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# CITY STREETS IN NORTH DAKOTA

Prepared as part of the
Transportation Needs Assessment Study
(HCR 3069)

By the
Upper Great Plains Transportation Institute
North Dakota State University
Fargo, ND

In cooperation with the

North Dakota State Highway Department,
Walter R. Hjelle, Commissioner,

and

Federal Highway Administration
U.S. Department of Transportation

July 1986

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## Preface

This report was prepared as part of the Transportation Needs Assessment (HCR 3069) in cooperation with the North Dakota State Highway Department. The author is indebted to the many city officials and to officials of the State Highway Department who provided much of the data contained within this report. For questions or information regarding this report contact:

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## INTRODUCTION

The state of North Dakota has 366 incorporated cities within its borders. Most of these cities have less than 5000 in population, but approximately 45 percent of the state's population lives in the cities larger than 5000 (Table 1).

TABLE 1. SIZE DISTRIBUTION OF NORTH DAKOTA CITIES.

| Size Category | Number of Cities |
|---|---|
| 0-100 | 74 |
| 101-500 | 188 |
| 501-1000 | 43 |
| 1001-5000 | 48 |
| 5000 and over | 13 |
| Total | 366 |

On December 31, 1984 there was 3317.9 miles of city streets in North Dakota, plus an additional 607.1 miles of city streets on the state and county highway systems[1], or a total of 3925 miles.[2]

The type of street system within each city varies tremendously by the size of city. Larger cities have extensive

[1]Includes mileage on the interstate, primary, secondary, urban and state system within city boundaries.

[2]Source: "North Dakota Highway Statistics, 1985", Planning Division, ND State Highway Department, Bismarck.

street networks and are consequently faced with substantially different street management problems than smaller cities.

Street systems in the larger cities consist primarily of asphalt and concrete streets, thereby creating the need for a more extensive paved street maintenance and construction program than their smaller counterparts. These cities are generally equipped with crews whose full-time duties are to maintain and construct their city's street system. The larger cities, (population 5000 and over) are also unique in that they are eligible for federal aid for streets through the Federal Aid Urban program. Three of the larger cities have metropolitan planning agencies which are responsible for providing planning activities necessary for receiving federal allocations for city street projects. One of the major problems found by street officials in larger cities is accommodating the needs of an expanding population base, and consequently growing traffic densities and traffic congestion problems. Because of the extensive street network in these cities, maintenance of existing streets is a major task. However, in addition to existing streets, the larger cities are faced with problems relating to construction of new streets in residential areas, expanding the capacities of existing major streets and the construction of major interchanges and other structures.

City street management in North Dakota's smaller cities, on the other hand, takes on a significantly different scope. In cities where the population base is stable or declining,

construction of new streets or structures may be a minor consideration or non-existent. The primary concern in these cities is maintenance and preservation of the existing street network. Many smaller cities lack the financial resources and personnel to establish any kind of substantial city street management operation. For a large share of smaller cities, the primary source of expertise, equipment and personnel for performing street work is the county roads department.

Actual miles of city streets in North Dakota are more highly concentrated in cities with populations less than 5000, however vehicle miles are heavily concentrated in the State's larger cities. While approximately 60 percent of the street miles are located in cities with populations less than 5000, 82 percent of the vehicle miles occur in the larger cities (Table 2). These comparisons are an indication of the reasons for the significantly different city street management problems faced by the various sizes of cities.

TABLE 2. NUMBER OF CITIES, STREET MILEAGE, AND ANNUAL VEHICLE MILES, BY SIZE OF CITY, 1983.

| City Size | Number of Cities | Street Mileage | Annual Vehicle Miles |
|---|---|---|---|
| 0-1000 | 305 | 1,543.7 | 142,456,435 |
| 1000-5000 | 48 | 733.6 | 145,246,055 |
| over 5000 | 13 | 1,568.3 | 1,303,883,660 |
| Total | 366 | 3,845.6 | 1,591,586,150 |

North Dakota's city streets are classified according to the type of function they perform within a city (Table 3). Street classifications presented in Table 3 are listed in descending order of their ability to carry heavier volumes of traffic over longer distances. Cities contain 41.5 miles of interstate highways within their borders, and approximately 181 miles of principal arterials. Arterials are streets which carry higher traffic volumes over longer distances, and are "fed" by major and minor collectors, which are in turn fed by other residential streets. Residential streets account for approximately 75 percent of total city street miles.

