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Enhancing Passenger Mobility Services in North Dakota through Increased Coordination

**Prepared for
North Dakota Department of Transportation
Public Transportation Office**

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ABSTRACT

North Dakota's public and human service transportation services evolved along the same program-specific approaches as did those in many other states. Individual human service agencies funded and/or operated transportation programs to support their basic missions. In addition, in recent years, federal and state funding has led to the inception or expansion of public transit services in many areas of the state

Transportation coordination at the state funding level or at the local operations level requires extensive personal interaction and negotiation to work out the best service plan for all organizations funding, using, or providing service. The Small Urban and Rural Transit Center (SURTC) conducted a study on coordination of North Dakota transportation services. The study process included data collection, a literature review and intensive discussion and collaboration between organizations and individuals.

The study was guided by an advisory committee that included representatives from state funding and program agencies, local human services, and transportation providers. The study also involved funders, providers, and users of the transportation services by holding focus groups meetings in the eight economic planning regions of the state during the first six months of 2004.

Based on results of the regional meetings, data collection, review of the literature, and the survey of state practices, the SURTC team developed a range of alternative policies that could increase transportation coordination. These options were reviewed and refined by the advisory committee; then the SURTC team developed detailed descriptions and assessed the benefits and costs of each option.

The following options are presented in order of impact, effectiveness, and implementation cost.

1. Issue a policy directive from Governor to each state agency that funds transportation encouraging the agency and its grantees to coordinate transportation programs locally.
2. Establish a regional ride-matching program and ride brokerage via Internet-based information sharing.
3. Require that all state-funded transit providers be part of a regional coordination organization for management and funding purposes.
4. Establish and fund transportation coordinators in each of the state's eight regions.
5. Establish and fund eight regional coordinating councils and coordinators.

The recommended coordination option (Option 5) calls for active promotion of cooperation among transportation providers and funding agencies with a goal of improving service and reducing costs. To implement this option requires a five-step action implementation process that is described as well as details on the state and regional coordinating bodies.

THE COORDINATION CHALLENGE AND PROJECT APPROACH

Need for Coordinated Public Transportation Services

Personal mobility is crucial to full participation in society and the economy. Fortunately, most residents of North Dakota have access to personal vehicles that allow them access to jobs, education, employment, medical, and social opportunities. However, according to the 2000 Census, about 7 percent of the households in the state do not own any vehicles. Individuals in these households must depend on public transportation, friends, families or human service agencies to provide rides.

Until the 1960s, private companies provided public transportation in most urban areas and within and between rural areas. However, as personal vehicle ownership soared after World War II, ridership on public systems declined and unprofitable services were discontinued. Beginning in the 1970s, government-funded transit and human service transportation programs were started to meet the mobility needs of individuals without access to private vehicle transportation because of a lack of income or physical or mental disability prevented them from operating a vehicle. Private bus systems were converted to public ownership to continue general-purpose public transportation. Further, with the addition of federal and state transit funding support, rural public services were started in areas that did not have any public service. Finally, human service agencies set up transportation programs to allow their clients access to their services and other needed programs.

In many cases, the result of these efforts to provide needed mobility was a duplication of services resulting from each organization serving particular market niches. Many communities experienced the situation in which buses from various organizations with only a few passengers each followed each other around communities giving the impression of inefficient, expensive and poorly managed service.

This study is timely given the increased emphasis placed on coordinating transportation services among the departments of Health and Human Services, Transportation, Labor and Education by the development and promotion of the Federal Transit Administration's "United We Ride" Program. This national effort focuses on reducing the regulatory and administrative barriers to coordination and resolving technical issues such as cost allocation. It, as well as the North Dakota effort, seeks to improve the availability and quality of transportation services available to all residents, especially those elderly, low income, or disabled persons without access to private vehicles, rather than reduce overall transportation costs. National studies have shown that coordination usually results in lower per trip costs, but this national experience also shows that the positive outcome of coordination is that through coordination, existing resources can be used to provide more rides and that coordinated systems are able to assemble and manage the resources necessary to expand transportation opportunities.

North Dakota Situation

North Dakota's public and human service transportation services evolved along the same program-specific approaches as did those in many other states. Individual human service agencies funded and/or operated transportation programs to support their basic missions. In addition, in recent years federal and state funding has led to the inception or expansion of public transit services in many areas of the state. Until recently, little attention has been paid to reducing duplication of services and coordination of transportation programs. However, in the past two years a new emphasis on coordination by the North Dakota Department of Transportation has led to an examination of the policy, funding, and operational options available to maximize the benefit of public transportation funds it manages and those of human service programs. This need to increase the effectiveness of transportation resources is crucial because of increasing needs for service and increasing difficulty in providing services especially in the rural western portion of the state where the overall population is declining and the remaining population is aging.

The North Dakota Department of Transportation contracted with the Small Urban and Rural Transit Center (SURTC) at North Dakota State University (NDSU) to help collect information about the current public and human service transportation programs in North Dakota and to formulate ways to increase coordination and effectiveness of state and federal funds. This report summarizes the one-year effort and provides background information needed to make policy decisions to improve coordination.

Study Approach

Transportation coordination at the state funding level or at the local operations level, requires extensive personal interaction and negotiation to work out the best service plan for all organizations funding, using, or providing service. Therefore, the study process included intensive discussion and collaboration between effected groups, organizations, and individuals, supported by research and data collection by the SURTC study team.

The study was guided by a steering committee that included representatives from state funding and program agencies and local human service and transportation providers. This steering committee met twice during the study; once at the start of the study to review the work plan and suggest additional issues and study participants, and at the end of the study to review final findings and recommendations.

The study also involved funders, providers, and users of transportation services through eight regional meetings held throughout the state during the first six months of 2004. Each of these meetings, attended by 20-30 persons, provided an opportunity for users, human service agencies and transportation providers to discuss issues and needs in their regions. Participants also gave the study team members leads to help identify additional needs and/or transportation resources.

