication link with the system office to relay vehicle position and control measures. Better tracking of buses within a transit system allows route planners and management to increase the efficiency of their operation.

Vermont's ITS plan also developed a package for demand-response transit operations. This package performs automatic driver assignment and monitoring as well as vehicle routing and scheduling for demand-response transit vehicles. It uses the AVL database to monitor current status of the transit fleet and supports allocation of these fleet resources to serve incoming requests from riders while also considering traffic conditions (University of Vermont, 2002). Tracking demand-response vehicles in North Dakota with similar technology would allow systems in North Dakota to better allocate their limited resources. Similar technologies have been deployed in many states.

The South Dakota rural ITS deployment study conducted by Castle Rock Consultants (2001) developed a project for rural addressing using geographic information systems (GIS). The South Dakota Department of Transportation (SDDOT) already collected much of the data for rural addressing, but the data had not been implemented within a GIS framework. Geocoding addresses into a GIS program provides a statewide database of information that can be used by various state and local agencies to improve personal mobility throughout the state. This $100,000

project contracted for database development of counties within South Dakota. A similar technique could be used in North Dakota.

Castle Rock Consultants (2001) also recommended that South Dakota facilitate communications and information sharing among member agencies. Shared information would support coordination transportation management and traveler information on a regional and corridor-wide basis. The I-95 corridor along the east coast was presented as an example of such an effort. NDinfo.org serves a similar purpose in North Dakota, but many transit agencies are without computer access due to limited funding and thus, cannot use NDinfo.org to better coordination services. Providing transit agencies with computers to access the Internet, which is currently being done by the NDDOT, will go a long way to improving this effort.

South Dakota's ITS deployment plan discussed another interesting application in recommending an automatic anti-icing system as a future ITS project. It would use a spray system that is automatically activated by a computerized control system in anticipation of frosty or icy road conditions. The automatic anti-icing system will detect or predict ice formation and treat the roadway before it becomes hazardous to drivers.

One North Dakota bridge already uses this technology and more are in the planning phase. The system consists of embedded pavement sensors, a processor to determine when conditions require anti-icing, and spray nozzles for the anti-icing agent. The estimated equipment costs for bridges spanning 500 feet or less with four traffic lanes or less would cost approximately $19,300. This system includes piping, chemical tank, sensors, and 10 spray nozzles that will provide coverage to the driving lanes,. This system requires the use of clear chemical agents such as magnesium chloride (Castle Rock Consultants, 2001).

7.12 Summary

Numerous ITS technologies have been developed throughout the United States to improve personal mobility. Implementing ITS technologies almost always improves the efficiency of a transportation system. However, the cost effectiveness of such technologies is a subject for further discussion. A cost/benefit analysis should always be evaluated before considering the implementation of an advanced technology.

For example, a transit agency with five or six vehicles providing fewer than 25,000 rides per year has little need for an AVL system to track its buses. The cost of the AVL system alone would occupy a very large percentage of the agency's annual budget. Other smaller scale ITS technologies involving computer scheduling and dispatching may aid the system and prove more feasibly in a cost/benefit analysis. A Web-based system that improves the coordination of transit providers throughout the state (NDinfo.org) is a good first step. Further action should consider expanding the current system to allow for more customization on the part of transportation providers.

8. Policy and Program Options and Recommendations

People in rural areas may believe that personal mobility is more important to them than it is to people in more populated urban areas. This is, in fact, not the case; personal mobility is equally important to everyone. What is different in rural areas, however, is the way that these needs must be met.

Rural areas, by their very nature, involve lower population densities and longer travel distances. The need to be personally mobile is generally the same for both urban and rural residents. People need to get to work, medical appointments, shopping, social functions, etc., but different approaches are needed to satisfy these needs, depending on where each individual lives.

Personal automobiles, for example, may be more of a necessity in rural areas and transit systems need to function differently in rural vs. urban settings. Similarly, mobility factors such as snow removal are more of an issue in northern climates. Carpool lanes and parking may be important in urban areas while they are non-issues in rural communities. Traveling from place to place is universally important, but how that is done varies depending on each individual's mobility environment.

The steering committee that was established to oversee this study came to a consensus concerning levels of passenger transportation service that are required to satisfy the basic mobility needs of various segments of the state's population and different size population centers in the state. Related recommendations will be presented in this chapter.

The steering committee recognized that budget constraints limit the level of service that may be universally possible across the state. While the committee recognized that higher levels of service are desirable, presenting recommendations and designing programs that are financially unrealistic would be counterproductive.

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 chapter presents 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 herein does not mean that there is not a role for state transportation agencies in this process. Quite to 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.

This chapter's second set of recommendations regarding supplemental service programs is followed by a presentation of "best practices." The mobility programs discussed in these subsections 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. Hopefully this presentation will provide state and local leaders with ideas for programs which will help address special personal mobility needs which exist in various parts of the state.

In the final analysis, it must be recognized that personal mobility needs are, in fact, personal. These needs vary from person to person and there is no one solution that will satisfy everyone.

Given this fact, there is no single 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 (elderly, disabled, commuters, school-age youth, etc.). This is the approach that is taken in the following recommendation section.

8.1 Base Level Service Recommendations

As indicated in the preceding narrative, this chapter's first set of recommendations relates to base level mobility services and corresponding programs. These goals and programs are discussed in the following subsections. Recommendations related to supplemental local programs and initiatives are presented in the latter portion of this chapter.

8.1.1 Focus on basic access rather than service enhancements

Given their population densities, many states have relatively mature personal mobility systems that provide comprehensive mobility services and even a variety of service options. Some areas of North Dakota have comparable personal mobility services but the systems in place in many cities and counties leave area residents with limited or no options, other than private automobiles.

The literature review that was conducted regarding other state's mobility studies found numerous plans that addressed personal mobility factors such as travel times, commuter choices, cost of service, reliability, quality, and safety. While these mobility factors are certainly important, they are secondary in nature in areas which have no personal mobility options.

Given this fact, 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.

8.1.2 Implement recommendations of coordination study

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

- 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 steering committee believes that the implementation of the remaining recommendations of this study would be greatly facilitated by the regional and state board concept outlined above.

It should also be noted that federal Executive Order No. 13330 mandates that federal agencies work together to coordinate their transportation programs, many of which were discussed in Chapter 4. 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.

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

The steering committee recognized that economic realities prevent the provision of high levels of universal service to all areas of the state. To balance these realities with the needs of various geographic areas and demographic groups, the steering committee sought to identify base levels of required service for each of the groups and areas identified on the grid on the following page. The corresponding levels of prescribed service increase relative to the lack of personally provided mobility available within each demographic group and to the population density of each geographic area. The level of prescribed service therefore increases with need densities.

Table 8.1 Mobility Goals

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

Demographic Group / Geographic Area	Pre-School	Grades K-12	Adult	Seniors Age 60+	Low Income	Disabled
Rural Areas & Cities Under 4,500	Head Start, & Emerg.	School & Emerg.	Weekly Dial-A-Ride & Emerg.	Weekly Dial-A-Ride & Emerg.	Weekly Dial-A-Ride, Medicaid, TANF, & Emerg.	Weekly Dial-A-Ride, Voc. Rehab. & Emerg.
Cities 4,500 – 20,000	Head Start, Taxi, & Emerg.	School, Taxi, & Emerg.	Daily Dial-A-Ride, Taxi, & Emerg.	Daily Dial-A-Ride, Taxi, & Emerg.	Daily Dial-A-Ride, Taxi, Medicaid, TANF, & Emerg.	Daily Dial-A-Ride, Taxi, Voc. Rehab. & Emerg.
Cities Over 20,000	Head Start, Fixed Route, Taxi, & Emerg.	School, Fixed Route, Taxi, & Emerg.	Daily Fixed Route, Taxi, & Emerg.	Daily Fixed Route, Taxi, & Emerg.	Daily Fixed Route, Taxi. Medicaid, TANF, & Emerg.	Daily Dial-A-Ride, Fixed Route, Taxi, Voc. Rehab. & 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.					

It is important to note that the services prescribed in the mobility goals grid are not necessarily capable of meeting all the mobility needs of state residents. As indicated earlier, these are services that will hopefully meet the basic needs of most state residents.

It should also be noted that the services identified in the grid are government-supported services. Some of these services are supported by state agencies such as the North Dakota Departments of Transportation and Human Services. Other services ("friends & family," commercial, faith-based, etc.) are needed to provide higher levels of service.

Many of the services identified in the mobility goals grid are already being provided in North Dakota. As indicated in Chapter 4, for example, there are 140 licensed ground ambulances services licensed to operate in the state. School transportation services are almost universally available in North Dakota and there are more than 800 entities registered to provide Medicaid-related transportation services. Each of the state's four largest cities already has fixed-route bus systems in place.

In some instances, however, services would need to be initiated to insure the provision of prescribed levels of service (e.g. taxi or more frequent dial-a-ride services in certain communities). Not all of the services identified in the grid would require a "free standing" service provider. One provider may, for example, be able to provide local taxi services plus all of the dial-a-ride services required within a county.

It should also be noted that an important underlying element of the services prescribed in the mobility grid is the availability of, at a minimum, weekly dial-a-ride services in all parts of the state. Chapter 6 presented a gap analysis which compared the services prescribed in the mobility grid with the services available around the state. Dial-a-ride services are available in some form in each of the state's 53 counties. Unfortunately, not all of these services provide comprehensive services to all parts of their respective county; corresponding service levels should be expanded to satisfy the prescribed service goal.

The analysis of vehicle miles of service per capita data indicates that the amount of service available to rural residents varies across the state. The reasons for this diversity include the capabilities of the providers (financial, equipment, management, etc.), the trip purpose priorities of the organization, and historic trip patterns. The most significant stimulus to improve the scope and level of rural transit services would be to implement the coordination plan recommendations (Recommendation 8.1.2). This would lead to increased efforts to identify and meet local mobility needs and to acquire and manage corresponding resources.

The capital and operating expenses associated with expanded rural services were estimated based on three optional levels of service. These expansions would allow operators with lower service levels to increase offerings to levels comparable to some of the state's higher-achieving paratransit operations. The service level 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 the 2004 levels (between $850,000 and $1.7 million). Capital costs for additional vehicles are estimated to be between $1.5 and $3.0 million.

These operating and capital cost figures are based on general approximations of need and the cost of responding to these needs. The next step in the process of improving mobility in rural areas will be to conduct the detailed regional needs and service planning studies recommended in the coordination study. As a part of these studies, the capabilities of current providers can be assessed along with the opportunities to increase utilization of existing services. These studies can also address the key question of funding, especially the availability of local matching funds.

Once the coordination plans are completed, the NDDOT may consider the development of funding programs that offer funding incentives for expanded services that provide for the base level mobility levels described in this study. It may also wish to consider funding for organizational development to assure that each region has an active brokerage program to match individual and agency needs with public transportation services.

The previous recommendations focus on the rural areas of the state because this study identified these areas as having the greatest need for additional mobility services. However, the urban areas also have needs and opportunities to offer greater mobility within their service areas.

The four urban areas with fixed-route systems, Fargo, Grand Forks, Bismarck, and Minot, all provide services that meet this study's criteria for bas-level service. Fargo's and Grand Forks' services are the most comprehensive while Bismarck has just started to receive fixed-route service 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 primarily focuses 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 but pay particular attention to the development of the Bismarck fixed-route system and encourage a broader market focus for Minot.

North Dakota cities with populations of 4,500 to 20,000 generally have the infrastructure in place to provide the levels of service presented in the mobility grid. As is the case with counties, however, individual assessments should be done to tailor these services to local needs.

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

The preceding recommendation focuses on providing a base level of access to public transportation services. Access to transportation providers does not, however, create mobility if the services do not connect users with the services that they need to access.

Some of the essential mobility needs of state residents relate to medical services, shopping, social and religious activities, etc. Some of these needs may be met within the individuals' home county, but in many instances travel to a regional hub may be required to access needed services. Travel within the county may not, therefore, be sufficient; getting to and from the regional hub is a necessity.

The steering committee therefore recommended that service systems be designed in a hub and spoke manner to provide services within each county and that each county system be linked to that region's hub city. In many cases, regional systems are already in place to provide such services. It should be a goal of the state to implement such services on a state-wide basis.

Providing access to regional hubs will not satisfy related mobility needs if available services do not allow travelers to move within these regional hubs once they get there. In many instances, county and regional paratransit operators already provide these services to the people they bring in from outlying areas. Efforts must be undertaken, however, to ensure that these local mobility needs are satisfied.

Taxi services also play a vital role in North Dakota's personal mobility system. An earlier recommendation suggested that systems be established and maintained in all cities of 4,500 residents or more. At this time, only Grafton and Beulah-Hazen do not have taxi services. 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.

These operations provide a vital service to the general population and specifically to individuals with special mobility needs. 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.

8.1.5 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 these hubs will be other regional centers 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.

As discussed in Chapter 4, intrastate regional connectivity via commercial operators has diminished over the past two decades. Much of this connectivity was originally provided by passenger bus services. As reported earlier, the number of commercial intercity bus services in North Dakota has declined from 12 in 1981 to 3 in 2005.

Intercity commercial bus services are still available in seven of North Dakota's eight regional hubs and regional connections are also provided by some of the state's paratransit services. It is important, however, that these publicly supported paratransit connections not compete with commercial intercity carriers. Doing so would deprive marginally profitable operators of much-needed revenue. The state's paratransit services should coordinate with commercial operators to provide feeder services which bring passengers to them.

Like many other states, North Dakota is using Federal Transit Administration funding to support the operations of some intercity bus operations. 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 study concerning 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.

Five of North Dakota's eight regional centers also have access to Amtrak service. As reported in Chapter 4, Amtak services in North Dakota have been relatively stable for more than 20 years and passenger boardings have increased in recent years. Nonetheless, the future of Amtrak is tenuous at the national level and whatever happens there will dictate the level of service, if any, available at the state and local level.

Amtrak provides many state residents with a means of traveling to out of state destinations as well as a means of traveling between points within the state. It is, therefore, an integral part of the state's personal mobility system and should be maintained.

NDDOT has worked with North Dakota's congressional delegation to monitor federal proposals concerning Amtrak. These efforts should be continued to insure that services are continued. Recommendation 8.1.8 also recommends that Amtrak be included in the proposed Personal Mobility Task Force so that its services can, to the greatest extent possible, be coordinated with those of other area service providers. If Amtrak service is discontinued in North Dakota, aggressive action should be taken to provide commercial bus transportation between Williston and Minot and to thereby maintain the Williston region's connections to other major hub communities in North Dakota.

Air passenger and air taxi services in North Dakota fall under the jurisdiction of the North Dakota Aeronautics Commission. The commission has conducted extensive research concerning air passenger services as well as services related to air taxi and the industry's infrastructure within the state.

Air passenger services are vitally important to North Dakota and provide one of the primary links between the state's regional hubs and out of state destinations. These services have undergone a dramatic transformation since the airline industry was deregulated in the early 1980s. Fortunately, overall service levels have been at least maintained and passenger boardings have increased.

The Aeronautics Commission should continue in its leadership role regarding air services in North Dakota. Recommendation 8.1.8 also recommends that the Aeronautics Commission be a member of the proposed Personal Mobility Task Force so that air services can, to the greatest extent possible, be coordinated with those of other facilitators of personal mobility.

8.1.6 Establish uniform performance measures for publicly supported transportation services and reward "achieving" programs

The analysis of 2004 operating and financial data for the state's publicly supported transit systems revealed a wide range in reported performance on both efficiency and effectiveness measures. Some of this difference is due to differences in the types of services provided and the operating environment encountered by the systems. However, much of the difference is due to management and policy decisions that can change and lead to increased mobility for North Dakota residents. Furthermore, a review of the data suggests errors in understand and/or reporting so that the usefulness of the data is compromised.

The benefits of collecting and using performance data for local management, policy decisions, and state-level funding decisions are significant; efforts to improve the data and encourage performance monitoring would be rewarded with both more and better service. As a first step, NDDOT and other state transit agencies should, in collaboration with grantees (including the Dakota Transit Association), 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 might consider developing performance bonuses to reward systems that perform to a high level or show substantial improvement. Other states have tried this approach with both success and failure so additional research may be warranted to determine what types of approaches produce desired results.

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

Much of the data in this study, as well as similar studies conducted in other states, depends on ancillary data related to the mobility needs of various segments of the population (senior citizens, disabled, low income, etc.). While this approach is supported by related research, first-hand information concerning residents' mobility needs would be superior.

It is also important to note that many national surveys and studies, such as the U.S. Department of Transportation's 2001 National Household Travel Survey, do not survey many rural states, including North Dakota. It is somewhat speculative, therefore, to extend related findings to all regions of the country.

Given these facts, it may be advisable to conduct occasional surveys of state residents concerning their existing mobility habits and unmet needs. The findings of such a survey would enable policymakers and program administrators to design and implement programs that better meet the unmet mobility needs of state residents.

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.

8.1.8 Establish a personal mobility task force

Personal mobility would be facilitated if the insightful individuals, businesses, and agencies that are involved with it meet regularly to educate one another and to collectively pursue ways to enhance personal mobility in North Dakota.

It is recommended that the director of the North Dakota Department of Transportation establish 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.
- 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.

8.2 Supplemental Service Recommendations

As indicated at the outset of the chapter, implementing the base-level service recommendations outlined herein 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.

Recommendations concerning supplemental mobility services are presented in the following subsections. This presentation will be followed by a section which discusses innovative mobility programs which have been implemented in other parts of the country. Some of these programs may warrant consideration in some parts of North Dakota.

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.

8.2.1 Provide state incentives to encourage local initiatives that facilitate the achievement of state personal mobility goals

Inevitably, the initiation and long-term operation of mobility-enhancing services will require local involvement. This is true not only for what might be considered state programs but also for local programs designed to provide enhanced levels of service.