TABLE 3. FUNCTIONAL SYSTEM MILEAGE OF NORTH DAKOTA CITY STREETS, 1983.

| Functional Classification | Miles |
|---|---|
| Interstate | 41.5 |
| Principal Arterial | 181.3 |
| Minor Arterial | 287.7 |
| Major and Minor Collectives | 473.1 |
| Other Streets | 2,862.1 |
| Total | 3,845.7 |

## CHARACTERISTICS OF CITY STREETS AND STREET PROGRAMS

A survey of all North Dakota cities was conducted to solicit information regarding characteristics and activities of city street departments. A short mail questionnaire was sent to auditors of all cities with instructions to forward the survey instrument to the appropriate city official. A summary of the mailings and returns by city size category is presented in Table 4. A copy of the questionnaire is included in Appendix A. A total of 189 city officials responded to the survey.

TABLE 4. NUMBER OF QUESTIONNAIRES MAILED AND RETURNED.

| City Size Category | Questionnaires Mailed | Number Returned | Percent Returned |
|---|---|---|---|
| 0-100 | 74 | 31 | 42 |
| 101-500 | 188 | 94 | 50 |
| 501-1000 | 43 | 24 | 56 |
| 1001-5000 | 48 | 29 | 60 |
| over 5000[a] | 13 | 11 | 85 |

[a]Survey was completed via telephone interview rather than mailed.

As mentioned earlier in this report, a substantial disparity exists among the various city size categories regarding the nature and scope of city street programs. As can be expected, the number of street miles varies in proportion to city size (population). As shown in Table 5, the average number of street

miles varies from 4.5 miles for cities with population 0-100, to 126.2 for cities with population over 5000. Also, the number of street miles within a size category also varies considerably.

TABLE 5. NORTH DAKOTA CITY STREET MILEAGE BY SIZE CATEGORY, 1986.

| Population | Street Mileage | |
|---|---|---|
| | Average | Range |
| 0-100 | 4.5 | 0.7-40.7 |
| 101-500 | 5.0 | 0.2-14.8 |
| 501-1000 | 7.3 | 1.6-10.0 |
| 1001-5000 | 15.4 | 4.6-25.7 |
| over 5000 | 126.2 | 21.8-268.8 |

One of the most dramatic differences in city street departments among size categories is the number of people employed by the cities for city street programs (Table 6). While cities within the smaller city size categories often had no full-time employees, cities in the larger category had up to 38 full-time city street workers. Smaller cities rely more heavily upon part-time employees, while larger cities utilize more full-time employees.

TABLE 6. NUMBER OF FULL TIME AND PART-TIME CITY STREET EMPLOYEES OF NORTH DAKOTA CITIES, BY SIZE CATEGORY, 1986.

| City Population | Number of Employees | | | |
|---|---|---|---|---|
| | Full Time | | Part-Time | |
| | Average | Range | Average | Range |
| 0-100 | 0 | - | 0.3 | 0-2 |
| 101-500 | 0.2 | 0-1 | 0.6 | 0-3 |
| 501-1000 | 1.0 | 0-2 | 0.6 | 0-2 |
| 1001-5000 | 2.0 | 0-4 | 1.2 | 0-8 |
| over 5000 | 17.0 | 4-38 | 3.7 | 0-10 |

Condition of North Dakota's city streets was also rated by city officials and is presented in Table 7. City officials were asked to specify the proportions of their street network which were in good, fair or poor condition. In general, officials from smaller cities reported that a higher proportion of their network was in fair or poor condition, while the larger city officials reported that a higher share was in good condition. For example, officials from cities over 5000 reported that 54% of their network was in good condition, while 17% was in poor condition. Officials from the smallest size category (0-100), on the other hand, reported that only 33% of their network was in good condition, while 22% was in poor condition. A large percentage of the smaller cities' streets were rated in fair condition.