The SURTC team conducted a literature review and assembled information on current transportation providers in North Dakota. State agencies and professional groups provided the number of transportation providers in each region, operating data describing the size and scope of the transportation operations, and detailed funding data. This data is necessary to understand

the nature of the coordination challenge in each region and the resources available to improve service.

Based on the results of the regional meetings, data collection, and review of the literature, the SURTC team developed a range of alternative policies that could increase transportation coordination. These options were reviewed and refined by the advisory committee.

This paper is an overview of the full report. It includes a shortened version of the literature review, and service inventory and coordination efforts, a more complete review of the evaluation of coordination policy options and recommendations, which is followed by the conclusion (Hegland et al., 2004).

TRANSPORTATION COORDINATION: A LITERATURE REVIEW AND SUMMARY OF PRACTICE

Research studies, legislative actions, regulatory efforts of federal, state, and local governments, and the experiences of individuals provides a rich source of information about coordination efforts. This information may also help policymakers in North Dakota as they devise coordination strategies for the state's transportation programs.

For more than 30 years, as public and human service transportation programs were created and expanded, transportation experts have decried the wasteful duplication of services and unnecessary gaps in service caused by small-scale operations which provide service to specific market niches. Since the late 1970s, service coordination has been proposed as the solution to these problems. The most simplistic and incorrect understanding of transportation coordination is the consolidation of all existing transportation providers into a single operation that receives all transportation funding and provides all rides for agency clients or the general public. While such a model has been followed in some communities, this option is not necessarily the desired outcome of coordination efforts. Various degrees of cooperation and information and resource sharing by independent systems have been shown to achieve the efficiency and service quality benefits attributed to coordination.

What is Coordination?

Coordination is a tool for better resource management. It requires people from different agencies and different client bases to work together to manage vehicle operations, planning, maintenance, purchasing and marketing of transportation services. Key attributes of this process are funding, shared responsibilities, management and shared power. A coordinated system strives to improve cost effectiveness, reduce cost per ride, and increase the quantity and quality of transportation services. In this way, coordination is a management tool for better allocation of scarce transportation resources.

Coordination is not a one-time event. It is more like living a healthy lifestyle. Coordination requires daily attention for a span of years, just like eating, exercise, and good mental health for long stable healthy life. It may require some occasional adjustments. In coordination, the passage of time brings changes in programs, clients served, management, regulations, and

willingness by individuals to cooperate. Therefore, a coordinated system needs someone to continually nurture it to keep the system healthy and strong.

Which Transportation Services are Likely to be Coordinated?

In the late 1960s and early 1970s, as a part of the “Great Society” movement, the federal government created a number of human service programs to respond to unmet needs of low income, disabled, or elderly persons. These programs helped individuals obtain and retain jobs and access health care, nutrition programs, mental health care and rehabilitation services. Programs also provided education to preschool children. A common complaint of these programs was that without transportation, none of the other programs could be accessed and therefore the benefits of the program were not available to those needing transportation. In response, most human service agencies created and/or funded transportation for their clients. In addition, public transportation services once provided by private companies were now being provided by government-subsidized agencies.

At the federal level, the departments of Transportation, Health and Human Services, Labor, and Education became major funders of transportation services – each through their own networks of grantees following their own priorities and program guidelines. A Government Accountability Office (GAO) study in 2003 estimated that 62 federal agencies funded transportation programs; 29 of these programs spent a total of more than \$2.4 billion on transportation in 2001 (U.S. Government Accountability Office et. Al. 2003). While Department of Transportation funds were used primarily to support traditional fixed-route bus and rail services, human service agency transportation was typically offered as demand-responsive service that provided door-to-door transportation for clients who could not access regular fixed-route services, either because the service was unavailable in their area or because they had some form of disability that prevented them from using regular transit services.

The Department of Transportation’s role in funding demand-responsive service grew in the late 1970s and 1980s as federal funding grew to enable rural areas to establish transit systems. While some of these services followed the traditional fixed-route delivery model, many in sparsely settled areas offered demand-response service. The 1990 passage of the Americans with Disabilities Act and related requirements that fixed-route transit systems also provide comparable paratransit (demand-response) services within their service areas promoted an even greater expansion of paratransit services around the county.

Most of the federal transportation programs are administered by state agencies; local systems obtain funding and receive program oversight at the state rather than from the federal government. While all state programs must follow federal regulations and guidelines, transportation-related funding and policy decisions can and do vary from state to state because states have discretion which may be used to encourage or require coordination. Significant players in North Dakota transit include the North Dakota Department of Transportation and the North Dakota Department of Human Services. The directors of both of these agencies are appointed by the governor.

The nature of the transportation coordination challenge also varies from community to community because not all human service and public transportation programs are found in every

urban or rural area. Recognizing these differences, the approach taken in this study is to determine the nature and size of each program's presence in each of the state's eight planning regions. Detailed information on the transportation resources available in each region is presented later in this paper.

Studies Documenting Barriers to Coordination, Benefits and Costs of Coordination, and Conditions Necessary for Effective Coordination

Much of the early literature related to transportation coordination focused on real and perceived barriers to coordination faced by local transportation providers. These barriers interfered with the desire to achieve coordination in the community. Funding regulations were often given as the reason for not coordinating services, but the most common "real" reason for lack of coordination was turfism (e.g. the unwillingness of individuals to give up control of the services they are providing to their customers). While there are some conflicting federal mandates and rules which govern transportation services and varying client eligibility requirements, issues of control are more often the sources of resistance to coordination. Another is the lack of integration of administrative functions including coordinated planning and the allocation of the scarce financial resources (National Governors Association 2002).

Transportation funds allocated through different federal departments (i.e. the Department of Health and Human Services (DHHS) and Department of Transportation (DOT)) have different objectives. DHHS is primarily for clients with special needs, while DOT funds are for the general public. The key to success in coordinating programs with different objectives is to design a service that can meet all, or at least a majority, of related needs.