Providing financial incentives to encourage and reward local initiatives would greatly facilitate the establishment of desired services. 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 conceived by local, regional, and state-level mobility interests.

These efforts should be coordinated through the state coordinating council that is discussed in Recommendation 8.1.2. The North Dakota Aeronautics Commission should be included in these discussions.

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

As illustrated by Chapter 4, there are a numerous transportation services available to state residents. Some of these services are available to the public while others are client-specific; some are non-profit and some are commercial.

In many instances, these services are not coordinated with one another. In some cases, they may not even be coordinated despite the fact that their underlying funding sources are the same.

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 as described in Recommendation 1.2.

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

Automobiles satisfy the vast majority of North Dakotans' personal mobility needs. In many instances, unmet needs could also be satisfied with private automobiles if the vehicles' operators were aware of the unmet transportation needs of their relatives, friends, and neighbors. Using this existing form of transportation may be far more cost-effective than initiating other forms of service, especially in sparsely populated areas.

Efforts should be undertaken at state and local levels to identify local entities that are willing and able to serve as a clearinghouse to bring together volunteer drivers and persons in need of transportation. Clearinghouse candidates might include the regional coordinating councils

discussed in Recommendation 1.2, some other existing transit service provider, or local churches, businesses, community action agencies, chambers of commerce, etc. This effort might be facilitated if the state developed a how to manual that could be used to promote the concept to potential operators.

Personal liability may be an issue in some instances. As will be discussed in the "best practices" section later in this chapter, sponsoring entities may wish to obtain supplemental liability insurance to provide additional insurance protection for both volunteer drivers and their passengers.

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

As indicated in Chapter 4, the North Dakota Department of Transportation had an active ridesharing program in the late 1970s and early 1980s. This program was designed to bring commuters together in carpools and vanpools. Declining interest rates and fuel prices contributed to the decline and ultimate cessation of the program in the mid-1980s.

The demographics of North Dakota's business community have changed greatly since the 1980s. Numerous employment centers have opened in rural areas and many rural residents are finding it more desirable to commute longer distances to larger cities rather than relocating. Under both scenarios, long commutes are common and, given the relatively low number of people who are making these trips, commercial commuter services are impractical.

Federal provisions that made highway funding available to encourage and support ridesharing programs in the 1970s are still in place today. This funding may be used to promote carpooling and vanpooling and even to provide low-interest loans to help purchase vanpool vehicles.

Additional federal incentives have been created to promote ridesharing. These incentives include features such as using flex comp programs to create tax incentives for commuters who rideshare or use transit. Employers are also eligible for tax benefits if they participate in eligible transit and ridesharing programs.

Efforts should be undertaken by the NDDOT 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.

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

Utilizing automatic vehicle location (AVL) technologies for transit buses and global positioning systems (GPS) technologies for rural addressing can greatly improve personal mobility throughout North Dakota. Two such endeavors in Vermont and South Dakota are highlighted in the following discussion.

The Vermont ITS strategic plan (University of Vermont, 2002) included a transit tracking technology package. This market package provides for an AVL system to track transit vehicle's real time schedule adherence and updates the transit system's schedule in real-time. Vehicle position may be determined either by the vehicle (e.g., through GPS) and relayed to the system office or it may be determined directly with communication devices. These devices include a two-way wireless communication link with the system office to relay vehicle position and control measures. Better tracking of buses within a transit system allows route planners and management to increase the efficiency of their operation.

The South Dakota rural ITS deployment study conducted by Castle Rock Consultants (2001) developed a project for rural addressing using geographic information systems (GIS). The South Dakota Department of Transportation already collected much of the data for rural addressing, but the data had not been implemented within a GIS framework. Geocoding addresses into a GIS program provides a statewide database of information that can be used by various state and local agencies to improve personal mobility throughout the state. The estimated cost of this project was $100,000 to contract for database development of counties within South Dakota. A similar technique could be used in North Dakota.

8.2.6 Encourage and facilitate pedestrian and bicycle transportation

As indicated in Chapter 4, 2000 Census data indicates that 5 percent of all North Dakotans walk to work and that another 0.8 percent commute by some means other than by car or transit (partially by bicycle). Chapter 4 also reported that the Federal Highway Administration has adopted a policy which requires that corresponding facilities shall be included in all new and reconstruction roadway projects in urban areas unless doing so is prohibited by law, the cost would be excessively prohibited, or there is an indicated absence of need.

Planning and operating facilities for pedestrian and bicycle travel are a formal part of the long range planning processes undertaken by NDDOT and each of the state's 13 largest cities. This process should be continued, both for the sake of persons who commute as pedestrians and via bicycle, and for those who use these forms of transportation for recreational and/or personal health reasons.

8.3 Best Practices - Mobility Programs That Work

A number of communities around the country have initiated innovative programs to enhance the mobility of area residents. The following pages present summary information on a few of these programs. Hopefully this presentation will spur discussions in North Dakota communities concerning innovative approaches that might help to meet the mobility needs of local residents.

8.3.1 Independent Transportation Network – Portland, Maine

ITN America / Independent Transportation Network operates within a 15 mile radius of Portland, Maine, but the concept is poised to expand nation-wide. Volunteer drivers use personal automobiles and, in some cases, accessible transit vehicles to provide local transportation services to area 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 for their services at a rate of 25 cents per passenger mile. They can either receive cash or they can receive 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.

8.3.2 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 round trip. Longer rides are 76.5 cents per mile.

Volunteer drivers are compensated at a rate of $.375 per mile, plus parking and meal expenses. Semcac has supplemental auto and liability insurance in place for the protection of both riders and drivers.

8.3.3 School Districts Coordinating Services with Transit Systems – Iowa

The Iowa Department of Transportation conducted a study in 2003 regarding the coordination of public transit services and school transportation. This study described the efficiencies that could be obtained by coordinating transit management and maintenance systems in the areas of school transportation, public transit, and other forms of public transportation. The Center for Transportation Research and Education

(CTRE) studied these issues and prepared the final report. CTRE conducted a survey of the 35 transit agencies in Iowa and school districts served by public transportation agencies to determine the extent of possible coordination. Findings showed that 23 transit agencies coordinate in some manner with more than 45 school districts (Andrle et al., 2003).

The report highlighted three main types of coordinated resources including capacity, specialized fleet equipped to serve passengers with disabilities, and infrastructure through which savings can occur. Capacity is the measure of seating room on a vehicle. Transit ridership often experiences sharp, directional peaks, leaving unused capacity available in the off-peak direction. Des Moines is a successful example of a community which has used this off-peak capacity for school transportation. Because 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 be coordinated also. Iowa has some cases of transit-school coordination using this model (Andrle et al., 2003).

The study found that the greatest barrier to coordination in the eyes of the public was the perceived relative safety of school buses and transit vehicles. Safety data indicates that both services are excellent, but the issue becomes complicated by the many combinations of vehicle types and operating environments. Many school districts operate sedans, vans, sport utility vehicles and four types of school buses while transit agencies operate at least three classes of transit vehicles throughout a wide variety of street conditions. It was important to consider the applicable vehicle safety standards and operating conditions when evaluating safety issues while keeping strict record of driver qualifications for both school and transit buses.

8.3.4 State Supported Commuter Ridesharing – State of Utah

Utah has maintained a vanpool promotion program similar to the one that was in place in North Dakota in the late 1970s and early 1980s. Using Federal-aid highway trust funds, the Utah Department of Transportation makes interest-free loans available to companies or individuals to purchase new vans for use as 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 downpayment 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.

8.3.5 Regional Coordination of Transit Services – Southwestern, 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 Roosevelt-Custer Regional Council for Development to do initial research. This council is working with the county commissioners, senior groups, schools, and transit providers located in the seven counties. The committee 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. The percent of residents that live in the rural areas ranged from a low of 13 percent in Bowman County to a high of 22 percent in Slope County.

The next step will be to determine if area school and transit vehicles can be coordinated to provide weekly services to a majority of rural and community residents in the region. It may be determined that some type of volunteer services providers' program may also be needed to accomplish the program's goals. The Small Urban & Rural Transit Center and the North Dakota Department of Transportation are working with the project's steering committee to develop a plan which will address some of the region's personal mobility needs.

8.4 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 personal 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 performance measures to manage their systems and report results to the public and their policy boards.

- Personal Mobility Index – this recommendation suggests that state residents be surveyed concerning their personal mobility needs and that a related personal 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.

8.5 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 personal 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 related 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 in place that are 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 are, by definition, personal. 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 that are 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.

Appendix A. Steering Committee

Bismarck, City of	Carl Hokenstad, Director of Planning
Bis-Man Transit (Bismarck)	Robin Werre
Dakota Center for Independent Living (Bismarck)	Robert Gomez
Dakota Center for Independent Living (Dickinson)	Kim Johnson
Dickinson, City of	Bill Reitmeier, Commissioner
Grand Forks, City of	Carol Gierszewski
	Roger Foster
Handi—Wheels (Fargo)	Allan Peterson
Independence, Inc. (Minot)	Steve Repnow
James River Transit (Jamestown)	Carol Wright
Lutheran Social Services (Fargo)	Dawn Christianson
Minot City Self Advocates (Minot)	Shirley Brennan
Minot State University (Minot)	Laurie Davis
ND Aeronautics Commission	Gary Ness
ND Assoc. for the Disabled (Bismarck)	Cindy Sheldon
ND Assoc. of Counties (Bismarck)	Wade Williams
ND Dept. of Human Services	Sheryl Pfliger – Aging Services
	Cheryl Wescott – Vocational Rehabilitation
ND Dept. of Public Instruction	Tom Decker
ND Dept. of Transportation	Paul Benning
	Bruce Fuchs
	Dave Leftwich
	Jack Olson
	David Sprynczynatyk, Director
	Jim Styron
ND Disabilities Advocacy (Bismarck)	Jim Moench
ND Governor's Office	Bill Goetz, Chief of Staff
ND Long Term Care Assoc. (Bismarck)	Shelly Peterson
ND Protection & Advocacy Project	Edna Keller
Oakes Public Schools (Oakes)	Art Conklin, Superintendent
Options Interstate Resource Center For Independent Living (East Grand Forks, MN)	Randy Sorenson

Appendix B. Intercity Commercial Bus Stops

Rimrock Trailways

Bus Stop / City	County	Phone Number
Beach	Golden Valley	701-872-3590
Bismarck	Burleigh	701-223-6576
Dickinson	Stark	701-225-6789
Fargo	Cass	701-293-1222
Grand Forks	Grand Forks	701-775-4781
Jamestown	Stutsman	701-252-1170
Medora	Billings	701-623-4345
Richardton	Stark	701-974-2365
Sterling	Burleigh	701-223-6576
Steele	Kidder	701-475-2221
Valley City	Barnes	701-845-1560

Greyhound Lines, Inc.

Fargo	Cass	701-293-1222

Jefferson Lines

Bus Stop / City	County	Phone Number
Fargo	Cass	701-293-1222
Grand Forks	Grand Forks	701-775-4781
Pembina	Pembina	701-775-4781

New Town Bus Line

Bus Stop / City	County	Phone Number
Bismarck	Burleigh	701-223-6576
Churches Ferry	Ramsey	701-852-2477
Coleharbor	McLean	701-852-2477
Devils Lake	Ramsey	701-662-8893
Garrison	McLean	701-852-2477
Grand Forks	Grand Forks	701-775-4781
Granville	McHenry	701-852-2477
Lakota	Nelson	701-775-4781
Larimore	Grand Forks	701-775-4781
Leeds	Benson	701-852-2477
Makoti	McLean	701-852-2477
Max	McLean	701-852-2477
Michigan	Nelson	701-775-4781
Minot	Ward	701-852-2477

New Town	Mountrail	701-627-3830
Parshall	Mountrail	701-852-2477
Plaza	Mountrail	701-852-2477
Rugby	Pierce	701-852-2477
Ryder	McLean	701-852-2477
Towner	McHenry	701-852-2477
Underwood	McLean	701-852-2477
Washburn	McLean	701-223-6576
Wilton	Burleigh	701-223-6576

Appendix C. Taxi Services

Bismarck / Mandan	Burleigh & Morton Counties
	Taxi 9000 3750 E. Rosser Avenue Bismarck, ND 58501 Phone: 701-223-9000
Devils Lake	Ramsey County
	City Cab 318 Eastern Avenue Crary, ND 58327 Phone: 701-351-5768
Dickinson	Stark County
	Deb's Cab 358 1st Street E. Dickinson, ND 58601 Phone: 701-290-8256
Fargo / West Fargo (2)	Cass County
	Doyle's Yellow Checker Cab, Inc. 2701 5th Avenue S. Fargo, ND 58103 Phone: 701-235-5535
	Lucky 7 Taxi Service Fargo, ND Phone: 701-235-1717
Grand Forks (2)	Grand Forks County
	Grand Forks Taxi 1515 11th Avenue N. Grand Forks, ND 58203 Phone: 701-780-8898
	Nodak Radio Cab Co. 1101 5th Street N Grand Forks, ND 58203 Phone: 701-772-3456

Jamestown (2)	Stutsman County
	Buffalo City Cab 1011 10th Street SE Jamestown, ND 58401 Phone: 701-252-4444
	Jamestown Taxi Service 1802 6th Avenue NE Jamestown, ND 58401 Phone: 701-252-4200
Minot (2)	Ward County
	Minot City Cab 11 SE 1st Street Minot, ND 58701 Phone: 701-852-8000
	Taxi 9000 500 3rd Street NE Minot, ND 58701 Phone: 701-852-9000
Valley City	Barnes County
	South Central Adult Services, Inc. P.O. Box 298 Valley City, ND 58072 Phone: 701-845-4300
Wahpeton	Richland County
	Twin Town Taxi 224 2nd Avenue. N. Wahpeton, ND 58075 Phone: 701-642-5757
Williston	Williams County
	Basin Cab 1804 2nd Street West Williston, ND 58801 Phone: 701-577-1957

Appendix D. Commercial Airports in North Dakota

Bismarck / Mandan - Burleigh / Morton Counties

Bismarck Municipal Airport
Address: 2301 University Drive
Bismarck, ND 58504
Airlines: Northwest Airlines (and affiliated carriers Mesaba Airlines and Big Sky Airlines)
United Express (operated by SkyWest and Air Wisconsin)
Allegiant Air
Flights: Minneapolis – 7 Flights Daily
Denver – 3 Flights Daily
Williston, Sidney, & Billings – 1 Flight Daily
Las Vegas – 2 Flights / Week
Phone: 701-222-6502
1-800-453-4244

Devils Lake - Ramsey County

Knoke Field
Address: Highway 19 W
Devils Lake, ND 58301
Airlines: Northwest Airlines (operated by Mesaba Airlines)
Flights: Jamestown & Minneapolis – 2 Flights Daily
Phone: 701-662-6310

Dickinson - Stark County

Dickinson Theodore Roosevelt Regional Airport
Address: 11168 42nd Street SW (5 miles south of city)
Dickinson, ND 58601
Airlines: Great Lakes Airlines (joint fares with United Airlines & Frontier Airlines)
Flights: Williston & Billings – 2 Flights Daily
Denver – 2 Flights Daily
Phone: 701- 225-3822
800-241-6522

Fargo / West Fargo - Cass County

Hector International Airport
Address: 2801 32 Ave. NW (off 19th Ave. N)
P.O. Box 2845
Fargo, ND 58108
Airlines: Northwest Airlines (and affiliated carrier Mesaba Airlines)
United Express (operated by Atlantic Coast, Skywest, and Air Wisconsin)

Flights: Minneapolis – 8 Flights Daily
Chicago – 4 Flights Daily
Denver – 3 Flights Daily
Phone: 701-241-1501

Grand Forks - Grand Forks County

Grand Forks Regional Airport
Address: 2787 Airport Drive (5 miles west of city on Hwy. 2)
Grand Forks, ND 58203
Airlines: Northwest Airlines (and affiliated carrier Mesaba Airlines)
Flights: Minneapolis – 8 Flights Daily
Phone: 701-795-6981

Jamestown - Stutsman County

Jamestown Municipal Airport
Address: 1600 Airport Road (1 mile east on old Highway 10)
Jamestown, ND 58401
Airlines: Northwest Airlines (operated by Mesaba Airlines)
Flights: Devils Lake and Minneapolis – 2 Flights Daily
Phone: 701- 252-6466

Minot - Ward County

Minot International Airport
Address: 25 Airport Road (off North Broadway Avenue)
Minot, ND 58703
Airlines: Northwest Airlines
Flights: Minneapolis – 3 Flights Daily
Phone: 701- 857-4724

Williston - Williams County

Sloulin International Airport
Address: Hwy. 2 & Hwy. 85 N.
Williston, ND 58801
Airlines: Northwest Airlines (operated by Big Sky Airlines)
Great Lakes Airlines (joint fares with United Airlines & Frontier Airlines)
Flights: Bismarck – 1 Flight Daily
Dickinson & Denver – 2 Flights Daily
Sidney & Billings – 1 Flight Daily
Phone: 701- 774-3124

Appendix E. Fixed Route & Dial-A-Ride / Paratransit Services in North Dakota

Fixed Route & Dial-A-Ride / Paratransit Services in North Dakota (45)

Criteria for Inclusion

- Receive FTA funding, either directly from FTA or via NDDOT or
- Receive state-aid funding from NDDOT
- Fixed-route systems that also provide dial-a-ride/paratransit services are listed only under Fixed-Route Systems to avoid double counting

Fixed Route Systems Receiving Federal (FTA) Funds

- Fargo (also provides local dial-a-ride / paratransit service)
- Bismarck (also provides local dial-a-ride / paratransit service)
- Grand Forks (also provides local dial-a-ride / paratransit service)
- Minot
- New Town Bus Line (Part of Souris Basin Transportation)