TABLE 7. NORTH DAKOTA CITY STREET CONDITION BY CITY SIZE CATEGORY, 1986.

| Population | Average Street Condition | | |
|---|---|---|---|
| | Good | Fair | Poor |
| | | (percent) | |
| 0-100 | 33.3 | 45.0 | 21.7 |
| 101-500 | 33.2 | 40.8 | 26.3 |
| 501-1000 | 56.6 | 32.5 | 10.9 |
| 1001-5000 | 39.6 | 43.9 | 16.5 |
| over 5000 | 54.4 | 28.9 | 16.6 |

City officials were also asked to identify the agency or jurisdiction that actually performed their street-related activities. As shown in Table 8, the responding official stated which of the following parties actually did several individual tasks: city, county, private contractor, other party, or some combination. As can be expected, the larger cities performed a larger proportion of services themselves. For example, cities over 5000 population performed almost all their own services, except for curb and gutter work, which was done by private contractor. Smaller cities, however, relied more heavily on the county and private contractors. This relationship makes intuitive sense given that the scope of operations in smaller cities may not be large enough to justify full time or fully-equipped city street crews.

TABLE 8. AGENCIES PERFORMING STREET-RELATED WORK FOR NORTH DAKOTA CITIES, BY CITY SIZE CATEGORY, 1986.

| Work Item | City | County | Private Contractor | Other | Combination |
|---|---|---|---|---|---|
| | (percent) | | | | |
| **Population 0-100** | | | | | |
| Gravel road/street blading | 7 | 41 | 41 | 0 | 10 |
| Paved street repair | 8 | 58 | 8 | 17 | 8 |
| Snow removal | 13 | 32 | 42 | 0 | 13 |
| Signing | 45 | 40 | 10 | 5 | - |
| Curb & gutter work | 22 | 22 | 44 | 11 | - |
| **Population 101-500** | | | | | |
| Gravel road/street blading | 33 | 40 | 14 | 0 | 14 |
| Paved street repair | 26 | 37 | 27 | 3 | 8 |
| Snow removal | 46 | 16 | 14 | 0 | 24 |
| Signing | 75 | 19 | 1 | 0 | 5 |
| Curb & gutter work | 55 | 2 | 36 | 2 | 5 |
| **Population 501-1000** | | | | | |
| Gravel road/street blading | 68 | 23 | 5 | 5 | 0 |
| Paved street repair | 65 | 4 | 22 | 0 | 9 |
| Snow removal | 83 | 0 | 0 | 0 | 17 |
| Signing | 96 | 0 | 0 | 0 | 4 |
| Curb & gutter work | 44 | 0 | 57 | 0 | 0 |
| **Population 1001-5000** | | | | | |
| Gravel road/street blading | 82 | 11 | 4 | 0 | 4 |
| Paved street repair | 76 | 3 | 7 | 0 | 14 |
| Snow removal | 86 | 3 | 0 | 0 | 10 |
| Signing | 86 | 10 | 0 | 0 | 3 |
| Curb & gutter work | 45 | 0 | 45 | 0 | 10 |
| **Population over 5000** | | | | | |
| Gravel road/street blading | 100 | 0 | 0 | 0 | 0 |
| Paved street repair | 82 | 0 | 9 | 0 | 9 |
| Snow removal | 100 | 0 | 0 | 0 | 0 |
| Signing | 100 | 0 | 0 | 0 | 0 |
| Curb & gutter work | 0 | 0 | 100 | 0 | 0 |

City officials were also asked to comment on the types of cooperative projects in which they had been involved on an inter-jurisdictional basis. Projects or programs of this type have the potential to help local jurisdictions utilize their resources more economically while maintaining essential services. Officials were asked to state whether or not they had been involved in equipment or crew sharing projects, joint materials purchasing, joint materials or stockpile utilization, shop facilities sharing, and others. Results are presented in Table 9.

In general, cities in smaller size categories had participated in fewer cooperative projects than their larger counterparts. The only exception was in the area of shop facility sharing. Nine cities in the smaller three categories had been involved in some kind of shop-sharing agreement, while only one city in the larger two categories had shared shop facilities. The larger cities, however, had a much higher frequency of participation in both equipment sharing and joint materials purchasing. Six of the eleven responding largest cities had participated in both equipment sharing and joint materials purchasing. Crew sharing, joint stockpile utilization, and other cooperative projects were much less common than either equipment sharing or joint materials purchasing.