Another obstacle to coordination is the difference in each program's accounting procedures and the need for accurate cost allocation procedures. These accounting and cost-allocation requirements result from each agency's desire to ensure that its funds are used to benefit its clients and that each agency participating in a coordinated system pays its fair share. Some granting sources such as the USDOT require detailed and specific accounting reports and cost-allocation procedures; most DHHS sponsored programs do not. Agencies differ in the detail of reporting of services rendered and trip purposes. The solution to these differences is to design an information system that provides all needed information and supports a cost-allocation plan that meets all agencies' needs.

Use of a fully allocated costing approach also highlights another barrier to coordination. Many agencies that provide transportation services as a small part of their overall program ignore many common costs of operation or charge direct transportation costs to other programs, thus understating the true cost of the transportation operation. A coordinated transportation system that must recover all costs may appear to be a higher-cost provider than the incumbent provider and thus agencies resist coordination, claiming it costs more.

Through many federally-funded studies, a number of state coordination efforts have been documented during the past 30 years. Three sources are suggested for those interested in further readings on previous efforts. These include the resources section of the United We Ride Web

site and the bibliographies from two recent Transit Cooperative Research Program reports by Jon Burkhardt (Federal Transit Administration html, Burkhardt 2003 & 2004).

To help promote coordination at the local level and to provide the evidence needed for legislative and regulatory action, studies have been undertaken to document the economic benefits of coordination. The general assumption is that the benefits of coordination far outweigh the costs. The most frequently stated benefits of coordination include increased efficiencies, decreased unit costs, and increased services. Related benefits include effective use of scarce resources, discovery of previously unused resources, reducing unmet needs by increasing services, and increased mobility for people with disabilities.

Coordination benefits are most achievable if a community's transportation vehicles have unused capacity and idle time. In addition, benefits may be realized through economies of scale related to administration, maintenance, operations, planning, and purchasing (Burkhardt 2003). For example, it is difficult to have fewer vehicles running at half capacity if there is only one vehicle in the community. Likewise, it is difficult to experience economies of scale if there is only one agency in the community or region that provides transportation services. If a community has a nursing home, a senior citizens center, and a Head Start program, all with vehicles, then opportunities exist for coordination-related benefits. In North Dakota, with its many small communities, coordination at the regional level may be required to realize benefits.

State Coordination Efforts

States have taken the lead role in making coordination a reality. Transportation Cooperative Research Program (TCRP) Report 101 reported on a survey of states to determine the status of coordination in the United States. All states responded to the survey. Every state said that it encouraged coordination as a philosophy; a majority said they were involved in coordination efforts. North Dakota was one of five states that did not report coordination activities as of 2002. Some states have mandated coordination through legislation. Florida and North Carolina did so more than 20 years ago. About half of the states have coordinating councils or boards to encourage coordination and resolve issues that limit coordination options. Other states have adopted a more grass-roots approach whereby the states encourage local coordination efforts and support them through technical assistance, enhanced funding, and assistance with resolving regulatory/administrative barriers to coordination. A brief discussion follows identifying the state studied, for full analysis please refer to the full report (Hegland et al., 2004).

Sampling of States where Coordination is Legislated

Three states Texas, Iowa and Washington that have legislated coordination were studied. They were selected because of their uniqueness and applicability to North Dakota. Texas created the Office of Community Transportation Services to work with the departments of Transportation and Human Services. Iowa divided the state into three districts, they include the rural, small urban and large urban. Washington's State Legislature created the Agency Council on Coordinated Transportation (ACCT) in 1998. The ACCT provides a structure for advancing coordination and improving transportation options for older citizens, people with low incomes, people with disabilities, and children.

States Where Coordination Evolved from Grass Roots

Three states Ohio, Montana, and North Dakota were studied that allowed coordination to grow through grass roots emergence. Ohio has encouraged coordination by disseminating information and making funds available to coordinated groups through a competitive application process. Montana's Transportation Assistance for the Disabled and Elderly (TransADE) program offers about \$300,000 per year in grants to expand or coordinate transportation services (Ballard et al., 2003). Other than federal mandates to coordinate local services, there are no legislative or state regulatory mandates to coordinate public transportation services in North Dakota. However, there are several grass roots efforts in place or in the planning process to promote coordination within North Dakota's public transportation system. They include some regional systems, one modified regional brokerage system, and a few single community systems.

Models for Achieving Coordination

As stated earlier, coordination is not a project or a product, it is an ongoing process. Therefore, to help individuals and groups that have not been involved in successful coordination efforts, the federal government and some state agencies have sponsored reports and studies to provide a road map for how to achieve coordination.

Several models have been created to help develop coordinated transportation programs. The common thread in the models is to start by identifying needs that exist, convening a variety of interested stakeholders, and talking and planning for coordination. The planning process is crucial because it identifies unmet needs, potential benefits, and participating parties. Leadership is required to develop an appropriate coordination plan. Coordination options are progressive in nature as they move from cooperation, to joint use agreements, to collaborative ventures. After the planning process is complete, implementation and evaluation begins. Evaluation is ongoing for as long as the coordinated efforts exist. Coordination does not just happen, it must be planned. For a discussion of the models that were reviewed please see the full report. (Hegland et al., 2004)

For the purpose of this study, a process developed by the Easter Seals was selected as the general model for North Dakota's coordination effort. This process prescribes a structure that is well-suited for a large geographical area such as North Dakota's. "Getting Started" identified a process for utilizing focus group and surveys as a planning process for the state's eight planning regions. It called for introducing the concept into the local region and understanding the local setting for things such as recent local history of coordination, the transportation resources, and local political economy. This type of information gathered at focus group meetings is discussed in the next section of this paper. It was also shared at the project's steering committee and provided a basis for a number of the study's recommendations.

SERVICES INVENTORY & COORDINATION EFFORTS

Analysis of the Grand Forks region is shown as a sample of the typical analysis that was documented in each of the state's eight regions following the focus group meetings in the full report. The map shows the regions of North Dakota (Figure 1).