Dial-A-Ride / Paratransit Systems Receiving Federal (FTA) Funds

- City of Dickinson (local taxi service – capital funds)
- City of Jamestown (local taxi service)
- Dickey County Senior Citizens
- Emmons County Council on Aging
- Fargo Senior Commission, Inc.
- Golden Valley / Billings County Council on Aging
- James River Senior Citizens Center, Inc.
- Kenmare Wheels & Meals, Inc.
- Kidder / Emmons Co. Senior Services
- Mercy Medical Center (vouchered rides / local taxi service)
- Minot Commission on Aging
- Nelson County Transportation

- North Central Planning Council: Benson County Transportation
  Cando Senior Citizens
  Cavalier County Senior Meals
  City Cab (Devils Lake)
  Devils Lake Taxi
  Eddy County Transportation
  Nutrition & Support Service (Belcourt)
  Nutrition United / Rolette Cty. Sen. Meals
  Royal Coach Transportation (Rolette Cty.)
  Senior Meals & Services (Devils Lake)
  Spirit Lake Tribe Senior Service Program)
- Pembina County Meals & Transportation
- Souris Basin Transportation Board
- South Central Adult Services, Inc. (Valley City)
- Southwest Transportation Services (Bowman)
- Standing Rock Public Transportation Program / Sitting Bull College
- Stark County Council on Aging / Elder Care
- Trenton Indian Service Area Aging Programs
- Walsh County Transportation Program
- West River Transportation Council
- Williston Council for the Aging

Dial-A-Ride / Paratransit Systems Receiving Only State-Aid

- City of Hazen
- Dunn County Council on Aging
- Glen Ullin Senior Transportation
- Handi-Wheels Transportation, Inc. (Fargo)
- Three Affiliated Tribes Aging Services
- Tioga Senior Citizens Club
- Wildrose Senior Transportation

Appendix F. Public Transportation Statistics

	July 1, 2003 - June 30, 2004		OPERATING FUNDS				Date Run 11/03/2004	
		STATE AID		FED 5311	FEDERAL	FEDERAL	CITY-CO-ST.	
	PROVIDER	CAPITAL	STATE AID	RURAL	OAA III B	OTHER	MILL LEVY	OTHER
1	Dickey County Trans	0	20,950	10,800	0	0	0	54
2	Dunn County Trans.	0	14,149	0	0	0	0	833
3	Elder Care-Dickinson	0	46,607	63,775	0	0	37,696	68,573
4	Emmons Co. Trans	0	18,783	12,100	0	0	0	0
5	Fargo Senior Commission (7 providers):							
	5a. Fargo/West Fargo	7,893	43,666	11,583	90,188	0	0	2,141
	5b. Cass County	0	5,483	14,123	0	0	0	101
	5c. Ransom County	0	21,153	13,008	0	0	0	0
	5d. Richland County	0	39,557	6,155	0	0	0	0
	5e. Sargent County	0	18,836	12,028	0	0	0	581
	5f. Steele/GF Counties	0	24,144	26,267	0	0	0	546
	5g. Traill County	0	25,085	8,625	0	0	0	328
6	Glen Ullin Trans.	0	4,913	0	0	0	0	0
7	Golden Valley Trans.	0	28,674	10,252	0	0	2,256	0
8	Handiwheels-Fargo	0	8,988	0	0	0	0	13,862
9	Hazen, City of	0	11,390	0	0	0	10,953	5,070
10	James River Transit	0	74,154	50,847	0	0	52,000	47,497
11	Kenmare Wheels/Mls	0	9,574	7,025	0	0	0	367
12	Kidder-Emmons Co.	0	16,385	12,155	11,100	0	2,112	3,000
13	Minot Comm/Aging	0	37,814	46,495	0	0	56,450	92,655
14	Nelson Co. Trans.	0	17,847	20,080	0	203	6,500	1,141
15	North Central Planning - Devils Lake (9 providers):							
	15a. Benson County	0	12,546	7,480	15,235	0	3,075	0
	15b. Cando Seniors	0	16,572	7,480	0	0	0	510
	15c. Cavalier County	0	18,543	8,530	0	0	5,776	0
	15d. Eddy County	0	16,390	3,240	0	0	0	0
	15e. Nutr United-Rolla	0	20,483	7,480	13,096	0	200	0
	15f. Sr Meals/Srvs-DL	0	24,440	19,100	0	0	0	0
	15g. Spirit Lake Srvs	0	10,239	8,150	0	0	0	0
	15h. Turtle Mntn Srvs	0	12,501	6,590	6,393	0	0	0
16	Pembina County	0	25,249	14,000	0	429	0	2,841
17	Sitting Bull College	0	18,347	31,920	0	24,500	0	0
18	Souris Basin Trans	15,000	108,567	93,629	67,663	0	0	9,265
19	South Central Trans.	12,622	104,182	40,600	0	0	11,500	54,416
20	Southwest Trans	0	62,692	26,290	0	0	8,500	3,999
21	Three Affiliated Tribes-report not yet received							
22	Tioga Seniors	0	4,912	0	0	0	0	2,737
23	Trenton Indian Srvs.	0	17,858	16,300	15,360	3,903	0	0
24	Walsh Co Trans	0	31,031	24,400	0	0	10,838	165
25	West River Trans	0	81,413	70,255	58,900	0	19,200	16,631
26	Wildrose Seniors Trans	775	3,631	0	0	0	0	258
27	Williston Council Aging	0	31,840	10,000	24,843	0	1,235	0
	SUB TOTAL - GROUP	$36,290	$1,109,588	$720,762	$302,778	$29,035	$228,291	$327,571
28	Jamestown Taxi	0	6,100	10,200	0	0	0	0
	15i. Lake Region Taxi-NorthCentral		6,100	26,460	0	0	0	16,637
29	Mercy-Williston Taxi-report not yet received							
	FIXED ROUTE and/or FED SECTION 5307				FED 5307	FedOther		
30	Bis-Man Transit	0	145,806	0	456,956	23,791	394,936	98,614
31	Fargo, City of	0	140,246	0	1,151,642	0	630,730	48,453
32	Grand Forks, City of	0	104,174	0	712,722	0	484,854	158,252
33	Minot, City of	0	49,432	143,820	0	0	172,136	54,754
	GRAND TOTALS	$36,290	$1,561,446	$901,242	$2,624,098	$52,826	$1,910,947	$704,281

STATS FOR ALL PUBLIC TRANSPORTATION

July 1, 2003-June 30, 2004		REPORTED	REPORTED		**Costs Per Based on Total Expense				
		TOTAL	TOTAL			VEHI-	**COST/	**COST/	**COST/
PROVIDER	FARES	INCOME	EXPENSE	MILES	RIDES	CLES	MILE	RIDE	VEHICLE
Dickey County	2,804	$34,608	$34,608	20,416	6,058	1	$1.70	$5.71	$34,608
Dunn County	1,418	$16,400	$15,927	9,209	804	1	$1.73	$19.81	$15,927
Elder Care	28,656	$245,307	$245,307	108,792	37,996	6	$2.25	$6.46	$40,885
Emmons Co	7,547	$38,430	$46,776	25,207	2,972	2	$1.86	$15.74	$23,388
Fargo Senior Commission:									
Fargo Senior	42,319	$189,897	$209,898	162,374	46,081	10	$1.29	$4.55	$20,990
Cass County	2,030	$21,737	$21,737	21,737	2,029	1	$1.00	$10.71	$21,737
Ransom Co	4,286	$38,447	$41,159	25,103	2,431	2	$1.64	$16.93	$20,580
Richland Co	4,644	$50,356	$50,439	23,430	5,891	5	$2.15	$8.56	$10,088
Sargent Co	3,376	$34,821	$37,843	29,816	854	2	$1.27	$44.31	$18,922
Steele/GF Co	5,184	$56,141	$56,141	28,919	1,830	1	$1.94	$30.68	$56,141
Traill Co	1,932	$35,970	$35,970	26,931	1,616	2	$1.34	$22.26	$17,985
Glen Ullin	1,873	$6,786	$7,614	5,564	690	1	$1.37	$11.03	$7,614
Golden Valley	4,144	$45,326	$42,058	31,204	790	2	$1.35	$53.24	$21,029
Handiwheels	38,077	$60,927	$64,162	45,157	10,431	2	$1.42	$6.15	$32,081
Hazen, City of	10,611	$38,024	$35,888	15,727	12,083	2	$2.28	$2.97	$17,944
James River	124,139	$348,637	$363,801	157,960	58,058	10	$2.30	$6.27	$36,380
Kenmare Whls	1,410	$18,376	$18,376	3,045	8,148	1	$6.03	$2.26	$18,376
Kidder	5,233	$49,985	$49,985	52,266	10,251	2	$0.96	$4.88	$24,993
Minot Comm	46,402	$279,816	$279,816	137,484	46,482	5	$2.04	$6.02	$55,963
Nelson Co.	4,270	$50,041	$50,860	31,278	4,598	2	$1.63	$11.06	$25,430
North Central-Devils Lake:									
Benson Co	6,808	$45,144	$46,435	45,523	6,377	4	$1.02	$7.28	$11,609
Cando	4,397	$28,959	$27,911	7,707	5,972	2	$3.62	$4.67	$13,956
Cavalier Co	9,008	$41,857	$40,029	13,535	7,237	2	$2.96	$5.53	$20,015
Eddy Co	1,461	$21,091	$21,116	3,828	2,491	1	$5.52	$8.48	$21,116
Nutrition Un	2,187	$43,446	$47,220	29,598	7,342	4	$1.60	$6.43	$11,805
Senior Mls	34,795	$78,335	$96,681	52,039	23,807	5	$1.86	$4.06	$19,336
Spirit Lake	0	$18,389	$42,729	38,244	10,061	5	$1.12	$4.25	$8,546
Turtle Mntn	890	$26,374	$25,140	17,753	5,407	3	$1.42	$4.65	$8,380
Pembina Co	3,441	$45,960	$45,960	21,817	2,461	2	$2.11	$18.68	$22,980
Sitting Bull	21,667	$96,434	$77,998	197,000	8,582	5	$0.40	$9.09	$15,600
Souris Basin	23,561	$302,685	$302,685	134,876	35,301	13	$2.24	$8.57	$23,283
South Central	35,950	$246,648	$246,648	172,768	31,109	14	$1.43	$7.93	$17,618
Southwest	5,543	$107,024	$97,200	55,601	32,087	5	$1.75	$3.03	$19,440
Three Af Tribes		$0					#DIV/0!	#DIV/0!	#DIV/0!
Tioga	2,955	$10,604	$10,604	8,699	2,297	1	$1.22	$4.62	$10,604
Trenton	650	$54,071	$54,071	12,856	7,798	3	$4.21	$6.93	$18,024
Walsh Co	8,485	$74,919	$74,919	45,598	8,817	2	$1.64	$8.50	$37,460
West River	37,035	$283,434	$277,287	109,143	40,045	14	$2.54	$6.92	$19,806
Wildrose	0	$3,889	$3,889	3,214	380	1	$1.21	$10.23	$3,889
Williston	9,769	$77,687	$75,471	25,098	13,542	8	$3.01	$5.57	$9,434
SUB TOTAL	**$548,957**	**$3,266,982**	**$3,322,358**	**1,956,516**	**511,206**	**154**	**$1.70**	**$6.50**	**$21,574**
JamestwnTaxi	51,141	$67,441	$79,952	57,632	14,382	2	$1.39	$5.56	$39,976
LR - Taxi	11,477	$60,674	$61,679	18,000	9,175	2	$3.43	$6.72	$30,840
Williston Taxi		$0					#DIV/0!	#DIV/0!	#DIV/0!
Bis-Man Transit	311,228	$1,431,331	$1,273,752	717,349	193,764	30	$1.78	$6.57	$42,458
Fargo, City of	417,699	$2,388,770	$2,388,770	757,876	570,129	25	$3.15	$4.19	$95,551
Grand Forks	226,324	$1,686,326	$1,583,173	680,000	322,899	32	$2.33	$4.90	$49,474
Minot, City of	59,601	$479,743	$479,743	194,541	155,018	17	$2.47	$3.09	$28,220
TOTALS	**$1,626,427**	**$9,381,267**	**$9,189,427**	**4,381,914**	**1,776,573**	**262**	**$2.10**	**$5.17**	**$35,074**

STATS FOR ALL PUBLIC TRANSPORTATION

July 1, 2003 - June 30, 2004

PROVIDER	FARE/MILE	FARE/RIDE	FARE/VEH	MILES/VEH	RIDES/VEH	FARES %/ EXPENSE
Dickey County Trans	$0.137	$0.463	$2,804	20,416	6,058	8.10%
Dunn County Trans.	$0.154	$1.764	$1,418	9,209	804	8.90%
Elder Care	$0.263	$0.754	$4,776	18,132	6,333	11.68%
Emmons Co. Trans	$0.299	$2.539	$3,774	12,604	1,486	16.13%
Fargo Senior Commission:						
Fargo Senior Comm	$0.261	$0.918	$4,232	16,237	4,608	20.16%
Cass County	$0.093	$1.000	$2,030	21,737	2,029	9.34%
Ransom County	$0.171	$1.763	$2,143	12,552	1,216	10.41%
Richland County	$0.198	$0.788	$929	4,686	1,178	9.21%
Sargent County	$0.113	$3.953	$1,688	14,908	427	8.92%
Steele/GF Counties	$0.179	$2.833	$5,184	28,919	1,830	9.23%
Traill County	$0.072	$1.196	$966	13,466	808	5.37%
Glen Ullin Trans.	$0.337	$2.714	$1,873	5,564	690	24.60%
Golden Valley Trans.	$0.133	$5.246	$2,072	15,602	395	9.85%
Handiwheels-Fargo	$0.843	$3.650	$19,039	22,579	5,216	59.35%
Hazen, City of	$0.675	$0.878	$5,306	7,864	6,042	29.57%
James River Transit	$0.786	$2.138	$12,414	15,796	5,806	34.12%
Kenmare Wheels/Mls	$0.463	$0.173	$1,410	3,045	8,148	7.67%
Kidder-Emmons Co.	$0.100	$0.510	$2,617	26,133	5,126	10.47%
Minot Comm/Aging	$0.338	$0.998	$9,280	27,497	9,296	16.58%
Nelson Co. Trans.	$0.137	$0.929	$2,135	15,639	2,299	8.40%
North Central-Devils Lake:						
Benson County	$0.150	$1.068	$1,702	11,381	1,594	14.66%
Cando	$0.571	$0.736	$2,199	3,854	2,986	15.75%
Cavalier County	$0.666	$1.245	$4,504	6,768	3,619	22.50%
Eddy County	$0.382	$0.587	$1,461	3,828	2,491	6.92%
Nutrition United-Rolla	$0.074	$0.298	$547	7,400	1,836	4.63%
Senior Meals/Srvs-DL	$0.669	$1.462	$6,959	10,408	4,761	35.99%
Spirit Lake Nation Tribe	$0.000	$0.000	$0	7,649	2,012	0.00%
Turtle Mntn Chippewa	$0.050	$0.165	$297	5,918	1,802	3.54%
Pembina County	$0.158	$1.398	$1,721	10,909	1,231	7.49%
Sitting Bull College	$0.110	$2.525	$4,333	39,400	1,716	27.78%
Souris Basin Trans	$0.175	$0.667	$1,812	10,375	2,715	7.78%
South Central Trans.	$0.208	$1.156	$2,568	12,341	2,222	14.58%
Southwest Trans	$0.100	$0.173	$1,109	11,120	6,417	5.70%
Three Affiliated Tribes	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Tioga Seniors	$0.340	$1.286	$2,955	8,699	2,297	27.87%
Trenton Indian Srvs.	$0.051	$0.083	$217	4,285	2,599	1.20%
Walsh Co Trans	$0.186	$0.962	$4,243	22,799	4,409	11.33%
West River Trans	$0.339	$0.925	$2,645	7,796	2,860	13.36%
Wildrose Seniors Trans	$0.000	$0.000	$0	3,214	380	0.00%
Williston Council Aging	$0.389	$0.721	$1,221	3,137	1,693	12.94%
TOTAL FOR GROUP	**$0.281**	**$1.074**	**$3,565**	**12,705**	**3,320**	**16.52%**
Jamestown Taxi	$0.887	$3.556	$25,571	28,816	7,191	63.96%
Lake Region Taxi-DL	$0.638	$1.251	$5,739	9,000	4,588	18.61%
Mercy-Williston Taxi	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Bis-Man Transit	$0.434	$1.491	$10,374	23,912	6,459	24.43%
Fargo, City of	$0.551	$0.471	$16,708	30,315	22,805	17.49%
Grand Forks, City of	$0.333	$0.588	$7,073	21,250	10,091	14.30%
Minot, City of	$0.306	$0.343	$3,506	11,444	9,119	12.42%
GRAND TOTALS	**$0.371**	**$0.915**	**$6,208**	**16,725**	**6,781**	**17.70%**