TABLE 9. FREQUENCY OF PARTICIPATION IN INTER-JURISDICTIONAL COOPERATIVE PROJECTS BY NORTH DAKOTA CITIES, 1986.

| Type of Cooperative Project | Yes | No |
|---|---|---|
| | ----(percent)----- | |
| **Population 0-100** | | |
| Equipment sharing | 7 | 93 |
| Crew sharing | 7 | 93 |
| Materials purchased jointly | 4 | 96 |
| Materials/stockpiles shared | 4 | 96 |
| Shop sharing | 15 | 85 |
| Other | 0 | 100 |
| **Population 101-500** | | |
| Equipment sharing | 17 | 84 |
| Crew sharing | 7 | 93 |
| Materials purchased jointly | 7 | 93 |
| Materials/stockpiles shared | 7 | 92 |
| Shop sharing | 6 | 94 |
| Other | 11 | 89 |
| **Population 501-1000** | | |
| Equipment sharing | 9 | 91 |
| Crew sharing | 4 | 96 |
| Materials purchased jointly | 9 | 91 |
| Materials/stockpiles shared | 9 | 91 |
| Shop sharing | 0 | 100 |
| Other | 0 | 100 |
| **Population 1001-5000** | | |
| Equipment sharing | 17 | 83 |
| Crew sharing | 4 | 96 |
| Materials purchased jointly | 24 | 76 |
| Materials/stockpiles shared | 28 | 72 |
| Shop sharing | 4 | 96 |
| Other | 0 | 100 |
| **Population Over 5000** | | |
| Equipment sharing | 55 | 46 |
| Crew sharing | 18 | 82 |
| Materials purchased jointly | 55 | 46 |
| Materials/stockpiles shared | 9 | 91 |
| Shop sharing | 0 | 100 |
| Other | 75 | 25 |

## FINANCING OF CITY STREETS

Cities receive funds from several sources to finance the construction and maintenance of their street systems. These include:

1. Special assessments
2. General obligation bonds
3. Property tax levies
4. Transfers from the county
5. Highway Distribution Fund
6. Federal Revenue Sharing, and
7. Federal Aid Urban program

The approximate share of 1983 total net receipts of each of these sources is presented in Figure 1 (exclusive of Federal Aid Urban funds).[3] The most significant sources of revenues for city streets include property taxes and special assessments, long term borrowing, the city share of the Highway Distribution Fund and the Federal Aid Urban Program. Each of these funding sources are described in the following paragraphs.

### Federal Aid For City Streets

Federal aid is available to North Dakota's cities under a variety of programs, but the two major sources of federal aid are the Federal Aid Urban program and funds available for urban extensions under the Federal Aid-Primary program. In addition,

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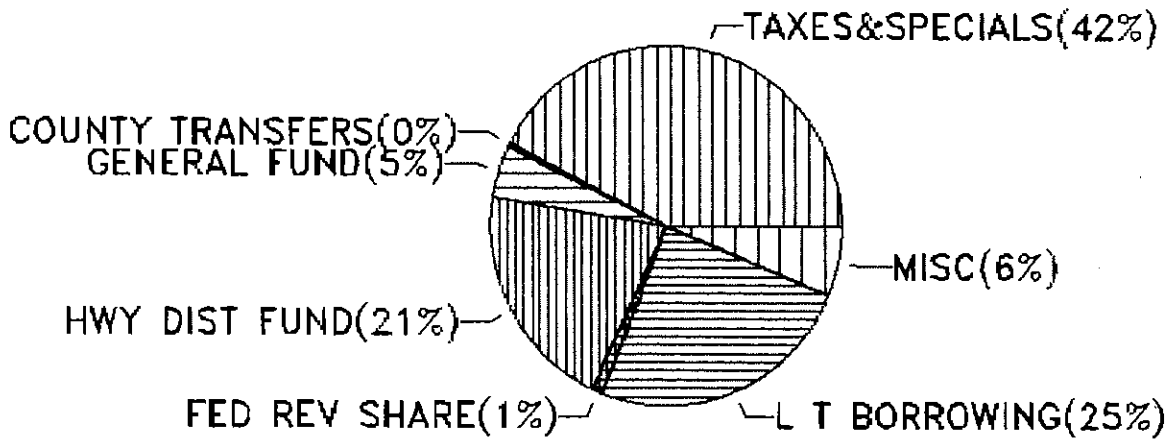
[3]Federal Revenue Sharing for local jurisdictions has since been eliminated.