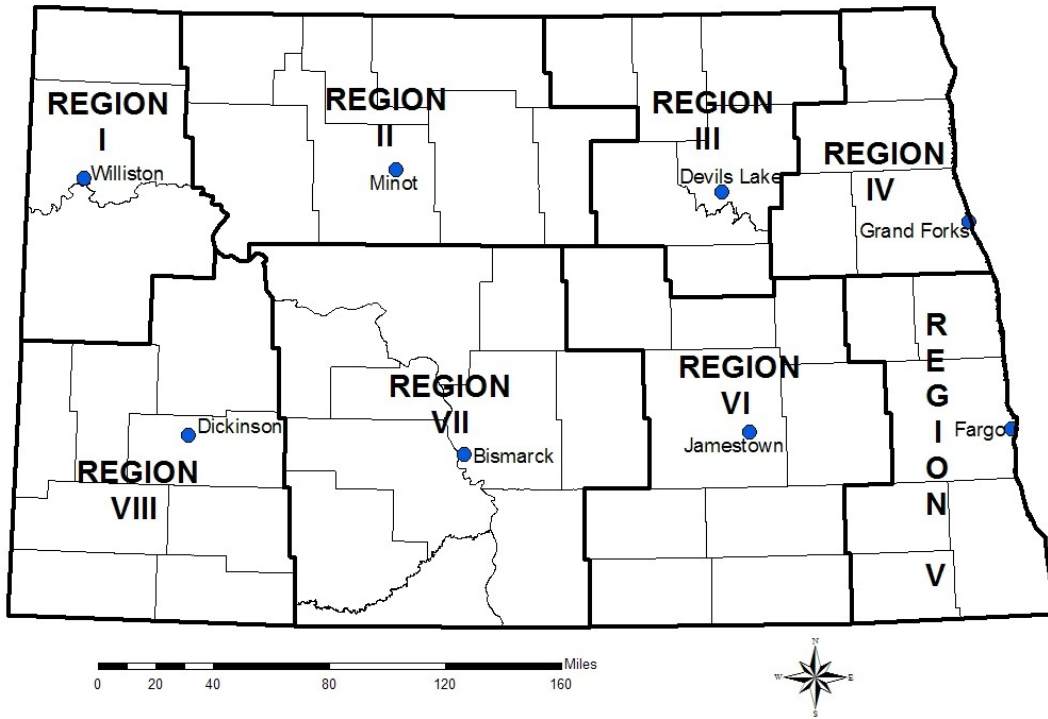


Figure 1 Economic Planning Regions in North Dakota

Region 4 – Grand Forks

Region 4, which includes Grand Forks, Nelson, Pembina, and Walsh Counties, is located in the northeast corner of North Dakota (Figure 2). The region has a surface area of 4,865 square miles and a population of 90,798. With 18.7 residents per square mile, this region ranks second in the state, second only to the Fargo region.

Grand Forks, the regional trade and medical center, has a population of 48,618. Grand Forks is the third largest city in North Dakota and is the home of the Grand Forks Air Force Base and the University of North Dakota, the state’s largest university.

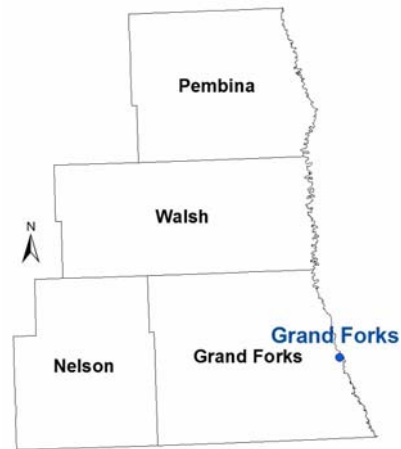


Figure 2 Counties in Region 4

Segments within the region’s population which are potentially transportation disadvantaged are listed below (Figure 3). The potentially disadvantaged include three groups of residents:

- ◆ 22,677 disabled residents or 25 percent of the population,
- ◆ 11,451 senior residents or 12.6 percent of the population,
- ◆ 10,654 low-income residents or 11.7 percent of the population.

There may be some overlap as these are not three separate and distinct groups.

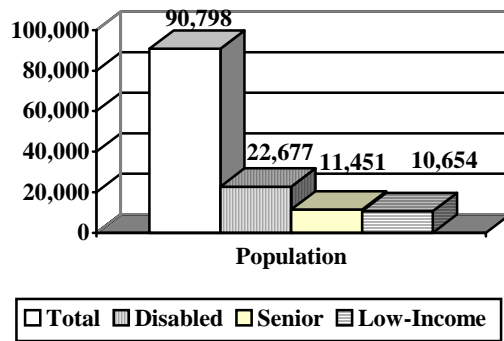


Figure 3 Demographics in Region 4

Source: US Census Bureau, 2000 ND Quick Facts online at www.census.gov/

Grand Forks has daily east and westbound intercity bus service on US Highway 2 and north and southbound services on Interstate Highway I-29. Grand Forks is also served by Amtrak and has a local fixed-route bus service and local taxi service. The local fixed-route bus service also operates the local dial-a-ride / paratransit service.

Rural public transportation services are provided by four different operators, one in each of the region’s four counties. Services in rural Grand Forks County are provided by the Fargo Senior Commission. Other rural service providers include Nelson County Transportation, Walsh County Transportation, and Pembina County Meals and Transportation. Each of these services operates three or fewer vehicles and provides local transportation and scheduled trips to Grand Forks.