2003 - June 30, 2004			SUBSIDY	PERCENT OF		
	SUBSIDY	SUBSIDY	PER	COSTS		PERCENT
PROVIDER	PER MILE	PER RIDE	VEHICLE	SUBSIDIZED		OTHER
Dickey County Trans	$1.56	$5.24	$31,750	91.74%	Subsidy	0.16%
Dunn County Trans.	$1.54	$17.60	$14,149	88.84%	includes all	5.23%
Elder Care	$1.01	$2.91	$18,397	45.00%	State Aid,	27.95%
Emmons Co. Trans	$1.23	$10.39	$15,442	66.02%	Fed 5311,	0.00%
Fargo Senior Commission:					Fed 5307,	
Fargo Senior Comm	$0.90	$3.16	$14,544	69.29%	Fed Other &	1.02%
Cass County	$0.90	$9.66	$19,606	90.20%	Fed Older	0.46%
Ransom County	$1.36	$14.05	$17,081	83.00%	Americans Act	0.00%
Richland County	$1.95	$7.76	$9,142	90.63%	Title 3B funds	0.00%
Sargent County	$1.04	$36.14	$15,432	81.56%	but NOT	1.54%
Steele/GF Counties	$1.74	$27.55	$50,411	89.79%	City,	0.97%
Traill County	$1.25	$20.86	$16,855	93.72%	County	0.91%
Glen Ullin Trans.	$0.88	$7.12	$4,913	64.53%	or State	0.00%
Golden Valley Trans.	$1.25	$49.27	$19,463	92.55%	Mill Levies	0.00%
Handiwheels-Fargo	$0.20	$0.86	$4,494	14.01 %		21.60%
Hazen, City of	$0.72	$0.94	$5,695	31.74%		14.13%
James River Transit	$0.79	$2.15	$12,500	34.36%		13.06%
Kenmare Wheels/Mls	$5.45	$2.04	$16,599	90.33%		2.00%
Kidder-Emmons Co.	$0.76	$3.87	$19,820	79.30%		6.00%
Minot Comm/Aging	$0.61	$1.81	$16,862	30.13%		33.11%
Nelson Co. Trans.	$1.22	$8.29	$19,065	74.97%		2.24%
North Central-Devils Lake:						
Benson County	$0.77	$5.53	$8,815	75.94%		0.00%
Cando	$3.12	$4.03	$12,026	86.17%		1.83%
Cavalier County	$2.00	$3.74	$13,537	67.63%		0.00%
Eddy County	$5.13	$7.88	$19,630	92.96%		0.00%
Nutrition United-Rolla	$1.39	$5.59	$10,265	86.95%		0.00%
Senior Meals/Srvs-DL	$0.84	$1.83	$8,708	45.03%		0.00%
Spirit Lake Nation Tribe	$0.48	$1.83	$3,678	43.04%		0.00%
Turtle Mntn Chippewa	$1.44	$4.71	$8,495	101.37%		0.00%
Pembina County	$1.82	$16.12	$19,839	86.33%		6.18%
Sitting Bull College	$0.38	$8.71	$14,953	95.86%		0.00%
Souris Basin Trans	$2.00	$7.64	$20,758	89.16%		3.06%
South Central Trans.	$0.84	$4.65	$10,342	58.70%		22.06%
Southwest Trans	$1.60	$2.77	$17,796	91.55%		4.11%
Three Affiliated Tribes	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!
Tioga Seniors	$0.56	$2.14	$4,912	46.32%		25.81%
Trenton Indian Srvs.	$4.16	$6.85	$17,807	98.80%		0.00%
Walsh Co Trans	$1.22	$6.29	$27,716	73.99%		0.22%
West River Trans	$1.93	$5.26	$15,041	75.94%		6.00%
Wildrose Seniors Trans	$1.13	$9.56	$3,631	93.37%		6.63%
Williston Council Aging	$2.66	$4.92	$8,335	88.36%		0.00%
TOTAL FOR GROUP	**$1.11**	**$4.23**	**$14,040**	**65.08%**		**9.86%**
Jamestown Taxi	$0.28	$1.13	$8,150	20.39%		0.00%
Lake Region Taxi-Devils Lake	$1.81	$3.55	$16,280	52.79%		26.97%
Mercy-Williston Taxi	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!
Bis-Man Transit	$0.87	$3.23	$20,885	49.19%		7.74%
Fargo, City of	$1.70	$2.27	$51,676	54.08%		2.03%
Grand Forks, City of	$1.20	$2.53	$25,528	51.60%		10.00%
Minot, City of	$0.99	$1.25	$11,368	40.28%		11.41%
GRAND TOTALS	**$1.17**	**$2.89**	**$19,617**	**55.93%**		**7.66%**

Appendix G. Profile of Public Transportation Services in North Dakota

Benson County Transportation / North Central Planning Council

Contact Information

Contact:	Norma Jean Neumiller	Title: Director
Address:	P.O. Box 369	Maddock, ND 58348-0369
Phone:	701.438.2550	Fax: 701.438.2523
E-Mail:	njneum@stellarnet.com	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit corporation
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride & fixed-route
Area Served:	Benson County to area service centers
Hours & Days of Service:	Monday - Friday
Base Fare:	$3 – $15
Transit Vehicles:	Buses: 2
	Vans: 2

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$21,653
State:	$12,133
Local:	$ 3,600
Fares:	$ 5,000
Other:	$ 9,000
Total Income:	$51,386

FY 2003 Operating Data

Operating Budget:	$ 53,919
Ridership (One-Way Trips):	
Elderly (60 & Over)	6,151
Disabled (ADA)	8
General Public	35
Other	0
Total	6,194
Annual Vehicle Miles:	37,925
Vehicle Hours of Service:	3,672
Population of Service Area:	6,964
Operating Cost per Trip:	$ 8.70
Operating Cost per Mile:	$ 1.42

Year	2003	2002	2001	2000	1999
One-way Passenger Trips	6,194	6,384	6,849	5,602	5,973
Vehicle Miles	37,925	42,191	31,452	35,959	22,267
Total Operating Costs	$53,919	$55,438	$48,136	$42,180	$30,386

City of Bismarck / Bis-Man Transit Board

Contact Information

Contact:	Robin Werre	Title: Director
Address:	3750 E. Rosser Avenue	Bismarck, ND 58501
Phone:	701.258.6817	Fax: 701.258.6752
E-Mail:	rwerre@bis.midco.net	Web-Site: None

System Snapshot

Corporate Status:	Public
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride & fixed-route
Area Served:	Bismarck, Mandan, & 2 mile area ext.
Hours & Days of Service:	24/7
Base Fare:	Fixed Rt.= $.50 - $1 / Paratransit $1.50 - $2.00
Transit Vehicles:	Buses: 25
	Vans: 3

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 626,070
State:	$ 145,806
Local:	$ 398,000
Fares:	$ 337,666
Other:	$ 62,806
Total Income:	$1,570,348

FY 2003 Operating Data

Operating Budget:	$1,086,938
Ridership (One-Way Trips):	
Elderly (60 & Over)	
Disabled (ADA)	193,764 E&D
General Public	_____
Other	_____
Total	193,764
Annual Vehicle Miles:	715,831
Population of Service Area:	72,250
Operating Cost per Trip:	$5.60
Operating Cost per Mile:	$1.51

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	187,818	187,569	185,721	174,612	181,506
Vehicle Miles	715,831	689,766	679,299	594,416	576,935
Total Operating Costs	$1,086,938	$1,555,691	$1,442,703	$1,370,994	$2,766,742

Cando Senior Citizens / North Central Planning Council

Contact Information

Contact:	Clarice Lien	Title: Project Director
Address:	P.O. Box 522	Cando, ND 58324
Phone:	701.968.4221	Fax: None
E-Mail:	None	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit corporation
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride within the city
Area Served:	City of Cando
Hours & Days of Service:	Monday - Friday
Base Fare:	$.50 one way
Transit Vehicles:	Buses: 2
	Vans: 0

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 8,825
State:	$16,572
Local:	
Fares:	$ 6,400
Other:	$ 2,415
Total Income:	$34,212

FY 2003 Operating Data

Operating Budget:	$29,545
Ridership (One-Way Trips):	
Elderly (60 & Over)	3,688
Disabled (ADA)	1,845
General Public	0
Other	0
Total	5,533
Annual Vehicle Miles:	9,898
Vehicle Hours of Service:	_____
Population of Service Area:	1,342
Operating Cost per Trip:	$ 5.33
Operating Cost per Mile:	$ 2.98

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	5,533				
Vehicle Miles	9,898				
Total Operating Costs	$29,545				

Cavalier County Senior Meals &Services /
North Central Planning Council

Contact Information

Contact:	Beatrice Delvo	Title: Project Director
Address:	211 Eighth Avenue	Langdon, ND 58249-2637
Phone:	701.256.2828	Fax: 701.256.2838
E-Mail:	ccsms@utma.com	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit corporation
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride
Area Served:	Langdon and surrounding area
Hours & Days of Service:	8:15 a.m. to 4 p.m. daily
Base Fare**:**	$ 1.00 one-way ride/varied costs county trips
Transit Vehicles:	Buses: 1
	Vans: 1

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 9,380
State:	$19,543
Local:	$ 4,400
Fares:	$ 4,700
Other:	$11,977
Total Income:	$50,000

FY 2003 Operating Data

Operating Budget:	$ 42,628
Ridership (One-Way Trips):	
Elderly (60 & Over)	4,679
Disabled (ADA)	1,701
General Public	709
Other	0
Total	7,089
Annual Vehicle Miles:	14,628
Population of Service Area:	2,101
Operating Cost per Trip:	$ 6.01
Operating Cost per Mile:	$ 2.92

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	7,089	9,002	8,689	6,917	6,937
Vehicle Miles	14,628	16,798	15,342	16,085	15,361
Total Operating Costs	$42,618	$42,820	$37,337	$30,799	$30,550

City Cab (Devils Lake) / North Central Planning Council

Contact Information

Contact:	Jacqueline R. Senger	Title: Program Coordinator
Address:	PO Box 651	Devils Lake, ND 58301
Phone:	701.662.8131	Fax: 701.662.8132
E-Mail:	jacquencpc@stellarnet.com	Web-Site: None

System Snapshot

Corporate Status:	Private, for profit business
Clientele:	Public, elderly, & disabled
Service Type:	Taxi (privately owned – gov't supported)
Area Served:	Devils Lake and surrounding area
Hours & Days of Service:	8 a.m. – 3 p.m. & 6 – 10 p.m.
Base Fare:	$ 4.50 per ride
Transit Vehicles:	Buses: 0
	Vans: 0
	Cars: 1

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 6,338
State:	$ 3,050
Local:	
Fares:	$ 4,418
Other:	_____
Total Income:	$13,806

FY 2003 Operating Data

Operating Budget:	$ 13,806
Ridership (One-Way Trips):	
Elderly (60 & Over)	_____
Disabled (ADA)	307
General Public	_____
Other	_____
Total:	307
Annual Vehicle Miles:	_____
Population of Service Area:	10,000
Operating Cost per trip:	$ 44.97
Operating Cost per Mile:	$_____

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	1,940				
Vehicle Miles					
Total Operating Costs					

City of Dickinson / Deb's Cab

Contact Information

Contact:	Greg Sund / Deb's Cab	Title: _____
Address:	99 2nd Street E.	Dickinson, ND 58601
Phone:	701.456.7720 / 225.2222	Fax: 701.256.7723
E-Mail:	gsund@state.nd.us	Web-Site: None

System Snapshot

Corporate Status:	Public
Clientele:	Public, elderly, & disabled
Service Type:	Taxi (privately owned – gov't supported)
Area Served:	Dickinson and surrounding area
Hours & Days of Service:	24 / 7
Base Fare:	_____
Transit Vehicles:	Buses: _____
	Vans: _____
	Cars: _____

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$_____
State:	$_____
Local:	$_____
Fares:	$_____
Other:	$_____
Total Income:	$_____

FY 2003 Operating Data

Operating Budget:	$_____
Ridership (One-Way Trips):	
Elderly (60 & Over)	_____
Disabled (ADA)	_____
General Public	_____
Other	_____
Total	8,842
Annual Vehicle Miles:	_____
Vehicle Hours of Service	_____
Population of Service Area:	_____
Operating Cost per Trip:	_____
Operating Cost per Mile:	_____

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips					
Vehicle Miles					
Total Operating Costs					

City of Hazen

Contact Information

Contact:	Corey Leintz	Title: City Auditor
Address:	P.O. Box 717	Hazen, ND 58545-0717
Phone:	701.748.2550	Fax: 701.748.2559
E-Mail:	hazennd@westriv.com	Web-Site: None

System Snapshot

Corporate Status:	Municipal government - incorporated
Clientele:	Elderly, handicapped, & residents
Service Type:	Dial-a-ride
Area Served:	Hazen, North Dakota
Hours & Days of Service:	M-F 7:30 a.m. – 4 p.m.
	Summer: 10 a.m. – 2 p.m.
Base Fare:	$.60 Seniors /$ .75 Riders one-way
Transit Vehicles:	Buses: 2
	Vans:

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 0
State:	$ 12,500
Local:	$ 14,500
Fares:	$ 10,250
Other:	$ 1,000
Total Income:	$ 38,250

FY 2003 Operating Data

Operating Budget:	$32,564
Ridership (One-Way Trips):	
Elderly (60 & Over)	3,080
Disabled (ADA)	2,779
General Public	7,172
Other	0
Total	13,031
Annual Vehicle Miles:	14,942
Vehicle Hours of Service:	
Population of Service Area:	2,457
Operating Cost per Trip:	$ 2.50
Operating Cost per Mile:	$ 2.18

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	13,031	12,283	11,828	10,163	8,892
Vehicle Miles	14,942	16,373	15,620	14,366	15,035
Total Operating Costs	$32,564	$48,252	$80,542	$42,765	$40,077

City of Jamestown / Jamestown Taxi Service

Contact Information

Contact:	Doug Fogderud	Title: _____
Address:	1802 6th Avenue NE	Jamestown, ND 58401
Phone:	701.252.4200	Fax: 701.252.5903
E-Mail:	_____	Web-Site: None

System Snapshot

Corporate Status:	Public
Clientele:	Public, elderly, & disabled
Service Type:	Taxi (privately owned – gov't supported)
Area Served:	Jamestown and surrounding area
Hours & Days of Service:	24 / 7
Base Fare:	_____
Transit Vehicles:	Buses: 0
	Vans: 0
	Cars: 2

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$12,900
State:	$ 6,100
Local:	
Fares:	$55,000
Other:	_____
Total Income:	$74,000

FY 2003 Operating Data

Operating Budget:	$96,314
Ridership (One-Way Trips):	
Elderly (60 & Over)	_____
Disabled (ADA)	_____
General Public	_____
Other	_____
Total	16,459
Annual Vehicle Miles:	69,085
Vehicle Hours of Service:	_____
Population of Service Area:	15,527
Operating Cost per Trip:	$5.81
Operating Cost per Mile:	$1.40

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	16,459	14,412	13,048	9,666	8,493
Vehicle Miles	69,085	61,900	53,914	34,800	48,506
Total Operating Costs	$96,314	$72,394	$62,683	$45,468	$39,578

City of Minot

Contact Information

Contact:	Alan Walter	Title: Public Works Director
Address:	515 Second Avenue SW	Minot, ND 58701
Phone:	701.857.4140	Fax: 701.857.4130
E-Mail:	pworks@web.ci.minot.nd.us	Web-Site:http://web.ci.minot.nd.us

System Snapshot

Corporate Status:	Public
Clientele:	Public, school, elderly, & disabled
Service Type:	Fixed-route
Area Served:	City of Minot
Hours & Days of Service:	6:55 a.m. - 5 p.m.
Base Fare:	$.40 - $.75
Transit Vehicles:	Buses: 14
	Vans: 3

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$164,280
State:	$ 69,000
Local:	$186,915
Fares:	$ 60,000
Other:	0
Total Income:	$480,195

FY 2003 Operating Data

Operating Budget:	$458,852
Ridership (One-Way Trips):	
Elderly (60 & Over)	
Disabled (ADA)	53,744
General Public	5,442
Other (Student)	100,839
Total	165,254
Annual Vehicle Miles:	185,587
Population: of Service Area:	36,567
Operating Cost per Trip:	$ 2.77
Operating Cost per Mile:	$ 2.47

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	165,254	148,257	153,272	157,281	157,251
Vehicle Miles	192,635	198,620	189,453	210,504	149,245
Total Operating Costs	458,852	433,528	435,048	369,033	358,299

Devils Lake Taxi / North Central Planning Council

Contact Information

Contact:	Jacqueline R. Senger	Title: Program Coordinator
Address:	PO Box 651	Devils Lake, ND 58301
Phone:	701.662.8131	Fax: 701.662.8132
E-Mail:	jacquencpc@gondtc.com	Web-Site: None

System Snapshot

Corporate Status:	Private for profit
Clientele:	Public, elderly, & disabled
Service Type:	Taxi (privately owned – gov't supported)
Area Served:	Devils Lake and surrounding area
Hours & Days of Service:	M – F: 6:30 - 8 a.m. & 3 – 8 p.m. Saturday 10 a.m. – 6 p.m. & Sunday 9 a.m. – 4 p.m.
Base Fare:	$4.50
Transit Vehicles:	Buses: 0 Vans: 1 Cars: 0

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$11,302
State:	$ 3,050
Local:	
Fares:	$10,030
Other:	_____
Total Income:	$24,382

FY 2003 Operating Data

Operating Budget:	$ 24,382
Ridership (One-Way Trips):	
Elderly (60 & Over)	_____
Disabled (ADA)	5,741 (1,466 for 4 months)
General Public	_____
Other	_____
Total	5,741
Annual Vehicle Miles:	_____
Vehicle Hours of Service:	_____
Population: of Service Area:	10,000
Operating Cost per Trip:	$ 4.25
Operating Cost per Mile:	$_____

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	5,741				
Vehicle Miles					
Total Operating Costs					

Dickey County Senior Citizens

Contact Information

Contact:	Cheryl Jongerius	Title: Director
Address:	P.O. Box 213	Ellendale, ND 58436-0213
Phone:	701.349.4513	Fax: 701.349.4011
E-Mail:	dcsc213@yahoo.com	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride
Area Served:	Dickey County
Hours & Days of Service:	8 a.m. to 4:30 p.m. to scheduled areas within county
Base Fare:	Donation
Transit Vehicles:	Buses: 1 Vans: 0