TOTAL 1983 NET RECEIPTS : $55,663,532

Figure 1. Incorporated City Net Receipts for Streets, 1983

Source: "North Dakota Highway Statistics, 1984", ND State Highway Department

cities benefit from federal funds in that many interstate, state and county highways which are eligible for federal funds pass through or near cities and are constructed partially with federal funds.

The Federal Aid-Urban program funds available historically are presented in Table 10. Funds from the Federal Aid Urban program have been stable over the ten year period, and recently have amounted to approximately 3.9 million dollars per year.

TABLE 10. FEDERAL AID URBAN APPORTIONMENTS TO NORTH DAKOTA, 1976-1985.

| Year | Urban Funds |
|---|---|
| | (dollars) |
| 1976 | 4,393,059 |
| 1977 | 7,870,450 |
| 1978 | 3,890,450 |
| 1979 | 3,841,894 |
| 1980 | 3,841,894 |
| 1981 | 3,841,894 |
| 1982 | 3,824,347 |
| 1983 | 3,841,895 |
| 1984 | 3,881,097 |
| 1985 | 3,881,097 |

Source: "North Dakota Highway Statistics, 1985", Planning Division, North Dakota State Highway Department.

In addition to funds from the Federal Aid Urban Program, the State Highway Department provides funds from the Interstate

Highway program which are transferred over to be made available for city street construction projects. Approximately $6.1 million per year are transferred for urban projects, bringing the total federal funds available for Federal Aid Urban projects to approximately $10 million per year.

These funds are allocated to North Dakotas 13 urban areas (cities with population greater than 5000) for a variety of projects such as complete street construction, reconstruction, resurfacing, interchange construction, one-way pair development, traffic signaling and pedestrian facilities.

Historical federal funds spent on urban projects in North Dakota's 13 urban areas are presented in Table 11.

TABLE 11. URBAN STREET AND HIGHWAY IMPROVEMENT PROJECT EXPENDITURES, 13 URBAN AREAS, 1976-1985, BY CITY.[a]

| City | Federal Funds | State Highway Dept. Funds | City Funds | Total |
|---|---|---|---|---|
| | (millions of dollars) | | | |
| Bismarck | 16.1 | 1.4 | 4.4 | 21.9 |
| Devils Lake | 5.6 | 1.1 | 0.6 | 7.3 |
| Dickinson | 5.1 | 0.5 | 1.4 | 7.0 |
| Fargo | 21.2 | 1.5 | 3.0 | 25.7 |
| Grafton | 1.1 | 0.1 | 0.3 | 1.5 |
| Grand Forks | 9.5 | 0.7 | 5.0 | 15.2 |
| Jamestown | 3.9 | 0.6 | 0.6 | 5.1 |
| Mandan | 8.0 | 1.0 | 1.0 | 10.0 |
| Minot | 17.1 | 2.2 | 3.0 | 22.3 |
| Valley City | 2.7 | 0.3 | 0.7 | 3.7 |
| Wahpeton | 2.6 | 1.1 | 0.5 | 4.2 |
| West Fargo | 2.9 | 0.3 | 0.8 | 4.0 |
| Williston | 3.3 | 0.4 | 0.7 | 4.4 |
| Total | 99.1 | 11.0 | 22.1 | 132.2 |

[a]Totals may not add due to rounding.
Source: Planning Division, ND State Highway Department, unpublished data.

The 13 urban areas are responsible for submitting annually lists of projects for which they are requesting aid through the Federal Aid Urban Program. In 1985, 96 projects were submitted to the State Highway Department for consideration. Federal funds were available to fund only 15 of these 96 projects. In 1986, 93 projects have been submitted to the State Highway Department with a total projected cost of approximately $107 million dollars. Total project costs by city are presented in Table 12.

TABLE 12. URBAN PROJECT REQUESTS FOR FEDERAL FUNDS, BY CITY, 1986.

| City | Total Cost of All Projects |
|---|---|
| Bismarck | $ 6,650,000 |
| Devils Lake | 7,850,000 |
| Dickinson | 7,690,000 |
| Fargo | 34,400,000 |
| Grafton | 1,400,000 |
| Grand Forks | 12,500,000 |
| Jamestown | 1,711,000 |
| Mandan | 13,384,000 |
| Minot | 6,295,000 |
| Valley City | 2,050,000 |
| Wahpeton | 1,294,000 |
| West Fargo | 6,900,001 |
| Williston | 4,800,000 |
| Total | $ 106,924,001 |

Source: Planning Division, ND State Highway Department, unpublished data.