Table one shows the influx of money to the region from various funding sources including:

- ◆ **Federal (5311)** Refers to Non-Urbanized Area Formula Program, Section 5311, that provides capital and operating funding for public transportation in non-urbanized areas. Funds are apportioned to the states according to a statutory formula based on each state's population in rural and small urban areas (under 50,000 population). In North Dakota, the state DOT allocates the funds to the various transit agencies.
- ◆ **Federal (5307)** Section 5307 of the Federal Transit Act (FTA) provides grants that may be used to finance the planning, acquisition, construction, improvement and operating costs of facilities, equipment and associated capital maintenance items used by operation or lease in mass transportation services, including the renovation and improvement of historic transportation facilities.
- ◆ **State Aid** This is money raised by the state through taxes and other sources that is allocated to local transit operations for local match to the federal funds and other operating and capital expenses
- ◆ **Local Mill** Some counties and municipalities in the state have a small mill levy to support their local transit and paratransit operations.
- ◆ **Other** This is the sum of all money raised by the local nonprofit transit operations in their local fund raising efforts like donations, phonathons, craft sales, etc.

Table 1 Region Transportation in Dollars

| <u>Source</u> | <u>Dollars (\$)</u> |
|-----------------|---------------------|
| Federal (5311) | 56,433 |
| Federal (5307) | 717,887 |
| State Aid | 183,445 |
| Local Mill | 621,577 |
| Other | 75,484 |
| Fares | 254,932 |
| <u>Medicaid</u> | <u>84,084</u> |
| Total | 1,993,842 |

- ◆ **Fare** The total of all fares collected by the transit agencies in the region.
- ◆ **Medicaid** The dollars that the North Dakota Medicaid program reimbursed the transit agencies and taxis in the region for qualified non-emergency medical assistance travel. The only number we could get included all taxi, air taxi and transit; fixed-route and paratransit.

The region has 11 nursing homes, four basic care facilities, six assisted living homes, and five facilities which serve developmentally disabled residents. Several of these facilities operate vans and buses for their residents/clients. The Vocational Rehabilitation Center associated with Altru Hospital in Grand Forks also operates vans to transport patients who live in the city. The North Dakota Association for the Disabled also has two accessible vehicles which are used to transport residents in wheelchairs in Grand Forks.

Region 4 has the highest per capita spending on public transportation of any of the state’s eight regions. As Table 1 indicates, the region has nearly \$2 million available annually to support local transportation service providers. This amount equals \$21.95 per capita, nearly \$5.89 more per capita than the next highest region (Fargo). This support comes from a variety of sources including the Federal Transit Administration, state aid, and local mill levies.

As is the case with all of the state’s eight regions, additional money flows into the region to reimburse area residents for transportation costs incurred to access various federal programs, including auto repair and insurance premium for personal vehicles. The two largest funding programs for transportation include Temporary Assistance to Needy Families (TANF) and Job Opportunity and Basic Skills (JOBS) run by North Dakota Department of Human Services (DHS). These reimbursements for vehicle repair, insurance, transit bus tickets and other transportation costs amount to:

- ◆ Vocational Rehabilitation (DHS) - \$25,746
- ◆ TANF and JOBS (DHS) - -\$250,444
- ◆ Workforce Investment Act (Job Service North Dakota) - \$3,580

As indicated earlier, there is coordination within the city of Grand Forks concerning the operations of the local fixed and paratransit bus services because both are operated by the same entity. Local paratransit services are also supplemented and coordinated via contracts with local taxi services to provide “after hours” services to eligible residents. There is no coordination with the region’s rural service providers.

EVALUATION OF COORDINATION POLICY OPTIONS AND RECOMMENDATIONS

North Dakota does not have a history of formal coordination initiatives at the state or local level; however, several providers have developed informal coordination arrangements. Human service agency representatives, transit providers, and state funding agency personnel participating in this

study's advisory committee and regional meetings endorse the concept of increased transportation coordination. Participants at the regional meetings hoped for the following benefits to derive from increased coordination:

- ◆ Better coordination between DOT and Human Services transportation systems,
- ◆ Single source of information for local transportation users,
- ◆ Expanded hours of service,
- ◆ Services that are available to general public,
- ◆ Expanded availability of services in rural areas,
- ◆ Connections from rural areas into regional centers,
- ◆ Connections to commercial transportation providers,
- ◆ Connections between regional systems to provide state-wide service, and
- ◆ Improved operating efficiencies leading to lower per-trip costs to the governmental funding agencies and the users.

In addition to these benefits from coordination, state funding agency officials also hoped that improved coordination at the local level would result in more efficient grant and contract administration.

The review of the literature and the experience of other states reported previously suggest successful coordination requires actions at both the state and local levels. At the state level, funding agencies for both public transit and human service transportation need to communicate with each other in order to minimize barriers to coordination at the local level such as overly restrictive rules on the use of assets and operating funds, conflicting data collection and reporting requirements and other administrative burdens. State approaches to promote coordination generally are of two types: mandates (legislative or administrative) that require coordination at the local level and/or combine state funding from a number of sources into a single funding stream available only to a coordinated systems, or incentive programs that provide special funds to coordinated systems that are not available to uncoordinated ones.

At the local level, coordination can be increased in response to the state mandates or incentives or it can be locally generated by programs to increase communication at the local level and by providing training and technical assistance to local providers. During the past 30 years coordinated systems have been developed throughout the country as the result of local initiatives by groups and individuals that believed better service at a lower cost was available to their customers and clients through coordination than could be achieved by continuing separate systems.

The best approach to encouraging coordination is to take steps at both the state and local levels to increase the likelihood of successful efforts. Therefore, the options presented in this chapter address policies and actions at both levels. While many options could have been proposed that would increase the likelihood of successful coordination at the state and local levels, the five options presented in this chapter were developed to represent a range of levels of effort and impact so that the advisory committee and state policy makers could consider the benefits and costs of several different options.

Evaluation Criteria

Any effort to select among a group of options requires the application of evaluation criteria to determine the “best” option, or at least to consider how or whether a particular option helps achieve a particular policy objective. Therefore to provide an evaluation framework for the coordination options proposed here, six evaluation criteria are proposed that were derived from the list of benefits of coordination that the regional forum participants identified and that are summarized at the beginning of this section.