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 10,000
State:	$ 20,950
Local:	$ 1,000
Fares:	$ 3,550
Other:	$ 0
Total Income**:**	$ 35,500

FY 2003 Operating Data

Operating Budget:	$34,980
Ridership (One-Way Trips):	
Elderly (60 & Over)	6,991
Disabled (ADA)	320
General Public	69
Other	0
Total	7,380
Annual Vehicle Miles:	21,969
Vehicle Hours of Service:	1,980
Population: of Service Area:	5,757
Operating Cost per Trip:	$ 4.74
Operating Cost per Mile:	$ 1.59

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	7,380	6,539	6,963	6,983	7,381
Vehicle Miles	21,969	20,715	17,568	21,077	20,450
Total Operating Costs	34,980	33,280	41,322	32,526	31,417

Dunn County Council on Aging

Contact Information

Contact:	Margaret Bandle	Title: Chairman- Bookkeeper
Address:	P.O. Box 144	Killdeer, ND 58640-0144
Phone:	701.764.5542	Fax: _____
E-Mail:	None	Web-Site: None

System Snapshot

Corporate Status:	_____
Service Type:	Demand response
Area Served:	Dunn County
Hours & Days of Service:	1 Day / Week – 10 Hours
Base Fare:	$5
Transit Vehicles:	Buses: 1
	Vans: 0

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 0
State:	$ 17,000
Local:	$_____
Fares:	$ 1,500
Other:	$ 0
Total Income**:**	$ 18,500

FY 2003 Operating Data

Operating Budget:	$ 14,194
Ridership (One-Way Trips):	
Elderly (60 & Over)	800
Disabled (ADA)	25
General Public	35
Other	0
Total	860
Annual Vehicle Miles:	9,632
Vehicle Hours of Service:	480
Population: of Service Area:	4,500
Operating Cost per Trip:	$ 16.50
Operating Cost per Mile:	$ 1.47

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	860	386	1,729	1,873	1,612
Vehicle Miles	9,632	8,997	11,373	10,614	9,627
Total Operating Costs	14,194	11,146	12,257	12,335	10,452

Eddy County Transportation / Senior Meals & Services

Contact Information

Contact:	La Mae Bergan	Title: Services Director
Address:	202 4th Ave	Devils Lake, ND 58301
Phone:	701.662.5061	Fax: 701.662.2412
E-Mail:	sms@gondtc.com	Web-Site: None

System Snapshot

Corporate Status:	Private, non profit
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride
Area Served:	New Rockford to area service centers
Hours & Days of Service:	9:00 a.m. to 1:00 p.m. Monday through Friday
Base Fare:	$.50/ one way
Transit Vehicles:	Buses: 1 Vans: 0

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 3,470
State:	$16,390
Local:	
Fares:	
Other:	
Total Income:	$19,860

FY 2003 Operating Data

Operating Budget:	$ 16,421
Ridership (One-Way Trips):	
Elderly (60 & Over)	2,464
Disabled (ADA)	10
General Public	50
Other	0
Total	2,524
Annual Vehicle Miles:	2,633
Vehicle Hours of Service:	895
Population: of Service Area:	1,463
Operating Cost per Trip:	$ 6.51
Operating Cost per Mile:	$ 1.04

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	2,524				
Vehicle Miles	2,633				
Total Operating Costs	16,421				

Emmons County Council on Aging

Contact Information

Contact:	Carol Mock	Title: Project Director
Address:	1955 56th Street SE	Braddock, ND 58524-9210
Phone:	701.332.6768	Fax: None
E-Mail:	None	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly & disabled
Service Type:	Dial-a-ride
Area Served:	Emmons County to area service centers, Including parts of Logan County.
Hours & Days of Service:	4 – 6 trips / month
Base Fare:	$ 5 Donation
Transit Vehicles:	Buses: 2 Vans: 0

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$15,000
State:	$30,000
Local:	
Fares:	$ 7,000
Other:	0
Total Income:	$52,000

FY 2003 Operating Data

Operating Budget:	$ 48,864
Ridership (One-Way Trips):	
Elderly (60 & Over)	432
Disabled (ADA)	some on 20 passenger bus (5 in 7 years)
General Public	2,228
Other	503
Total	3,163
Annual Vehicle Miles:	19,940
Vehicle Hours of Service:	10 to 11 hours a trip
Population: of Service Area:	5000
Operating Cost per Trip:	$ 15.45
Operating Cost per Mile:	$ 2.45

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	3,163	2,442	2,140	2,244	2,042
Vehicle Miles	19,940	18,991	16,925	18,434	16,235
Total Operating Costs	48,864	34,267	33,656	22,638	20,383

Fargo Metro Area Transit (no response)

Contact Information

Contact:	Julie Bommelman	Title: _____
Address:	502 NP Avenue	Fargo, ND 58102
Phone:	701.476.6737	Fax: 701.241.8558
E-Mail:	jbbommelman@ci.fargo.nd.us	
Web-Site:	http://www.ci.fargo.nd.us/Transit/default.htm	

System Snapshot

Corporate Status:	Public
Clientele:	General public
Service Type:	Fixed-route
Area Served:	Cities of Fargo & West Fargo
Hours & Days of Service:	_____
Base Fare:	_____
Transit Vehicles:	Buses: _____
	Vans: _____

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$_____
State:	$_____
Local:	$_____
Fares:	$_____
Other:	$_____
Total Income:	$_____

FY 2003 Operating Data

Operating Budget:	$1,940,611
Ridership (One-Way Trips):	
Elderly (60 & Over)	_____
Disabled (ADA)	_____
General Public	_____
Other	_____
Total	538,885
Annual Vehicle Miles:	772,592
Vehicle Hours of Service:	_____
Population: of Service Area:	90,599
Operating Cost per Trip:	$_____
Operating Cost per Mile:	$_____

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	538,885	475,775	498,425	213,594	480,533
Vehicle Miles	772,592	777,300	639,292	530,184	600,591
Total Operating Costs	$1,940,611	$1,914,543	$2,008,778	$1,331,846	$1,464,751

Fargo Senior Commission (Including West Fargo)

Contact Information

Contact:	Paul Grindeland	Title: Dir. of Transportation
Address:	P.O. Box 2217	Fargo, ND 58108-2217
Phone:	701.293.1440	Fax: 701.241.9639
E-Mail:	pgrindeland@fsc.fargoparks.co	Web-Site: None

System Snapshot

Corporate Status:	Public
Clientele:	Public, elderly, & disabled
Service Type:	Scheduled service in seven-county area to area service centers
Area Served:	Cass, Traill, Steel, Richland, Ransom, Sargent, & rural Grand Forks counties
Hours & Days of Service:	7:40 a.m. to 4:30 p.m. Monday thru Friday
Base Fare:	Donation
Transit Vehicles:	Buses: 2, 14 pass, 24 pass Vans: 8

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$110,000
State:	$135,000
Local:	
Fares:	$ 24,000
Other:	0
Total Income:	$269,000

FY 2003 Operating Data

Operating Budget:	$264,427
Ridership (One-Way Trips):	
Elderly (60 & Over)	43,599
Disabled (ADA)	
General Public	0
Other	0
Total	43,599
Annual Vehicle Miles:	144,057
Vehicle Hours of Service:	
Population: of Service Area:	106,000
Operating Cost per Trip:	$ 6.07
Operating Cost per Mile:	$ 1.84

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	43,599	42,111	40,843	39,577	43,657
Vehicle Miles	144,057	133,739	121,916	120,247	43,357
Total Operating Costs	$264,427	$141,420	$144,185	$147,857	$143,257

Fargo Senior Commission (Cass County)

Contact Information

Contact:	Paul W. Grindeland	Title: Dir. of Transportation
Address:	P.O. Box 2217	Fargo, ND 58108-2217
Phone:	701.293.1440	Fax: 701.241.9639
E-Mail:	pgrindeland@fsc.fargoparks.co	Web-Site: None

System Snapshot

Corporate Status:	Public
Clientele:	General public & senior citizens
Service Type:	Public transportation
Area Served:	Rural Cass County
Hours & Days of Service:	Tuesday & Thurs. 7a.m. – 7 p.m.
Base Fare:	$2
Transit Vehicles:	Buses: 1
	Vans: _____

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$11,300
State:	$ 5,483
Local:	$ 2,500
Fares:	$ 1,384
Other:	$_____
Total Income:	$ 20,667

FY 2003 Operating Data

Operating Budget:	$ 20,534
Ridership (One-Way Trips):	
Elderly (60 & Over)	2,250
Disabled (ADA)	
General Public	55
Other	0
Total	2,305
Annual Vehicle Miles:	20,999
Vehicle Hours of Service:	1,100
Population: of Service Area:	25,000
Operating Cost per Trip:	$ 8.64
Operating Cost per Mile:	$ .95

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	2,305	2,810	2,824	2,557	2,300
Vehicle Miles	20,999	26,485	25,987	24,478	25,813
Total Operating Costs	$19,909	$19,771	$83,904	$15,514	$22,219

Fargo Senior Commission (Ransom County)

Contact Information

Contact:	Paul W. Grindeland	Title: Dir. of Transportation
Address:	P.O. Box 2217	Fargo, ND 58108-2217
Phone:	701.293.1440	Fax: 701.241.9639
E-Mail:	pgrindeland@fsc.fargoparks.co	Web-Site: None

System Snapshot

Corporate Status:	Public
Clientele:	Public, elderly and disabled
Service Type:	Paratransit scheduled service
Area Served:	Ransom County
Hours & Days of Service:	Thursday 7 a.m. – 7 p.m.
Base Fare:	$6 per ride rural areas
Transit Vehicles:	Buses: 1
	Vans: 1

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 9,880
State:	$ 21,153
Local:	$ 2,500
Fares:	$ 2,000
Other:	$ 0
Total Income:	$ 35,533

FY 2003 Operating Data

Operating Budget:	$35,000
Ridership (One-Way Trips):	
Elderly (60 & Over)	980
Disabled (ADA)	
General Public	22
Other	0
Total	1,002
Annual Vehicle Miles:	13,741
Vehicle Hours of Service:	500
Population: of Service Area:	5,890
Operating Cost per Trip:	$ 9.98
Operating Cost per Mile:	$ 2.55

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	1,002	7,000	4,650	2,550	5,100
Vehicle Miles	13,741	22,355	22,001	25,000	28,250
Total Operating Costs	$28,573	$31,868	$31,576	$27,667	$25,192

Fargo Senior Commission (Richland County)

Contact Information

Contact:	Paul W. Grindeland	Title: Dir. of Transportation
Address:	P.O. Box 2217	Fargo ND 58108-2217
Phone:	701.293.1440	Fax: 701.241.9639
E-Mail:	pgrindeland@fsc.fargoparks.co	Web-Site: None

System Snapshot

Corporate Status:	Public
Clientele:	Public, elderly and disabled
Service Type:	Paratransit scheduled service
Area Served:	Richland County
Hours & Days of Service:	M-F 8:00 a.m. – 4:30 p.m.
Base Fare:	$6 for rural rides
Transit Vehicles:	Buses: 3
	Vans: 2

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 6,155
State:	$39,557
Local:	$ 0
Fares:	$ 4,575
Other:	$_____
Total Income:	$ 50,287

FY 2003 Operating Data

Operating Budget:	$42,062
Ridership (One-Way Trips):	
Elderly (60 & Over)	6,370
Disabled (ADA)	
General Public	56
Other	0
Total	6,426
Annual Vehicle Miles:	27,046
Vehicle Hours of Service:	3,800
Population: of Service Area:	17,996
Operating Cost per Trip:	$ 6.55
Operating Cost per Mile:	$ 1.56

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	6,426				
Vehicle Miles	27,046				
Total Operating Costs	$42,062				

Fargo Senior Commission (Sargent County)

Contact Information

Contact:	Paul W. Grindeland	Title: Dir. of Transportation
Address:	P.O. Box 2217	Fargo, ND
Phone:	701.293.1440	Fax: 701.241.9639
E-Mail:	pgrindeland@fsc.fargoparks.co	Web-Site: None

System Snapshot

Corporate Status:	Public
Clientele:	General public
Service Type:	Paratransit scheduled service
Area Served:	Sargent County
Hours & Days of Service:	8 a.m. to 4 p.m. Monday thru Friday
Base Fare:	$6 for rides in rural areas
Transit Vehicles:	Buses: 1
	Vans: 1

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 8,500
State:	$ 18,836
Local:	$ 0
Fares:	$ 3,500
Other:	$_____
Total Income:	$ 30,836

FY 2003 Operating Data

Operating Budget:	$ 31,000
Ridership (One-Way Trips):	
Elderly (60 & Over)	1,000
Disabled (ADA)	
General Public	26
Other	0
Total	1,026
Annual Vehicle Miles:	25,260
Vehicle Hours of Service:	1,100
Population: of Service Area:	4,366
Operating Cost per Trip:	$ 26.50
Operating Cost per Mile:	$ 1.08

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	1,026	1,715	1,682	2,014	1,595
Vehicle Miles	25,260	23,149	26,038	28,234	24,324
Total Operating Costs	$27,185	$31,129	$23,806	$26,792	$19,962

Fargo Senior Commission (Steele & Grand Forks County)

Contact Information

Contact:	Paul W. Grindeland	Title: Dir. of Transportation
Address:	P.O. Box 2217	Fargo , ND 58108-2217
Phone:	701.293.1440	Fax: 701.241.9639
E-Mail:	pgrindeland@fsc.fargoparks.co	Web-Site: None

System Snapshot

Corporate Status:	Public
Clientele:	General public
Service Type:	Paratransit scheduled services
Area Served:	Steele and parts of Nelson, Griggs, Traill, Cass and Grand Forks counties
Hours & Days of Service:	10 days/month 7:00 a.m. -7:00 p.m.
Base Fare:	$6 suggested
Transit Vehicles:	Buses: 1
	Vans: 0

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 33,948
State:	$ 24,144
Local:	$ 1,000
Fares:	$ 5,184
Other:	$_____
Total Income:	$ 31,552

FY 2003 Operating Data

Operating Budget:	$ 32,000
Ridership (One-Way Trips):	
Elderly (60 & Over)	1,800
Disabled (ADA)	
General Public	30
Other	0
Total	1,830
Annual Vehicle Miles:	28,919
Vehicle Hours of Service:	1,320
Population: of Service Area:	2,258
Operating Cost per Trip:	$ 17.49
Operating Cost per Mile:	$ 1.11

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	1,500	1,482	1,516	1,575	1,652
Vehicle Miles	27,922	26,137	26,430	27,417	18,483
Total Operating Costs	$31,884	$29,585	$29,070	$28,185	$26,291

Fargo Senior Commission (Traill County)

Contact Information

Contact:	Paul W. Grindeland	Title: Dir. of Transportation
Address:	P.O. Box 2217	Fargo, ND 58108-2217
Phone:	701.293.1440	Fax: 701.241.9639
E-Mail:	pgrindeland@fsc.fargoparks.co	Web-Site: None

System Snapshot

Corporate Status:	Public
Clientele:	General public
Service Type:	Paratransit scheduled services
Area Served:	Traill County
Hours & Days of Service:	M-F 8:00 a.m. – 4:00 p.m.
Base Fare:	$6 suggested out of county/ $2 in county
Transit Vehicles:	Buses: 1
	Vans: 1

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 7,870
State:	$25,085
Local:	$,500
Fares:	$ 1,500
Other:	$_____
Total Income:	$34,455

FY 2003 Operating Data

Operating Budget:	$34,000
Ridership (One-Way Trips):	
Elderly (60 & Over)	1,246
Disabled (ADA)	
General Public	26
Other	0
Total	1,272
Annual Vehicle Miles:	17,124
Vehicle Hours of Service:	2,000
Population: of Service Area:	8,477
Operating Cost per Trip:	$ 25.70
Operating Cost per Mile:	$ 1.91

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	1,272	1,482	1,816	2,088	1,982
Vehicle Miles	17,124	9,074	4,991	4,767	9,625
Total Operating Costs	$32,687	$31,059	$30,248	$21,337	$13,219

Glen Ullin Senior Transportation (no response)

Contact Information

Contact:	Rose Hagel	Title: _____
Address:	411 South 2nd Street, Apt. A-1	Glen Ullin, ND 58631
Phone:	701.348.3768	Fax: _____
E-Mail:	_____	Web-Site: _____

System Snapshot

Corporate Status: _____
Clientele: _____
Service Type: _____
Area Served: _____
Hours & Days of Service: _____

Base Fare: _____
Transit Vehicles: Buses: _____
Vans: _____

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal: $_____
State: $_____
Local: $_____
Fares: $_____
Other: $_____
Total Income: $_____

FY 2003 Operating Data

Operating Budget: $ 8,039
Ridership (One-Way Trips):
Elderly (60 & Over) _____
Disabled (ADA) _____
General Public _____
Other _____
Total 671
Annual Vehicle Miles: 4,178
Vehicle Hours of Service: _____
Population: of Service Area: _____
Operating Cost per Trip: $ 11.98
Operating Cost per Mile: $ 1.92

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	671	868	1,236	1,530	1,067
Vehicle Miles	4,178	5,145	7,788	5,761	5,923
Total Operating Costs	8,039	6,572	7,280	7,994	8,144

Golden Valley / Billings County Council on Aging

Contact Information

Contact Person:	Gwen Lorenz	Title: Coordinator
Address:	P.O. Box 434	Beach, ND 58621-0434
Phone:	701.872.3836	Fax: 701.872.3836
E-Mail:	coa@midstae.net	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride
Area Served:	Beach & Medora to area service centers
Hours & Days of Service:	Monday through Friday
Base Fare:	$1 - $26 depending on destination
Transit Vehicles:	Buses: 1
	Vans: 1

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 500	
State:	$ 29,159	
Local:	1,542	Donations
Fares:	$ 2,233	
Other:	$ 1,497	Medicaid Fares
Total Income:	$ 34,931	

FY 2003 Operating Data

Operating Budget:	$ 36,599
Ridership (One-Way Trips):	
Elderly (60 & Over)	780
Disabled (ADA)	2
General Public	3
Other	0
Total	785
Annual Vehicle Miles:	24,504
Vehicle Hours of Service:	
Population: of Service Area:	2812
Operating Cost per Trip:	$ 28.00
Operating Cost per Mile:	$ 25.00

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	782	645	686	857	3,020
Vehicle Miles	24,504	20,946	18,644	20,597	16,643
Total Operating Costs	36,599	47,948	39,094	38,403	42,342

Grand Forks Public Transit Dept.