Specific projects submitted for federal funds are selected on the basis of a priority ranking system which takes into account such factors as traffic volume, congestion problems, types of

vehicles utilized on the route, the city's own priority and others. All projects submitted are then prioritized on a statewide basis and selected for funding. It is apparent with total project requests of $107 million and average annual funds available of approximately $10 million that the total funds available are far short of meeting the needs and wants of cities regarding major construction and rehabilitation projects.

The outlook for continued Federal Aid is questionable. One of two options appear to be forthcoming. First, monies available from the Federal Aid Urban program may likely be continued, however, funds available to be transferred from the interstate program may be substantially reduced or eliminated. Alternatively, block grant programs may replace the current ones. If so, urban program funds may be continued, but funds formerly transferred from the interstate program may be required to be spent only on the interstate system. Indications are that Urban funds will be continued, but funds formerly transferred from interstate to urban programs are in jeopardy.

State Highway Distribution Funds for Cities

Funds distributed to the cities from the Highway Distribution Fund are an important source of revenue for all North Dakota cities. The amount of funds allocated to a particular city is based on a formula according to the number of vehicles registered in the county and population of the city. Total funds allocated

to all cities in North Dakota in the 1985 fiscal year amounted to approximately 11.7 million dollars (Table 13).

TABLE 13. ACTUAL AND PROJECTED CITY APPORTIONMENTS OF HIGHWAY TAX FROM HIGHWAY DISTRIBUTION FUND, ALL NORTH DAKOTA CITIES, 1973-87.

| Fiscal Year | City Apportionments |
|---|---|
| | (dollars) |
| 1973 | 4,000,000 |
| 1974 | 6,073,000 |
| 1975 | 6,260,000 |
| 1976 | 6,718,000 |
| 1977 | 7,098,000 |
| 1978 | 8,180,000 |
| 1979 | 8,661,000 |
| 1980 | 6,666,000 |
| 1981 | 8,619,000 |
| 1982 | 10,969,000 |
| 1983 | 11,413,000 |
| 1984 | 11,937,914 |
| 1985 | 11,665,977 |
| 1986 (proj.) | 10,676,000 |
| 1987 (proj.) | 10,676,000 |

Source: Planning Division, North Dakota State Highway Department, unpublished data.

The cities' allocation of funds from the Highway Distribution Fund has grown steadily from $4.0 million in 1973 to almost $12 million in 1984 and 1985. Projections are, however, that this allocation will fall in the 1986-87 biennium to an average of $10.7 million per year. This reduction is attributed to the fall

in the level of the Highway Distribution Fund projected for the 1986-87 biennium.

Long Term Borrowing

Funds made available from issuing long term bonds is a major share of total funds available for city street programs. In 1983, 25 percent of all receipts for city streets came from bonding (exclusive of Federal Aid Urban Funds). Total funds available from issuing these obligations have been highly variable, ranging from $5.3 million in 1979 to $33.8 million in 1980. Total funds available from bonding in 1983 were $13.7 million.[4]

Property Taxes and Special Assessments

The largest share of total city receipts for streets is generated by local property taxes and special assessments. Forty two percent of total receipts (non-Federal Aid Urban) were collected through taxes and special assessments, or approximately $26.6 million in 1983. Revenues available from property taxes and special assessments are under the control of the cities, and therefore each city is able to tax up to a level necessary to accommodate the perceived needs and wants of the residents.

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[4]"North Dakota Highway Statistics, 1984" Planning Division, ND State Highway Department.

## TRENDS IN CITY STREET FINANCE

One of the major concerns to city street officials is the changing philosophy at the federal level regarding the extent of federal involvement in providing funds for city street projects. As indicated earlier, approximately $10 million per year has been available for North Dakota cities from the Federal Aid Urban program alone. A major policy shift whereby federal responsibility would be reduced and passed back to state or local jurisdictions would create significant changes at the local level. If required to replace federal aid through state or local financing programs, existing programs would have to be expanded substantially or new funding sources developed.