The six evaluation criteria proposed for the North Dakota coordination options are:

- ◆ Impact on quality of service to customers defined in terms of the customers’ ability to obtain one-stop access to transportation information and ride scheduling,
- ◆ Availability of service – capacity, service area, hours of service, connectivity to other regions and other modes,
- ◆ Administrative efficiency – grants administration, fund raising,
- ◆ Operating efficiencies and economies of scale as measured in terms of cost per unit of service,
- ◆ Implementation cost – start up and ongoing expenses related directly to coordination activities, and
- ◆ Administrative effort to implement – the degree of difficulty in effecting changes in organizations and management both at the state and local levels.

Coordination Options for North Dakota

After reviewing the literature and the discussions from the eight focus group meetings, four coordination options were developed that might be appropriate for North Dakota. These options were presented at the second steering committee meeting in June 2004. The consensus of the committee members was that options three and four both had features that they would support and asked the study team to combine the best features of each into a fifth option. Therefore, the following five options are presented here in order of impact, effectiveness, and implementation cost. The five options and a brief description of each follows:

1. Issue a policy directive from Governor to each state agency that funds transportation that encourages the agency and its grantees to coordinate transportation programs at the local level.

Each of the major funding agencies would issue a policy directive to grantees encouraging them to work with other transportation providers to seek ways to increase service, reduce costs and share resources. No incentives or penalties would subsequently be included in this option.

2. Establish a regional ride-matching program and ride brokerage via Internet-based information sharing

This option would increase customer access to existing services by providing an information link between individuals that need transportation and the many providers of transportation services. Under this Internet-based approach transportation providers in a region would list their services

and contact persons to allow users to make contact with organizations that might be able to provide transportation.

3. Require that all state-funded transit providers be part of a regional coordination organization for management and funding purposes.

This option calls for the state to mandate coordination in each region. Each state funding source would require its grantees to be part of a local coordination organization. The details of the structure of these coordination organizations would be prescribed by the state agencies. Each regional organization would support a transportation coordinator whose duties would be to apply for and administer all state public and human service transportation funds and seek opportunities to improve service in their region through cooperative efforts among providers. The regional coordination body would write the job description and hire the regional coordinator. Federal and state funds that flow through the state to local agencies for purchasing vehicles and operations for both the Departments of Transportation of Human Services would pass through the regional coordinator who would be the regional grantee with a responsibility to maximize the amount of service provided with the funds and minimize the cost of providing that service. The agencies and projects would have their own managers and compete for regional funds by proving they could provide cost-effective services.

4. Establish and fund transportation coordinators in each of the state's eight regions.

This option calls for the establishment and funding of a transportation coordinator in each of the state's eight regions. To avoid unnecessary administrative overhead, a two-tiered approach to the regional coordinators should be adopted whereby four coordinators in the regions with the larger urban areas would be senior coordinators and assist the coordinators in one of the four adjacent rural regions. Each of the eight regions would have coordinators, but the rural regional coordinators would look to their urban counterparts for assistance with grant preparation, recordkeeping, procurement, and other administrative activities. Coordinators would encourage coordination, information sharing, resource and ride sharing, and seek additional funding from traditional and non-traditional sources.

Each region would be required to prepare a coordination plan and provide annual updates. This plan would document transportation services provided in the region by state grantees and indicate what steps were taken or would be taken to increase service and/or reduce costs through coordination activities. The state would assist and support the coordination efforts in the regions through funding, education, and reducing regulatory barriers hampering the coordination effort.

5. Establish and fund eight regional coordinating councils and coordinators

This options calls for the establishment of a state-level coordinating council and eight regional coordinating councils that include representation of providers and users of all publicly funded transportation programs. State funds will support a regional coordinator and necessary expenses. All state-managed transportation funds will flow through the regional coordinating councils.

The state-level coordinating council will advise state agencies on funding allocations and barriers to increased coordination and will oversee the activities of the regional councils.

Evaluation of the Coordination Options

Table 2 presents an evaluation matrix that rates the five coordination options based on the six evaluation criteria. These ratings are somewhat subjective, but they are informed by a review of the impact of similar options implemented by other states or local agencies. This matrix provides a starting point for further discussion and evaluation of the best option for North Dakota.

As can be seen from Table 2, options such as one and two that are relatively easy to implement are also not likely to be very effective in achieving the service and cost-savings goals of coordination. However, the last three options that put some teeth into coordination by devoting administrative resources to the effort and tying funding to successful coordination efforts will likely produce the intended outcomes. Therefore, Option 5, the most comprehensive approach to achieving coordination at both the state and local levels, is the one recommended based on current conditions in North Dakota and the apparent willingness of state agencies and local transportation providers and funders to strive for increased coordination as a way to provide more rides at an affordable cost.

Table 2 Coordination Options Evaluation Matrix

| Coordination Options | Quality of Customer Service | Service Availability | Administrative Efficiency | Operating Efficiency | Cost of Implementation | Effort to Implement |
|---|------------------------------------|-----------------------------|----------------------------------|-----------------------------|-------------------------------|----------------------------|
| 1. Governor’s directive encouraging coordination | Little impact | Little impact | No gain | Minimal gain | Low | Little |
| 2. Establish information sharing system | Moderate to high impact | Moderate impact | Some gain | Limited gain | Moderate | Moderate |
| 3. Require participation in coordination organization | Moderate impact | Moderate impact | Some gain | Moderate to high gain | Low | Moderate |
| 4. Establish coordinators in each region | Moderate to high impact | Moderate | Significant improvement | Moderate to high gain | High | Moderate |

| | | | | | | |
|---|-------------|------|-------------------------|------------------|------|------|
| 5. Establish state and regional coordinating councils and fund coordinators each region. Require all public funds to be administered by coordinator | High impact | High | Significant improvement | Significant gain | High | High |
|---|-------------|------|-------------------------|------------------|------|------|

Recommended Implementation Plan

The recommended coordination option (Option 5) calls for active promotion of cooperation among transportation providers and funding agencies with a goal of improving service and reducing costs. To implement this option requires a five-action implementation process that is described below along with details on the state and regional coordinating bodies and a timetable for implementation.