Contact Information

Contac:	Roger Foster	Title: Supt.
Address:	P.O. Box 5200	Grand Forks, ND 58206-5200
Phone:	701.746.2590	Fax: 701.746.2582
E-Mail:	rfoster@grandforksgov.com	
Web-Site:	www.grandforksgov.com/bus	

System Snapshot

Corporate Status:	Public
Clientele:	Public, elderly, & disabled
Service Type:	Fixed-route – paratransit- senior citizens
Area Served:	City of Grand Forks
Hours & Days of Service:	M-F 6 a.m. – 6 p.m./Sat. 10 a.m. - 6 p.m.
Base Fare:	
Transit Vehicles:	Buses: 14
	Vans: 0

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 726,976
State:	$ 104,000
Local:	$ 529,306
Fares:	$ 379,611
Other:	$ 144,839
Total Income:	$1,884,732

FY 2003 Operating Data

Operating Budget:	$1,680,260
Ridership (One-Way Trips):	
Elderly (60 & Over)	52,896
Disabled (ADA)	85,876
General Public	113,136
Other	14,099
Total	266,007
Annual Vehicle Miles:	664,352
Vehicle Hours of Service:	313,920
Population: of Service Area:	50,000
Operating Cost per Trip:	$ 1.75
Operating Cost per Mile:	$ 3.55 Fixed Route Only

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	266,007	266,007	226,034	213,594	214,494
Vehicle Miles	664,352	317,668	317,668	530,184	307,220
Total Operating Costs	$1,680,260	$1,753,998	$1,416,007	$1,331,846	$1,242,351

Handi-Wheels Transportation, Inc.

Contact Information

Contact:	Allan Peterson	Title: _____
Address:	2525 N. Broadway #002	Fargo, ND 58102-1459
Phone:	701.232.3231	Fax: 701.293.9582
E-Mail:	_____	Web-Site: _____

System Snapshot

Corporate Status:	_____
Clientele:	_____
Service Type:	_____
Area Served:	_____
Hours & Days of Service:	_____
Base Fare:	_____
Transit Vehicles:	Buses: _____
	Vans: _____

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$_____
State:	$_____
Local:	$_____
Fares:	$_____
Other:	$_____
Total Income:	$_____

FY 2003 Operating Data

Operating Budget:	$ 55,791
Ridership (One-Way Trips):	
Elderly (60 & Over)	_____
Disabled (ADA)	_____
General Public	_____
Other	_____
Total	8,309
Annual Vehicle Miles:	40,542
Vehicle Hours of Service:	_____
Population: of Service Area:	90,500
Operating Cost per Trip:	$ 6.71
Operating Cost per Mile:	$ 1.38

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	8,309	8,262	9,922	9,472	9,297
Vehicle Miles	40,542	35,240	40,767	37,936	35,442
Total Operating Costs	$55,791	$51,917	$49,786	$103,617	$52,797

James River Senior Citizens Center, Inc.

Contact Information

Contact:	Carol Wright	Title: Executive Director
Address:	P.O. Box 1092	Jamestown, ND 58402-1092
Phone:	701.252.2882	Fax: 701.252.2529
E-Mail:	jrsc@csicable.net	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride with fixed schedule
Area Served:	Jamestown, Harvey, Fessenden, & McClusky to area service centers
Hours & Days of Service:	Daily in Jamestown, Monday through Friday & Sunday morning in Harvey, and weekly to monthly elsewhere
Base Fare:	$ 2.50/ one way ride
Transit Vehicles:	Buses: 8 Vans: 2

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 60,091
State:	$ 74,154
Local:	$ 35,000
Fares:	$133,188
Other:	$ 81,547
Total Income:	$383,980

FY 2003 Operating Data

Operating Budget:	$360,029
Ridership (One-Way Trips):	
Elderly (60 & Over)	_____
Disabled (ADA)	55,010 E&D not tracked separately
General Public	1,411
Other	0
Total	56,421
Annual Vehicle Miles:	156,101
Vehicle Hours of Service:	14,218 scheduled plus excursions
Population: of Service Area:	28,720
Operating Cost per Trip:	$ 6.38
Operating Cost per Mile:	$ 2.31

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	56,421	54,725	53,642	62,099	70,177
Vehicle Miles	156,101	155,288	155,351	152,378	162,062
Total Operating Costs	$360,029	$347,940	$327,741	$296,267	$94,420

Kenmare Wheels and Meals, Inc. / Souris Basin Transportation Board

Contact Information

Contact:	Linda Freeman	Title: Director
Address:	P.O. Box 481	Kenmare, ND 58746
Phone:	701.385.4364	Fax: 701.385.4396
E-Mail:	wandm@restel.net	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride
Area Served:	Within city of Kenmare
Hours & Days of Service:	9 a.m. to 2 p.m. Monday through Friday + Sunday mornings (winter only)
Base Fare:	$ 1 per round trip
Transit Vehicles:	Buses: 1 Vans: 0

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 6,500
State:	$ 9,574
Local:	$ 926
Fares:	$ 1,500
Other:	_____
Total Income:	$18,500

FY 2003 Operating Data

Operating Budget:	$ 18,419
Ridership (One-Way Trips):	
Elderly (60 & Over)	6,793
Disabled (ADA)	312
General Public	208
Other	0
Total	7,313
Annual Vehicle Miles:	2,794
Vehicle Hours of Service:	1,430
Population: of Service Area:	1,200
Operating Cost per Trip:	$ 2.53
Operating Cost per Mile:	$ 6.62

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	7,313	8,740	8,294	9,832	10,317
Vehicle Miles	2,794	2,564	3,211	3,046	3,774
Total Operating Costs	$18,419	$18,438	$20,046	$14,340	$8,256

Kidder / Emmons County Senior Services

Contact Information

Contact:	Pat Randall	Title: Director
Address:	202 1st Avenue NW	Steele, ND 58482
Phone:	701.475.2708	Fax: 701.475.2192
E-Mail:	kess@bektel.com	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Fixed-route to area service centers
Area Served:	Kidder County
Hours & Days of Service:	Daily service to designated cities
Base Fare:	$ 6
Transit Vehicles:	Buses: 1
	Vans: 1

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$26,600
State:	$16,385
Local:	$ 2,100
Fares:	$ 4,500
Other:	$ 738
Total Income:	$50,323

FY 2003 Operating Data

Operating Budget:	$49,985
Ridership (One-Way Trips):	
Elderly (60 & Over)	10,050
Disabled (ADA)	196
General Public	5
Other	0
Total	10,251
Annual Vehicle Miles:	52,266
Vehicle Hours of Service:	_____
Population: of Service Area:	2,753
Operating Cost per Trip:	$ 4.88
Operating Cost per Mile:	$ .97

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	9,296	9,687	10,952	11,208	9,243
Vehicle Miles	51,226	39,559	32,417	29,560	28,621
Total Operating Costs	$58,256	$44,920	$46,039	$42,050	$37,471

Mercy Medical Center / Mercy Rider/ Dickinson Taxi

Contact Information

Contact:	Shirley Tietz	Title: Manager
Address:	1301 15th Avenue West	Williston, ND 58501
Phone:	701.774.7445	Fax: 701.774.7479
E-Mail:	ShirleyTietz@catholichealth.net	
Web-Site:	www.mercy-williston.org	

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Subsidized taxi service
Area Served:	Williston
Hours & Days of Service:	20 hours / day – 7 days / week
Base Fare:	$1 per trip from client Mercy Rider pays taxi $ 4 for car or $8 for lift van
Transit Vehicles:	Buses: 1 Vans: 3

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$22,383
State:	$ 8,547
Local:	
Fares:	$ 1,000
Other:	$10,818
Total Income:	$42,748

FY 2003 Operating Data

Operating Budget:	$42,748
Ridership (One-Way Trips):	
Elderly (60 & Over)	2,539
Disabled (ADA)	5,662
General Public	0
Other	1,416
Total	9,437
Annual Vehicle Miles:	_____
Vehicle Hours of Service:	20 hrs. a day
Population: of Service Area:	12,000
Operating Cost per Trip:	$ 4.53
Operating Cost per Mile:	$_____

Year	2003	2002	2001	2000	1999
One-Way Passenger Trips		7,772	7,222	6,409	8,163
Vehicle Miles		9,093	10,887	8,633	11,795
Total Operating Costs		$36,779	$31,928	$28,169	$30,912

Minot Commission on Aging, Inc.

Contact Information

Contact:	Charlotte Zahn	Title: Exec. Director
Address:	21 First Avenue SE	Minot, ND 58701-3992
Phone:	701.852.0561	Fax: 701.852.0564
E-Mail:	mcoapsc.ndak.net	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Advance reservation dial-a-ride
Area Served:	City of Minot
Hours & Days of Service:	7:30 a.m. - 10 p.m. M-F
	10 a.m. – 10 p.m. Sat.
	8 a.m. – 3 p.m. Sundays
Base Fare:	$1.50
Transit Vehicles:	Buses: 5
	Vans: 1 belongs to the city

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 52,000
State:	$ 37,800
Local:	$ 56,175
Fares:	$ 46,000
Other:	$ 73,720
Total Income:	$265,695

FY 2003 Operating Data

Operating Budget:	$238,114
Ridership (One-Way Trips):	
Elderly (60 & Over)	43,293
Disabled (ADA)	unknown - included in total trips
General Public	876
Other	0
Total	44,169
Annual Vehicle Miles:	126,077
Vehicle Hours of Service:	4,656.5
Population: of Service Area:	35,567
Operating Cost per Trip:	$ 5.39
Operating Cost per Mile:	$ 1.88

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	43,169	40,990	39,934	35,607	34,293
Vehicles Miles	129,138	126,077	118,659	97,828	85,033
Total Operating Costs	$238,114	$247,256	$234,522	$186,936	$174,547

Nelson County Transportation

Contact Information

Contact:	Carol Joy Brandvold	Title: Project Director
Address:	P.O. Box 613	McVille, ND 58254
Phone:	701.322.5557	Fax: 701.322.4477
E-Mail:	_____	Web-Site: _____

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Fixed-route with reservation required
Area Served:	Nelson County to area service centers
Hours & Days of Service:	8 a.m. to 6 p.m. Monday through Friday to designated cities
Base Fare:	$1.50 to $12
Transit Vehicles:	Buses: 1 Vans: 1

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$23,518
State:	$17,847
Local:	$ 8,000
Fares:	$ 5,470
Other:	_____
Total Income:	$54,835

FY 2003 Operating Data

Operating Budget:	$ 50,280
Ridership (One-Way Trips):	
Elderly (60 & Over)	2,753
Disabled (ADA)	285
General Public	1,306
Other	_____
Total	4,344
Annual Vehicle Miles:	31,528
Vehicle Hours of Service:	_____
Population: of Service Area:	3700
Operating Cost per Trip:	$ 11.57
Operating Cost per Mile:	$ 1.59

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	4,344	4,023	4,056	3,370	3,519
Vehicle Miles	31,528	27,150	25,126	25,654	24,977
Total Operating Costs	$50,280	$49,620	$45,397	$80,892	$35,386

New Town Bus Line /
Souris Basin Transportation Board (no response)

Contact Information

Contact:	Marilyn & Wendell Overlie	Title: Owner / Operator
Address:	P.O. Box 939	New Town, ND 58763
Phone:	701.627.3830	Fax: _____
E-Mail:	_____	Web-Site: _____

System Snapshot

Corporate Status:	Private, for profit
Clientele:	Public, elderly, & disabled
Service Type:	Commercial fixed-route bus
Area Served:	Bismarck to Minot
	Minot to Grand Forks
	Minot to New Town
Hours & Days of Service:	Daily with Minot to New Town M-F
Base Fare:	_____
Transit Vehicles:	Buses: 3
	Vans: 3

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$108,500
State:	
Local:	$108,500
Fares:	$ 63,000
Other:	_____
Total Income:	$280,000

FY 2003 Operating Data

Operating Budget:	$_____
Ridership (One-Way Trips):	
Elderly (60 & Over)	_____
Disabled (ADA)	_____
General Public	_____
Other	_____
Total	_____
Annual Vehicle Miles:	_____
Vehicle Hours of Service:	_____
Population: of Service Area:	_____
Operating Cost per Trip:	$_____
Operating Cost per Mile:	$_____

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips		7,352	8,105	9,024	5,591
Vehicle Miles		336,620	354,081	344,087	194,012
Total Operating Costs		$373,347	$346,435	$312,988	$181,860

North Central Planning Council

Contact Information

Contact:	Jacqueline Senger	Title: Transportation Coordinator
Address:	P.O. Box 651	Devils Lake, ND 58301
Phone:	701.662.8131	Fax: 701.662.8132
E-Mail:	ncpc@stellarnet.com	Web-Site: _____

System Snapshot

Corporate Status:	Public
Clientele:	Public, elderly, & disabled
Service Type:	Coordinating agency for area service providers
Area Served:	Benson, Cavalier, Eddy, Ramsey, Rolette, and Towner counties and Spirit Lake and Turtle Mountain Indian Reservations
Hours & Days of Service:	Not Applicable
Route Maps & Schedules:	Not Applicable
Base Fare:	Not Applicable
Transit Vehicles:	Buses: 0 Vans: 0

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$25,087
State:	$ 6,940
Local:	
Fares:	
Other:	$ 8,007
Total Income:	$40,034

FY 2003 Operating Data

Operating Budget:	$_____
Ridership (One-Way Trips):	
Elderly (60 & Over)	_____
Disabled (ADA)	_____
General Public	_____
Other	_____
Total	_____
Annual Vehicle Miles:	_____
Vehicle Hours of Service:	_____
Population: of Service Area:	_____
Operating Cost per Trip:	$_____
Operating Cost per Mile:	$_____

Nutrition & Support Services / Turtle Mountain Band of Chippewa

Contact Information

Contact:	Alfreda Morin	Title: _____
Address:	P.O. Box 900	Belcourt, ND 58316
Phone:	701.477.6609	Fax:
E-Mail:	_____	Web-Site: _____

System Snapshot

Corporate Status:	Indian Tribe
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride
Area Served:	Belcourt & surrounding area
Hours & Days of Service:	_____
Base Fare:	_____
Transit Vehicles:	Buses: 2
	Vans: 1

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$14,950
State:	$12,501
Local:	
Fares:	$ 3,915
Other:	$33,134
Total Income:	$64,500

FY 2003 Operating Data

Operating Budget:	$16,912
Ridership (One-Way Trips):	
Elderly (60 & Over)	_____
Disabled (ADA)	_____
General Public	_____
Other	_____
Total	4,456
Annual Vehicle Miles:	_____
Vehicle Hours of Service:	_____
Population: of Service Area:	_____
Operating Cost per Trip:	$ 3.80
Operating Cost per Mile:	$_____

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	4,456	6,188	2,256	2,031	5,936
Vehicle Miles		24,094	8,967	9,572	9,572
Total Operating Costs	$16,912	$21,372	$8,388	$14,111	$7,304

Nutrition United, Inc. / Rolette County Senior Meals & Services

Contact Information

Contact:	Larry Leonard, Jr.	Title: Director
Address:	P.O. Box 274	Rolla, ND 58367-0274
Phone:	701.477.6421	Fax: 701.477.6422
E-Mail:	nutusms@utma.com	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride
Area Served:	Rolette County
Hours & Days of Service:	8:30 a.m. to 3:30 p.m. M - F
Base Fare:	$1
Transit Vehicles:	Buses: 1
	Vans: 3

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$23,843
State:	$20,483
Local:	
Fares:	$ 3,000
Other:	$ 3,174
Total Income:	$50,500

FY 2003 Operating Data

Operating Budget:	$ 46,620
Ridership (One-Way Trips):	
Elderly (60 & Over)	6,897
Disabled (ADA)	317
General Public	213
Other	
Total	7,427
Annual Vehicle Miles:	28,531
Vehicle Hours of Service:	2,600
Population: of Service Area:	13,674
Operating Cost per Trip:	$ 6.28
Operating Cost per Mile:	$ 1.28

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	7,427	7,178	8,321	7,259	7,233
Vehicle Miles	28,531	24,039	25,910	31,481	25,379
Total Operating Costs	$46,620	$44,421	$49,049	$55,481	$37,250

Pembina County Meals &Transportation

Contact Information

Contact:	Sally Kiliniske	Title: Director
Address:	P.O. Box 9	Drayton, ND 58225
Phone:	701.454.6586	Fax: 701.454.3807
E-Mail:	pcmt@polarcomm.com	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride service within communities on specified days, between cities, and to area service centers
Area Served:	Pembina County
Hours & Days of Service:	Tuesday – Friday; specified days to specified communities
Base Fare:	_____
Transit Vehicles:	Buses: 2 Vans: 0

Funding Sources (Non-Capital Operating Funds)

Federal:	$15,000
State:	$25,249
Local:	
Fares:	$ 3,200
Other:	$ 2,401
Total Income:	$45,850