Currently federal officials are considering federal involvement only in roads of national significance, which would likely include only the interstate and primary system. Otherwise, all roads and streets would be the responsibility of either state, local or city jurisdictions. Reduced federal involvement, however, would likely have associated with it some tax relief in the form of reduced federal motor fuel taxes. However, from North Dakota's perspective, even if the state could replace the reduced federal tax with an equal state tax, the state would still suffer a loss because North Dakota currently receives approximately two dollars back for every one dollar paid in federal highway taxes. The state of North Dakota would therefore have to replace any lost federal tax by twice that amount in state taxes (for example, a reduced 9 cent/gallon federal gasoline tax would have to be

replaced by an additional 18 cent/gallon state tax to net the state the same revenues.)

Another topic gaining attention recently is innovative and creative funding techniques which have been discussed or implemented by cities to finance local street projects. One common topic of discussion among city street officials is that of privatization, whereby private developers are responsible for partial funding of new and expanded street projects. Developers may indeed want to share in some street costs in order to get particular projects financed more quickly and to prevent possible congestion problems in the future. However, it is sometimes difficult to attract private participation, particularly in economically deficient areas. Also, state legislation may be required to allow private participation in street projects.

Some cities in the U.S. have implemented city gasoline taxes to assist in funding street projects. This option may, however, require changes in local or state legislation to be implemented. Also, the potential impacts of such a tax must be evaluated, such as revenue potential, impact on total sales, etc.

In addition to maintaining and seeking additional revenue, city officials are also searching for methods to economize on existing programs. One such method which has been accomplished in one North Dakota city is consolidation of city street activities with another jurisdiction. The City of Hettinger and Adams County recently consolidated their city street and county road

departments into one program.[5] Indications are that the consolidation has been highly successful. Quality of services, particularly within the city, have been upgraded and some costs of operation have been held stable or reduced.

## MAJOR CITY STREET ISSUES

The primary issue facing city street officials in North Dakota is the availability of funds to maintain and construct the network. In the larger cities, availability of funds to finance major construction and rehabilitation projects to accommodate a growing population and traffic base is a chronic problem. Total cost of projects submitted for Federal Aid Urban funds was over $100 million in 1986, while funds available historically have averaged only $10 million per year. The disparity between funds available and project requests for those funds is an indication that a substantial shortfall exists. In addition to funds needed for construction and rehabilitation projects, funds available for maintenance of existing streets continues to be an important issue. Deferring maintenance on streets and roads is a dangerous economic philosophy to follow, given that the payoff on proper maintenance is high in the form of longer street life and lower future reconstruction costs.

Communication and planning efforts are becoming increasingly important to effective long term management of city streets.

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[5]See "Consolidation of Local Highway Departments: The Case of Adams County and the City of Hettinger", UGPTI Staff Paper No. 72, Upper Great Plains Transportation Institute, Fargo ND, April 1986

Cooperation among all jurisdictions is essential to insure maximum resource utilization and to provide a truly integrated road and street network in North Dakota. Increased consideration of activities such as equipment and personnel sharing, cooperative planning efforts among agencies, and efforts to consolidate activities like the local road department merger in the city of Hettinger will become increasingly important as the proper expenditure of scarce funds becomes more difficult. Programs to provide proper transportation planning efforts, especially at local levels, may become more important as economic growth and decline occurs.

Urban sprawl in metropolitan areas is an issue which crosses jurisdictional lines. As North Dakota's cities grow, transportation facilities in the fringe areas often suffer due to the rapid growth in population and traffic and the inability of the street system to accommodate the increase. In addition, development of rural subdivisions is often a problem for both counties and cities. Residents of the subdivisions utilize county roads and city streets while traveling to and from the city and therefore cause heavy concentrations of traffic over local roads.

## RECOMMENDATIONS

Funding of city streets and the effective utilization of those funds appear to be two of the most important issues currently facing city street officials. These issues may be addressed legislatively as follows:

1. Maintain or bolster funds available to the cities from state sources. The Highway Distribution Fund is an important source of funds to the cities, providing approximately 21 percent of city street revenues. Funds from the Highway Distribution Fund to cities should be maintained at least at current levels to provide adequate maintenance and construction funds for city streets.
2. Re-establish planning efforts at the state level which will be charged with assisting local jurisdictions with transportation planning for effective use of scarce funds. Although North Dakota's larger cities likely posses some transportation planning capabilities, scarce financial resources and staff prohibit most cities from performing any long term planning activities.