Regardless of which coordination option is chosen for implementation, it is recommended that all public transportation services which receive state or federal funding support from the North Dakota Department of Transportation become enrolled with the North Dakota Department of Human Services to provide Medicaid-related transportation services. A cross-check of the public transit operations and the operations which have received transportation-related reimbursement from Medicaid since 2002 indicates that many service providers have apparently not enrolled with the Department of Human Services to become eligible to receive Medicaid reimbursement for services provided. Becoming enrolled to provide these services and seeking related reimbursement for services provided may be financially beneficial for these service providers, reducing operating deficits or permitting enhanced services.

Actions Required to Implement the Recommended Coordination Option

1. Issue a Governor’s Directive

The first step to implementing this coordination plan is the issuance a directive from the Governor to administrators of state agencies that fund transportation (Departments of Transportation, Human Service, Education, and Job Services) to appoint a member to the North Dakota Personal Mobility Council (NDPMC), assist in staffing the NDPMC, and encourage local grantees to participate in coordination efforts. The purpose of this executive policy directive is to indicate support for coordination from the highest level of state government and to assure that all departments give the proposed coordination activities the high priority that guidance from the Governor’s office suggests. The directive would also authorize the formation of the required state and regional coordination bodies.

2. Establish the North Dakota Personal Mobility Council (NDPMC)

The Governor’s directive would call for the formation of a state-level coordinating body to promote coordination and communication among state agencies that fund personal transportation, and between the state agencies and local transportation coordinating groups. The Department of Transportation should convene its first meeting within two months of the issuance

of the Governor's directive and then the NDPMC should meet at least quarterly for the first year of two of its operation. Once the regional boards are functioning fully and the NDPMC has been through a funding cycle then the Council should meet at least twice a year.

Membership on the NDPMC should include from 10-15 members. The following departments and groups should be asked to name members to the Council:

- ◆ Department of Transportation,
- ◆ Department of Human Services (one or more members representing Aging, Head Start, Long-term care, developmental disabilities facilities, Medicaid programs)
- ◆ Job Service North Dakota,
- ◆ Department of Public Instruction,
- ◆ One or two representatives of user advocacy groups, and
- ◆ A representative of the private sector transportation providers

The Department of Transportation should be responsible for convening the NDPMC, staffing it, and naming the first chair. After a year's operation the Council should elect its own chair.

The North Dakota Personal Mobility Council should be charged with the following duties:

- ◆ Promote cooperation among programs that fund transportation,
- ◆ Identify policies of non- transportation agencies that impact ability to provide mobility,
- ◆ Encourage enhanced customer access to transportation services,
- ◆ Identify barriers to coordination including duplicative or restrictive regulations or requirements,
- ◆ Establish eight regional coordinating councils and prescribe roles and responsibilities for these councils,
- ◆ Review and approve regional coordination plans,
- ◆ Review and recommend annual funding levels to regional coordinating councils for all state-administered transportation programs, and
- ◆ Report annually on the performance of transportation providers in North Dakota and on the progress in accomplishing the duties listed above.

3. Establish Regional Transportation Coordination Boards and Employ Regional Transportation Coordinators

One of the first tasks of the North Dakota Personal Mobility Council will be to develop and approve guidelines for the formation of regional transportation coordination boards in each of the state's eight planning regions. These regional bodies will be responsible for planning and implementing coordinated transportation programs and are the key to success of this coordination plan. The initial meetings of the regional transportation coordinating boards should be held within three months of the start of this plan's implementation.

The regional transportation coordination boards (RTCB) are designed to promote coordination and communication among parties involved in personal mobility within a region and with activities that promote high-quality and cost-effective transportation through better use of resources. Therefore, all interested parties should have the opportunity to participate in the regional boards. Nevertheless, care must be taken to limit the size of the boards to allow

efficient administration and communication among board members. Each of the eight regional coordination boards will be responsible for the following activities:

- ◆ Develop a coordination plan that identifies needs, users, present and potential service providers, funding sources, and a strategy for improving the quantity and quality of information and services in the region while improving the cost-effectiveness of state-funded transportation services. The plan should also include a three-year capital and operating expense budget for a coordinated system, as well as recommendations for joint purchasing and training programs.
- ◆ Develop a job description and screening criteria for the position of regional transportation coordinator.
- ◆ Solicit applications from individuals and organizations to be the regional coordinator and select best option for the region.
- ◆ Develop a regional information system that allows users and providers to obtain information about transportation services and arrange rides.
- ◆ Prepare grant applications and administer state and federal transportation funds.
- ◆ Develop an evaluation procedure to measure the performance of transportation services in the region and prepare an annual report that documents progress toward coordination.
- ◆ Solicit input from private-sector transportation companies (taxi, bus, non-emergency ambulance) on plans and on opportunities for them to coordinate with participate in the regional system.
- ◆ Review annual applications for operating funds and capital grants for all state-and federally-funded transportation programs in the region and make recommendations to the North Dakota Personal Mobility Council concerning funding levels and specific grants.
- ◆ Identify barriers to coordination that should be addressed by the NDPMC.

These coordination activities will require significant human and financial resources to accomplish and therefore state funding above and beyond current operations should be provided to each regional board. Preliminary estimates of these costs are presented in the next section.

4. Provide State Funding to Support Start-up and On-going Operations of Regional Boards

After more than 30 years of experience with coordinated transportation systems, research has concluded that properly implemented coordinated systems result in more and better transportation services at lower per-unit costs. This research also concludes that coordination, especially at the start, costs money for not only planning and start-up costs, but also on-going operations. Therefore, to advance personal transportation in North Dakota, additional resources will be required. At this point, the exact funding level required to implement this plan is not known; a better estimate will result from the regional coordination planning efforts of the regional boards. However, to give some guidance to decision makers reviewing this study, estimates of start-up and operating funding needs are provided.