FY 2003 Operating Data

Operating Budget:	$ 45,274
Ridership (One-Way Trips):	
Elderly (60 & Over)	1,968
Disabled (ADA)	74
General Public	27
Other	_____
Total	2,074
Annual Vehicle Miles:	19,920
Vehicle Hours of Service:	_____
Population: of Service Area:	8,585
Operating Cost per Trip:	$ 21.83
Operating Cost per Mile:	$ 2.27

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	2,074	2,288	2,478	2,591	2,277
Vehicle Miles	19,920	18,959	18,921	19,241	18,982
Total Operating Costs	$45,274	$38,853	$39,840	$35,469	$30,870

Royal Coach Transportation / North Central Planning Council

Contact Information

Contact:	Jacqueline Senger	Title: Program Coordinator
Address:	P.O. Box 651	Devils Lake, ND 58301
Phone:	701.662.8131	Fax: 701.662.8132
E-Mail:	jacquencpc@stellarnet.com	Web-Site: None

System Snapshot

Corporate Status:	Private for profit
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride
Area Served:	Belcourt, Rolla, Dunseith, & Rolette
Hours & Days of Service:	7:30 a.m. - 8 p.m. 7 days a week
Base Fare:	$4 pick-up fee and $1 per mile
Transit Vehicles:	Buses: 0
	Vans: 3
	Cars: 0

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 7,375
State:	
Local:	
Fares:	$ 3,958
Other:	$ 0
Total Income:	$11,333

FY 2003 Operating Data

Operating Budget:	$ 18,120
Ridership (One-Way Trips):	
Elderly (60 & Over)	
Disabled (ADA)	517
General Public	0
Other	0
Total	517
Annual Vehicle Miles:	5,996
Vehicle Hours of Service:	326
Population: of Service Area:	
Operating Cost per Trip:	$ 35.00
Operating Cost per Mile:	$ 3.03

Year	2003	2002	2001	2000	1999
One-Way Passenger Trips	556				
Vehicle Miles					
Total Operating Costs					

Senior Meals and Services, Inc. / North Central Planning Council

Contact Information

Contact:	LaMae Bergan	Title: Services Director
Address:	202 4th Avenue	Devils Lake, ND 58301
Phone:	701.662.5061	Fax: 701.662.2412
E-Mail:	sms@gondtc.com	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride
Area Served:	Devils Lake & surrounding area
Hours & Days of Service:	Monday – Friday 7:30 a.m. – 4:30 p.m.
Base Fare:	$1.75 Elderly, $1.50 Handicap, $3 under 60 years, & 25 cent surcharge on all rides until gas prices drop to $1.75/gallon.
Transit Vehicles:	Buses: 4 Vans: 0

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$21,010
State:	$24,440
Local:	$21,010
Fares:	$30,000
Other:	$ 3,050
Total Income:	$99,510

FY 2003 Operating Data

Operating Budget:	$91,252
Ridership (One-Way Trips):	
Elderly (60 & Over)	12,672
Disabled (ADA)	8,936
General Public	303
Other	0
Total	21,911
Annual Vehicle Miles:	46,344
Vehicle Hours of Service:	2,330
Population: of Service Area:	8,000
Operating Cost per Trip:	$ 4.16
Operating Cost per Mile:	$ 2.12

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	21,911	7,273	7,060	5,558	5,327
Vehicle Miles	46,344	7,500	7,500		
Total Operating Costs	$91,252	$63,188	$54,000	$233,750	$161,364

Souris Basin Transportation Board

Contact Information

Contact:	Rick Thoms	Title: Executive Director
Address:	P.O. Box 2211	Minot, ND 58702
Phone:	701.852.8008	Fax: 701.852.8419
E-Mail:	ndrtap@ndak.net	
Web-Site:	www.sourisbasintransit.com	

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride in-town and intercity within region (reservations required for intercity service)
Area Served:	Bottineau, Burke, Divide, McHenry, Mountrail, Pierce, Renville, and Ward counties
Hours & Days of Service:	Monday through Friday
Base Fare:	_____
Transit Vehicles:	Buses: 10 Vans: 2

Funding Sources (Non-Capital Operating Funds)

Federal:	$169,000
State:	$123,567
Local:	
Fares:	$ 25,500
Other:	$ 27,500
Total Income:	$345,567 (includes New Town Bus)

FY 2003 Operating Data

Operating Budget:	$287,464
Ridership (One-Way Trips):	
Elderly (60 & Over)	27,043
Disabled (ADA)	2,422
General Public	4,248
Other	948
Total	34661
Annual Vehicle Miles:	139,167
Vehicle Hours of Service:	_____
Population: of Service Area:	51,500
Operating Cost per Trip:	$ 9.52
Operating Cost per Mile:	$ 2.28

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	34,661	33,471	34,880	36,333	34,476
Vehicle Miles	139,167	139,151	143,584	142,035	134,692
Total Operating Costs	$287,464	$379,989	$358,735	$346,147	$249,258

South Central Adult Services, Inc.

Contact Information

Contact:	Joan Campbell	Title: Director
Address:	P.O. Box 298	Valley City, ND 58072-0298
Phone:	701.845.4300	Fax: 701.845.4073
E-Mail:	scasc@daktel.com	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride in Valley City & weekly trips from area communities to regional service centers
Area Served:	Barnes, LaMoure, Logan, McIntosh, Griggs, & Foster counties
Hours & Days of Service:	8 a.m. – 5 p.m. Monday –Friday 9 a.m. – 2 p.m. Sat. & Sunday
Base Fare:	Depends on county
Transit Vehicles:	Buses: 0 Vans: 13

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 98,200
State:	$119,000
Local:	$ 26,392
Fares:	$ 41,626
Other:	$ 42,800
Total Income:	$328,018

FY 2003 Operating Data

Operating Budget:	$227,162
Ridership (One-Way Trips):	
Elderly (60 & Over)	19,046
Disabled (ADA)	3,299
General Public	11,617
Other	0
Total	33,962
Annual Vehicle Miles:	178,537
Vehicle Hours of Service:	Varies by County
Population: of Service Area:	28,687
Operating Cost per Trip:	$ 6.69
Operating Cost per Mile:	$ 1.27

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	33,962	32,471	39,506	36,218	35,973
Vehicle Miles	178,537	155,882	157,743	148,891	141,346
Total Operating Costs	$227,162	$215,911	$290,374	$188,053	$181,702

Southwest Transportation Services

Contact Information

Contact:	Donna Schaff	Title: Project Director
Address:	206 10th Avenue NW	Bowman, ND 58623-4482
Phone:	701.523.3241	Fax: 701.523.3860
E-Mail:	swtrans@pop.ctctel.com	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Local dial-a-ride with trips to regional service centers
Area Served:	Bowman, Adams, Hettinger, & Slope counties
Hours & Days of Service:	M-F 8 a.m. - 4 p.m.
Base Fare:	$2 round trip (local)/out-of–town fares based on miles
Transit Vehicles:	Buses: 3 Vans: 2

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 26,000
State:	$ 62,000
Local:	$ 12,500
Fares:	$ 7,500
Other:	$ 8,000
Total Income:	$116,000

FY 2003 Operating Data

Operating Budget:	$101,922
Ridership (One-Way Trips):	
Elderly (60 & Over)	30,759
Disabled (ADA)	2,983
General Public	1,008
Other	0
Total	34,760
Annual Vehicle Miles:	64,661
Vehicle Hours of Service:	2,300
Population: of Service Area:	9,500
Operating Cost per Trip:	$ 2.93
Operating Cost per Mile:	$ 1.58

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	34,760	32,556	30,700	37,768	40,980
Vehicle Miles	64,661	77,482	78,000	83,081	85,568
Total Operating Costs	$101,922	$156,764	$92,142	$148,229	$87,327

Spirit Lake Tribe Senior Services Program /
North Central Planning Council

Contact Information

Contact:	Myrna Green	Title: Director
Address:	P.O. Box 359	Fort Totten, ND 58335
Phone:	701.766-1211	Fax: 701.766.1711
E-Mail:	_____	Web-Site: _____

System Snapshot

Corporate Status:	Indian Tribe
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride
Area Served:	Ft. Totten & surrounding area
Hours & Days of Service:	_____
Base Fare:	Demand response - no schedule
Transit Vehicles:	Buses: 5
	Vans: 1

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$28,965
State:	$10,239
Local:	
Fares:	
Other:	$ 8,796
Total Income:	$48,000

FY 2003 Operating Data

Operating Budget:	$18,272
Ridership (One-Way Trips):	
Elderly (60 & Over)	3,746
Disabled (ADA)	20
General Public	100
Other	0
Total	3,669
Annual Vehicle Miles:	42,017
Vehicle Hours of Service:	2,902
Population: of Service Area:	200
Operating Cost per Trip:	$ 4.98
Operating Cost per Mile:	$ 0.44

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	3,669	6,021	6,413	2,667	2,790
Vehicle Miles	42,017	39,473	34,209	32,850	27,684
Total Operating Costs	$18,272	$40,630	$41,337	$39,570	$36,902

Standing Rock Public Transportation Program / Sitting Bull College

Contact Information

Contact:	Pam Ternes	Title: Director
Address:	1341 92nd Street	Ft. Yates, ND 58538
Phone:	701.854.3861 Ext. 233	Fax: 701.854.3403
E-Mail:	pamelat@sbci.edu	Web-Site: www.sittingbull.edu

System Snapshot

Corporate Status:	Indian Tribe
Clientele:	Public, elderly, & disabled
Service Type:	Fixed-route & dial-a-ride
Area Served:	Standing Rock Indian Reservation / Sioux County in North Dakota
Hours & Days of Service:	Daily
Base Fare:	$2.50 one way
Transit Vehicles:	Buses: 4 Vans: 2

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$142,000
State:	$ 18,500
Local:	
Fares:	$ 24,000
Other:	$ 72,000
Total Income:	$256,500

FY 2003 Operating Data

Operating Budget:	$257,790 (ND, SD and Fares)
Ridership (One-Way Trips):	
Elderly (60 & Over)	2
Disabled (ADA)	60
General Public	5,366
Other	0
Total	5,428
Annual Vehicle Miles:	66,903
Vehicle Hours of Service:	N/A
Population: of Service Area:	8,000 (73% Native American)
Operating Cost per Trip:	$ 47.50
Operating Cost per Mile:	$ 3.86

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	3,115	5,248	7,309	6,416	4,935
Vehicle Miles	66,903	147,103	179,427	104,271	69,320
Total Operating Costs	$89,356	$83,965	$80,136	$69,620	$50,230

Stark County Council on Aging / Elder Care

Contact Information

Contact:	Midge Kuntz	Title: Executive Director
Address:	P.O. Box 629	Dickinson, ND 58602-0629
Phone:	701.456.1818	Fax: 701.456.1820
E-Mail:	eldercare@ndsupernet.com	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Local dial-a-ride with service to regional service centers
Area Served:	Stark County
Hours & Days of Service:	7:30 a.m. to 5:30 p.m. M-F After hours thru local taxi operator
Base Fare:	$ 1.75 one-way trip in city limits
Transit Vehicles:	Buses: 5 Vans: 1

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 70,000
State:	$ 48,000
Local:	$ 22,525
Fares:	$ 32,000
Other:	$ 59.200
Total Income:	$252,200

FY 2003 Operating Data

Operating Budget:	$243,469
Ridership (One-Way Trips):	
Elderly (60 & Over)	31,714
Disabled (ADA)	11,233
General Public	213
Other	-0-
Total	43,160
Annual Vehicle Miles:	96,878
Vehicle Hours of Service:	13,468
Population: of Service Area:	22,636
Operating Cost per Trip:	$ 5.64
Operating Cost per Mile:	$ 2.51 (cab contract miles are not included, so this number is distorted)

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	43,160	43,026	41,354	42,768	42,582
Vehicle Miles	96,878	100,595	90,020	81,655	75,380
Total Operating Costs	$243,469	$228,533	$226,553	$213,767	$179,996

Three Affiliated Tribes Aging Services (no response)

Contact Information

Contact:	Clyde Bearstail	Title: _____
Address:	404 Frontage Road	New Town, ND 58763
Phone:	701.627.4547	Fax: 701.627.3805
E-Mail:	_____	Web-Site: _____

System Snapshot

Corporate Status: _____
Clientele: _____
Service Type: _____
Area Served: _____
Hours & Days of Service: _____
Base Fare: _____
Transit Vehicles: Buses: _____
Vans: _____

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal: $_____
State: $_____
Local: $_____
Fares: $_____
Other: $_____
Total Income: $_____

FY 2003 Operating Data

Operating Budget: $_____
Ridership (One-Way Trips):
Elderly (60 & Over) _____
Disabled (ADA) _____
General Public _____
Other _____
Total _____
Annual Vehicle Miles: _____
Vehicle Hours of Service: _____
Population: of Service Area: _____
Operating Cost per Trip: $_____
Operating Cost per Mile: $_____

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips		0	702		
Vehicle Miles		0	6,000		
Total Operating Costs		0	13,868		

Tioga Senior Citizens Club

Contact Information

Contact:	Bonnie Jean Barton	Title: Treasurer
Address:	P.O. Box 153	Tioga, ND 58852-0153
Phone:	701.664.3425	Fax: None
E-Mail:	None	Web-Site: None

System Snapshot

Corporate Status:	Non-profit 501 (C) (3)
Clientele:	Elderly, disabled & general public
Service Type:	Dial-a-ride / local & out of town
Area Served:	Tioga Area - Stanley, Williston & Minot
Hours & Days of Service:	Local: Tues. & Fri. 10 a.m. – 3 p.m. Stanley each Thursday Williston: 2nd & 4th Wed. of every month Minot: 3rd Wed. of every month
Base Fare:	Local: 50 cents, Stanley $3, Williston $5, Minot $8
Transit Vehicles:	Buses: 1 Vans: 0

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$_____
State:	$ 5,208
Local:	$_____
Fares:	$ 2,800
Other:	$ 3,000
Total Income:	$11,008

FY 2003 Operating Data

Operating Budget:	$11,819
Ridership (One-Way Trips):	
Elderly (60 & Over)	1,591
Disabled (ADA)	550
General Public	320
Other:	1,242 (Home delivered meals)
Total	2,461
Annual Vehicle Miles:	8,972
Vehicle Hours of Service:	731
Population: of Service Area:	1500
Operating Cost per Trip:	$ 4.80
Operating Cost per Mile:	$ 1.32

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	2,461	1,416	1,826	1,399	888
Vehicle Miles	8,972	4,955	6,894	5,836	2,499
Total Operating Costs	$11,819	$6,373	$7,483	$3,909	$2,625

Trenton Indian Service Area / Aging Programs

Contact Information

Contact:	Shannon Moran	Title: Chr./Aging Prog. Coord.
Address:	P.O. Box 210	Trenton, ND 58853-0210
Phone:	701.774.0303	Fax: 701.774.3953
E-Mail:	chr@dia.net	Web-Site: None

System Snapshot

Corporate Status:	Indian Tribe
Clientele:	Public, elderly, & disabled
Service Type:	Fixed-route & after hours dial-a-ride
Area Served:	Trenton Indian Service Area / Divide, Williams, & McKenzie counties in North Dakota
Hours & Days of Service:	8 a.m. to 4:30 p.m.
Base Fare:	$2
Transit Vehicles:	Buses: 2 Vans: 6

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 46,485
State:	$ 56,216
Local:	$ 500
Other:	$_____
Total Income:	$103,201

FY 2003 Operating Data

Operating Budget:	$ 57,866
Ridership (One-Way Trips):	
Elderly (60 & Over)	7,200
Disabled (ADA)	_____
General Public	_____
Other	_____
Total	7,200
Annual Vehicle Miles:	8,503
Vehicle Hours of Service:	_____
Population: of Service Area:	_____
Operating Cost per Trip:	$ 8.03
Operating Cost per Mile:	$ 6.80

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	7,200	8,477	7,310	6,286	5,863
Vehicle Miles	8,503	7,860	8,132	9,179	7,701
Total Operating Costs	$57,866	$94,083	$51,126	$40,759	$31,422

Walsh County Transportation Program

Contact Information

Contact:	Pam Landsem	Title: Director
Address:	P.O. Box 620	Park River, ND 58270-0620
Phone:	701.284.7980	Fax: 701.284.7955
E-Mail:	l1@polarcomm.com	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Fixed-route, door-to-door
Area Served:	Walsh County with service to regional service centers
Hours & Days of Service:	Tues. – Friday 7 a.m. – 7 p.m.
Base Fare:	Suggested fares - variable
Transit Vehicles:	Buses: 2 Vans: 0

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$24,400
State:	$31,031
Local:	$13,669
Fares:	$11,000
Other:	0
Total Income:	$80,100

FY 2003 Operating Data

Operating Budget:	$69,614
Ridership (One-Way Trips):	
Elderly (60 & Over)	6,103
Disabled (ADA)	
General Public	960
Other	0
Total	7,063
Annual Vehicle Miles:	47,108
Vehicle Hours of Service:	_____
Population: of Service Area:	8,000
Operating Cost per Trip:	$ 9.86
Operating Cost per Mile:	$ 1.48

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	7,063	6,798	5,683	3,377	1,842
Vehicle Miles	47,108	37,087	38,745	40,549	29,816
Total Operating Costs	$69,614	$60,410	$71,331	$68,338	$33,391

West River Transportation Council

Contact Information

Contact:	Carol Anderson	Title: Director
Address:	3750 E. Rosser Avenue	Bismarck, ND 58501-3380
Phone:	701.224.1876	Fax: 701.223-2572
E-Mail:	westriver@midconetworkk.net	
Web-Site:	None	

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Local dial-a-ride with scheduled service to regional service centers
Area Served:	Mercer, Oliver, Morton, McLean, Grant and rural Burleigh counties
Hours & Days of Service:	Monday – Friday
Base Fare:	vary from $.50 - $10 round trip
Transit Vehicles:	Buses: 11
	Vans: 0