To carry out their duties, the regional transportation coordination boards will need funding to prepare their plans, hire a coordinator, and set up the customer and user information systems needed to improve service. Because the need for transportation in each region is so great and the total funds now expended on public and human service transportation are so limited, care must

be taken to minimize expenditures on planning and other administrative tasks so as to maximize funds available for service delivery. Therefore, grants to regional boards will be small and represent the minimum level needed to accomplish the duties prescribed.

The proposed start-up grants will be used by the RTCBs to develop a plan, hire a coordinator, and develop an information system for internal use and for use by customers. These funds are not designed to pay for on-going operations. The funding provided to a regional board will vary and will be determined by the size of transportation programs in the region. For planning purposes an average of \$50,000 per region is suggested, recognizing that individual regions may receive from \$25,000 to as much as \$75,000 for these start-up activities. The total cost to the state would then be about \$400,000 for one-time start-up expenses.

One way to encourage increased coordination among existing transportation providers is to assure them that the costs of coordination will not be paid for by reduced services and that coordination activities will receive their own funding. Further, by providing categorical funding for just coordination, the state will be assured that these activities are given priority at the local level.

5. Provide Training and Technical Assistance to Regional Boards

Successful coordination efforts require technical and interpersonal skills that may not be currently present in all regions. Further, activities such as data collection, development of information systems, cost allocation plans, etc, require significant commitments of effort by the transportation coordinators and other personnel in each region. To help train members of the regional transportation coordination boards, the regional coordinators, and other local personnel, the Department of Transportation should assist with related regional activities. This function could be fulfilled either with department personnel or on a contractual basis with an entity such SURTC. The purpose of this funding would be to provide support to the regions as they prepare their plans and to develop training and other resources that could be used by each region to accomplish its mission.

Next Steps

Discussions with local and state officials throughout this North Dakota coordination study indicate strong support for increased coordination efforts on the part of public and human service transportation systems as a way to improve service and stretch limited budgets. This enthusiasm combined with the data and other background information presented in this report should help state and local decision makers refine the recommendations presented in this chapter and start the coordination process. Following a review of this report by study participants, the next step in the process should be to take the actions necessary to create the North Dakota Personal Mobility Council and the regional transportation coordination boards; then begin the detailed work of creating coordinated transportation systems in each of the state's eight regions.

CONCLUSION

North Dakota transit officials, managers, and employees are very dedicated. They are prudent about spending and diligent about stretching the tax dollars to the maximum. As a group they strive to improve efficiencies, are willing to discuss the sharing of resources, and understand that turfism and government regulation can create barriers to coordination. They are visionary about the future searching for innovative means to accomplish their goals.

The stakeholders, including departments of Human Services, Job Service, and public Instruction displayed enthusiasm in discussing the possible benefits of improved services through coordination of resources, management, and technologies. They acknowledged the potential benefits of working together at a regional level, combining resources to make transportation available to a greater number of North Dakota residents. Additional planning meetings to formulate a coordinated regional plan that would address some of their transportation issues were perceived a necessary.

Benefits from coordination, as a management tool, can most effectively be realized when there are excess resources to be shared or better utilized. In North Dakota, this can most easily be accomplished with regionalization of transit services. Therefore, the proposal to regionalize transit along the line of the economic planning regions in North Dakota is a logical conclusion. This allows each of the state's eight major cities to be a regional transportation hub.

The best approach to encouraging coordination is to take steps at both the state and local levels to increase the likelihood of successful efforts. State approaches to promote coordination often are mandates (legislative or administrative) that require coordination at the local level and/or combine state funding from a number of sources into a single funding stream available only to a coordinated systems. Another state approach is incentive programs that provide special funds to coordinated systems that are not available to uncoordinated ones. At the local level, coordination can be increased in response to the state mandates or incentives or it can be locally generated by programs to increase communication at the local level and by providing training and technical assistance to local providers.

This study recommendation calls for the establishment of a state-level coordinating council and eight regional coordinating councils that include representation of providers and users of all publicly funded transportation programs. All state-managed transportation funds will flow through the regional coordinating councils. The state-level coordinating council will advise state agencies on funding allocations, ease barriers to increased coordination, and will oversee the activities of the regional councils.

REFERENCES

Agency Council on Coordinated Transportation, *2002-2003 Report to the Washington State Legislature*, Washington State Department of Transportation, Olympia, Washington, July 2003.

Ballard, Lisa, David Kack, Shaun Kellu, and Xianming, *Montana Coordinated Transportation Handbook*, Montana Council on Developmental Disabilities, Bozeman, Montana. 2003.

Burkhardt, Jon E., David Koffman, and Gail Murray, TCRP Report 91. *Economic Benefits of Coordinating Human Services Transportation and Transit Services*. Transportation Research Board, Washington D.C., 2003.

Burkhardt, Jon E., Charles A. Nelson, David Koffman, and Gail Murray, TCRP Report 101. *Toolkit for Rural Community Coordinated Transportation Services*. Transportation Research Board, Washington D.C., 2004.

Federal Transit Administration United We Ride Program Resources available online at: .

Hegland, Gary, Jim Miller Ph. D., Jon Mielke, and Jill Hough, *Enhancing Passenger Mobility Services in North Dakota through Increased Coordination*, Upper Great Plains Transportation Institute, No. 160, Fargo, ND. November 2004.

Iowa Code Chapter 324 Public Transportation, <http://www.legis.state.ia.us/IACODE/2001/324A/> September 2004.

National Governors Association, *Improving Public Transportation Services through Effective Statewide Coordination*, NGA Center for Best Practices, Washington, D.C., 2002.

Ohio Department of Transportation Coordination Activities
http://www.dot.state.oh.us/ptrans/downloads/Coordination_Links/coord_activities.htm/ May 2002.

U.S. Government Accountability Office, GAO-03-697, *Transportation Disadvantaged Populations: Some Coordination Efforts Among Programs Providing Transportation Services, but Obstacles Persist*. Washington, D.C., June 2003, (www.gao.gov/new.items/d03697.pdf).