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$144,088
State:	$ 85,000
Local:	$ 28,000
Fares:	$ 38,000
Other:	$ 1,000
Total Income:	$296,088

FY 2003 Operating Data

Operating Budget:	$262,610
Ridership (One-Way Trips):	
Elderly (60 & Over)	33,000
Disabled (ADA)	3,650
General Public	4,500
Other	1,000
Total	42,510
Annual Vehicle Miles:	105,942
Vehicle Hours of Service:	12,448
Population: of Service Area:	20,800
Operating Cost per Trip:	$ 6.18
Operating Cost per Mile:	$ 2.48

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	42,510	45,500	55,135	47,787	49,481
Vehicle Miles	105,942	110,000	119,513	105,583	110,082
Total Operating Costs	$262,610	$359,808	$430,541	$270,939	$228,517

Wildrose Senior Transportation

Contact Information

Contact:	Ruth Stefonowicz	Title: Manager
Address:	P.O. Box 636	Wildrose, ND 58795-0636
Phone:	701.539.2430	Fax: _____
E-Mail:	stefonow@nccray.com	Web-Site: None

System Snapshot

Corporate Status:	_____
Clientele:	Senior & other Wildrose Citizens
Service Type:	Demand-response
Area Served:	Wildrose & surrounding area
Hours & Days of Service:	No set schedule
Base Fare:	_____
Transit Vehicles:	Buses: 1 small bus
	Vans: 0

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$ 0
State:	$4,585
Local:	$_____
Fares:	$_____
Other:	$_____
Total Income:	$4,585

FY 2003 Operating Data

Operating Budget:	$3,563
Ridership (One-Way Trips):	
Elderly (60 & Over)	356
Disabled (ADA)	
General Public	20
Other	0
Total	376
Annual Vehicle Miles:	3,214
Vehicle Hours of Service:	Unknown
Population: of Service Area:	200
Operating Cost per Trip:	$ 9.48
Operating Cost per Mile:	$ 1.11

Year	**2003**	**2002**	**2001**	**2000**	**1999**
One-Way Passenger Trips	318	114	124	196	230
Vehicle Miles	2,853	2,130	2,182	1,755	1,580
Total Operating Costs	$3,563	$7,720	$2,289	$2,398	$1,650

Williston Council for the Aging

Contact Information

Contact:	Jerry Engel	Title: Director
Address:	18 Main Street	Williston, ND 58801
Phone:	701.577.6751	Fax: _____
E-Mail:	seniors60@yahoo.com	Web-Site: None

System Snapshot

Corporate Status:	Private, nonprofit
Clientele:	Public, elderly, & disabled
Service Type:	Dial-a-ride with scheduled trips to regional service centers
Area Served:	Williams, McKenzie, & Divide counties (Cities of Williston, Watford City, Arnegard, Alexander, Crosby, & Noonan)
Hours & Days of Service:	Williston – 8 a.m. – 4:30 p.m. M-F Watford City 9 a.m. – 4 p.m. M-F Crosby - M & Th p.m., Tues. a.m., Friday a.m. & p.m.
Base Fare:	Under 60 $1.50, over 60 donation $1
Transit Vehicles:	Buses: 3 Vans: 1 Cars: 3

Projected FY 2004 Funding Sources (Operating Funds Only)

Federal:	$33,000
State:	$32,000
Local:	$ 1,235
Fares:	$ 8,280
Other:	$ 6,106
Total Income:	$82,461

FY 2003 Operating Data

Operating Budget:	$42,141
Ridership (One-Way Trips):	
Elderly (60 & Over)	_____
Disabled (ADA)	_____
General Public	_____
Other	_____
Total	9,437
Annual Vehicle Miles:	11,560
Vehicle Hours of Service:	_____
Population: of Service Area:	19,750
Operating Cost per Trip:	$ 4.47
Operating Cost per Mile:	$ 3.65

Year	2003	2002	2001	2000	1999
One-Way Passenger Trips	9,437	12,942	14,193	13,693	12,435
Vehicle Miles	11,560	24,064	24,341	25,646	25,780
Total Operating Costs	$42,141	$73,570	$75,159	$65,516	$68,351

Appendix H. Medicaid Transportation Services (Non-Individual & Ambulance)

Public & Private Non-Profit
Medicaid Transportation Service Providers

Service Provider	City / Base of Operations
1. Golden Valley / Billings County Council on Aging	Beach
2. Royal Coach Taxi	Belcourt
3. AAA World Wide Travel	Bismarck
4. Bis-Man Transit	Bismarck
5. Greyhound Bus Line	Bismarck
6. Satrom Travel and Tour	Bismarck
7. Taxi 9000	Bismarck
8. West River Transportation	Bismarck
9. Southwest Senior Services	Bowman
10. Champeau Travel	Devils Lake
11. Chet's Taxi	Devils Lake
12. Senior Meals and Services	Devils Lake
13. All American International	Dickinson
14. Elder Care	Dickinson
15. IGO For U Errand Service	Dickinson
16. Queen City Cab	Dickinson
17. Care A Van	Fargo
18. Doyle Yellow Checker Cab	Fargo
19. Greyhound Lines, Inc.	Fargo
20. Handi-Wheels Transportation	Fargo
21. Ready Wheels	Fargo
22. Travel Travel	Fargo
23. Carefree Travel	Grand Forks
24. Grand Forks County Treasurer	Grand Forks
25. Grand Forks Taxi	Grand Forks
26. Nodak Radio Cab Company	Grand Forks
27. Stengl Johnson Cruise & Travel	Grand Forks
28. James River Senior Center	Jamestown
29. Globe International Travel	Jamestown
30. Dakota Estates Retirement	Lidgerwood
31. AAA Travel	Minot
32. AAA World Wide Travel	Minot
33. International Travel Agency	Minot
34. Minot Bus Depot	Minot
35. Minot City Cab	Minot
36. Satrom Travel & Tour	Minot
37. Souris Basin Transportation Service	Minot
38. Taxi 9000	Minot
39. Trinity Hospital	Minot
40. Trinity Medical Center	Minot
41. New Town Bus	New Town

42. Three Affiliated Tribes	New Town
43. Walsh County Transportation	Park River
44. Grandy Travel & Cruise	St. Thomas
45. Twin Town Taxi	Wahpeton
46. Volunteer Caregiver	Wahpeton
47. Daryles Destinations	Williston
48. Health Ride Van LLC	Detroit Lakes, MN
49. Aberdeen Transfer Service	Aberdeen, SD
50. Northwest Specialized Transportation	Crookston, MN

(Source: E-mail from Barbara Gaardner, North Dakota Department of Human Services, 9/9/04)

Medicaid Transportation Service Providers

Ambulance Services

	Service Provider	City / Base of Operation
1.	Ashley Ambulance	Ashley
2.	Community Ambulance Service	Beach
3.	Quentin N. Burdick Health Center	Belcourt
4.	Belfield Ambulance Service	Belfield
5.	Berthold Ambulance Service	Berthold
6.	MedCenter One Aircare	Bismarck
7.	Bottineau Ambulance Service	Bottineau
8.	Bowbells Ambulance Service	Bowbells
9.	Bowdon Volunteer Ambulance Service	Bowdon
10.	Southwest Healthcare Service	Bowman
11.	Towner County Ambulance	Cando
12.	Carpio Ambulance Service	Carpio
13.	Carrington Health Center	Carrington
14.	Carson Ambulance Service	Carson
15.	Cavalier Ambulance Service	Cavalier
16.	Oliver County Ambulance	Center
17.	Cooperstown Ambulance Service	Cooperstown
18.	Divide County Ambulance	Crosby
19.	Lake Region Ambulance Service	Devils Lake
20.	Dickinson Area Ambulance	Dickinson
21.	Edgeley Community Ambulance	Edgeley
22.	Ellendale Community Ambulance	Ellendale
23.	FM Ambulance Service, Inc.	Fargo
24.	Meritcare Hospital Ambulance	Fargo
25.	Fargo Air Medical Ambulance	Fargo
26.	Fessenden Ambulance Service	Fessenden
27.	City of Finley	Finley
28.	Flasher Fire Protection	Flasher
29.	Fordville Ambulance	Fordville
30.	Sargent County Ambulance	Forman
31.	Sprit Lake EMS	Fort Totten
32.	Standing Rock Ambulance	Fort Yates
33.	Gackle Ambulance Service	Gackle
34.	Garrison Ambulance District	Garrison
35.	Glen Ullin Ambulance Service	Glen Ullin
36.	Valley Ambulance and Rescue	Grafton
37.	Altur health System Ambulance	Grand Forks
38.	Altru Hospital	Grand Forks
39.	Halliday Rural Fire Department	Halliday
40.	Hankinson Ambulance Service	Hankinson
41.	Harvey Ambulance Service	Harvey
42.	Mercer County Ambulance Service	Hazen
43.	Hebron Ambulance Service	Hebron
44.	West River Regional Medical	Hettinger
45.	Hillsboro Medical Center	Hillsboro
46.	Hope Ambulance	Hope

47.	Hunter Ambulance Service	Hunter
48.	Jamestown Ambulance, Inc.	Jamestown
49.	Jamestown Area Ambulance	Jamestown
50.	Kenmare Ambulance	Kenmare
51.	Killdeer Area Ambulance Service	Killdeer
52.	Kindred Area Ambulance Service	Kindred
53.	Kulm Ambulance Corps, Inc.	Kulm
54.	Lakota Ambulance Service	Lakota
55.	Community volunteer Ambulance	Lamoure
56.	Cavalier County Memorial	Langdon
57.	Lansford Ambulance Service	Lansford
58.	Larimore Emergency Services	Larimore
59.	Leeds Ambulance Service	Leeds
60.	Lidgerwood Community Ambulance	Lidgerwood
61.	Linton Hospital Ambulance	Linton
62.	First Medic Ambulance Service	Lisbon
63.	Maddock Ambulance Service	Maddock
64.	Ryder-Makoti Ambulance	Makoti
65.	Bismarck Air Medical LLC	Mandan
66.	Metro Area Ambulance Service	Mandan
67.	McClusky Rural Ambulance	McClusky
68.	McHenry Ambulance Service	McHenry
69.	McVille Ambulance Service	McVille
70.	Medina Ambulance Services	Medina
71.	Michigan Area Ambulance	Michigan
72.	Sargent County Ambulance	Milnor
73.	Minnewaukan Ambulance Service	Minnewaukan
74.	Trinity Hospital	Minot
75.	Community Ambulance Service	Minot
76.	Mohall Ambulance Service	Mohall
77.	Napoleon Ambulance Service	Napoleon
78.	New Leipzig Ambulance Service	New Leipzig
79.	Community Ambulance Service	New Rockford
80.	City of New Salem Ambulance	New Salem
81.	New Town Ambulance Service	New Town
82.	Northwood Deaconess Health	Northwood
83.	Oakes volunteer Ambulance	Oakes
84.	Page Ambulance Service	Page
85.	Park River Volunteer Ambulance	Park River
86.	Parshall Ambulance Service	Parshall
87.	Portal Ambulance	Portal
88.	Powers Lake Ambulance	Powers Lake
89.	Ray Community Ambulance	Ray
90.	Richardton Ambulance Service	Richardton
91.	Riverdale Ambulance	Riverdale
92.	Rock Lake Ambulance Service	Rock Lake
93.	Community Ambulance Service	Rolla
94.	Rolette Ambulance Service	Rolla
95.	Rugby Emergency Ambulance	Rugby
96.	Heart of American Medical Center	Rugby
97.	Stanley Ambulance Service	Stanley
98.	Kidder County Ambulance Service	Steele

99.	Tioga Ambulance Service	Tioga
100.	Towner Fire Ambulance & Rescue	Towner
101.	Turtle Lake Ambulance Service	Turtle Lake
102.	Underwood Ambulance Service	Underwood
103.	Upham Ambulance	Upham
104.	Barnes County Ambulance	Valley City
105.	Velva Ambulance Service	Velva
106.	Walhalla Ambulance	Walhalla
107.	Washburn Ambulance Service	Washburn
108.	McKenzie County Ambulance	Watford City
109.	Westhope ambulance Service	Westhope
110.	City of Williston ambulance	Williston
111.	Servair West, Inc.	Williston
112.	Willow City Ambulance Service	Willow City
113.	Wilton Rural Ambulance	Wilton
114.	Wing Rural Ambulance	Wing
115.	Wishek ALS Ambulance Service	Wishek
116.	Wyndmere-Barney Ambulance	Wyndmere
117.	Avera St. Lukes Ambulance	Aberdeen, SD
118.	Aberdeen Advanced Care Ambulance	Aberdeen, SD
119.	DND Aberdeen Ambulance Service	Aberdeen, SD
120.	Fallon County Ambulance	Baker, MT
121.	Ambulance Service, Inc.	Breckenridge, MN
122.	Ringdahl Ambulances, Inc.	Fergus Falls, MN
123.	Mobridge Regional Hospital	Mobridge, SD
124.	Barnesville Ambulance	Moorhead, MN
125.	Sidney Health Center	Sidney, MT
126.	Wheaton Ambulance Service	Wheaton, MN

(Source: E-mail from Barbara Gaardner, North Dakota Department of Human Services, 9/9/04)

Appendix I. Car Rental Agencies

City	County / Company Information
Bismarck / Mandan	Burleigh & Morton Counties
	Avis Rent-A-Car Phone: 701-255-0707 800-331-1212
	Enterprise Rent-A-Car Phone: 701-258-2636 701-663-2809 800-736-8222
	Hertz Car Rental Phone: 701-223-3977 800-654-3131
	Nickel & Dime Car Rental Phone: 701-663-7000
Devils Lake	Ramsey County
	Devils Lake Chrysler Center Phone: 701-662-2124
	Markeplace Motors Phone: 701-622-7571 800-450-4663
	Riggin Motors, Inc. Phone: 701-662-5346
	U-Save Auto Rental Phone: 701-662-1144 800-450-4663

Dickinson Stark County

Budget Car Rental
Phone: 701-225-2838

Dan Porter Motors, Inc.
Phone: 701-227-1272
800-626-3231

Fargo / West Fargo Cass County

AAA Auto Rental
Phone: 701-237-6569

Adventure RV Sales / Rental
Phone: 701-277-1165

Avis Rent-A-Car
Phone: 701-241-1580

Budget Car and Truck Rental
Phone: 701-241-1575

Enterprise Rent-A-Car
Phone: 701-239-8023
701-277-8349
800-325-8007

Ford Rent-A-Car System
Phone: 701-282-2350

Generic Rent-A-Car
Phone: 701-232-2600

Hertz Rent-A-Car
Phone: 701-241-1533
800-654-3131

National Car Rental
Phone: 701-241-1576
800-227-7368

Norwegian Rent-A-Car
Phone: 701-282-0962

Grand Forks Grand Forks County

Avis Rent-A-Car
Phone: 701-775-0688
800-831-2847

Econo Rent-A-Car
Phone: 701-775-2317

Enterprise Rent-A-Car
Phone: 701-775-3977
800-325-8007

Hertz Rent-A-Car
Phone: 701-746-6426
800-854-3131

National Car Rental
Phone: 701-746-1375
800-227-7368

Price King Rent-A-Car
Phone: 701-775-2509
800-570-3754

Rent Rite
Phone: 701-775-2509

Grafton Walsh County

Heritage Ford Mercury
Phone: 701-352-2992

Jamestown Stutsman County

Avis Rent-A-Car
Phone: 701-252-2255

Minot	Ward County
	Avis Rent-A-Car Phone: 701-838-7665
	Enterprise Phone: 701-838-3800 800-325-8007
	Hertz Rent-A-Car Phone: 701-852-0104
	National Car Rental Phone: 701-852-5115 800-227-7368
Valley City	Barnes County
	Stoudt-Ross Ford, Inc. Phone: 701-845-1671 800-599-3792
Williston	Williams County
	Avis Rent-A-Car Phone: 701-577-7151 800-831-2847
	Dakota Car Rentals Phone: 701-572-2883 701-770-1245

Appendix J. Charter Bus Services

City	County / Company Information
Bismarck / Mandan	Burleigh & Morton Counties
	Harlow's Bus Sales and Service, Inc. Phone: 701-224-1767 800-450-1767
Dickinson	Stark County
	Dakota Bus Service Phone: 701-227-4366
Fargo / West Fargo	Cass County
	Red River Trails, Inc. Phone: 218-236-0300
	Richards Transportation Service, Inc. Phone: 218-233-3404
	Schuck Bus Service Phone: 218-233-1402
	Valley Bus Company Phone: 701-235-5912
Grand Forks	Grand Forks County
	Triangle Transportation Company, Inc. Phone: 218-773-2631
Jamestown	Stutsman County
	Nodak Coaches & Tours, Inc. Phone: 800-626-2599

Minot	Ward County Northland Bus Service Phone: 701-362-7793
Rugby	Pierce County Hartley's School Buses Phone: 701-776-5746

Appendix K. Air Taxi Services in North Dakota

Bismarck / Mandan — Burleigh & Morton Counties

Executive Air Taxi Corp.
Phone: 701-258-5024
800-932-8924

Devils Lake — Ramsey County

Foss-Meier, Inc.
Phone: 701-662-3221

Dickinson — Stark County

Dickinson Air Service
Phone: 701-483-4221

Grand Forks — Grand Forks County

Dakota Jet, LLP
Phone: 701-792-3530

GFK Flight Support
Phone: 701-772-5504

Fargo — Cass County

Fargo Jet Center, Inc.
Phone: 800-770-0538

Kinert Aviation, Inc.
Phone: 701-428-3352

Jamestown — Stutsman County

Summit Aviation, Inc.
Phone: 701-252-0224

Minot Ward County

Don Bessette Aviation
Phone: 701-852-6094

Williston Williams County

Servair West, Inc.
Phone: 701-577-3773