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## G84-729 Financing Roads, Streets and Highways in Nebraska (Revised August 1992)

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## Financing Roads, Streets and Highways in Nebraska\*

**This is one of a series of NebGuides on financing state and local government. This publication focuses on roads, streets and highways.**

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Roads, streets and highways are among the most important "public goods" provided by government. Public goods are items whose availability can't be limited to those who specifically pay for them. In the case of roads, collective support for an adequate surface transportation system is long-standing, extending from the rutted trails of colonial America to the interstate highways of today.

In fiscal year 1989-90 (hereafter FY 1990), state and local governments in the United States spent \$60.9 billion on highways. This represented about 6 percent of all expenditures by state and local governments. Among direct general expenditure categories, highways ranked third behind education and public welfare, both nationally and in Nebraska. Direct general expenditures are any expenditures other than 1) an intergovernmental transfer, 2) utility expenditure or 3) employee retirement contribution.

State governments supply the largest share of funds for highway construction and maintenance. In FY 1989, states funded 48 percent of all highway expenditures nationally, followed by local governments and the federal government, with 28 percent and 24 percent of the total, respectively. Nearly all federal expenditures are intergovernmental; that is, federal funds are transferred to state and local governments, which then assume construction and maintenance responsibilities. A smaller share of state-generated highway funds also goes to local governments.

Two of the most important determinants of highway construction and maintenance expenditures are mileage and traffic density. In addition, costs are affected by topography (especially bridge needs), motor vehicle weights, wage rates, material costs and numerous other factors.

### **An Overview of Roads, Streets and Highways in Nebraska**

Nebraska's roads, streets and highways (hereafter collectively referred to as "roads," unless more specific identification is appropriate) can be categorized several ways.

Historically, the most common designation has been to identify all federal- and state-numbered highways as primary roads. The Nebraska Department of Roads (DOR) has primary construction and maintenance responsibility for such roads.

All others have been designated as local roads. Responsibility for construction and maintenance of local roads may be assigned to counties, municipalities, townships, sanitary improvement districts or road improvement districts. However, as this was written, the federal government was in the process of moving away from primary and secondary designations. Future reference is expected to be to urban and rural roads.

Nebraska's road system is a product of a relatively large land area (15th largest in the nation), a relatively small population (36th largest), and the concentration of population in the eastern third of the state. Perusal of a Nebraska road map shows many primary and local roads in the area east of a line generally running north from Franklin County to Buffalo County and then northeasterly to Knox County. Roads elsewhere in the state are not only farther apart but, for the most part, carry less vehicle traffic per mile.

### The DOR Classification System

The Nebraska Department of Roads (DOR) uses a classification system that places each public road in Nebraska in one of four categories (*Table I*).

| <b>Table I. State and locally maintained road mileage in Nebraska, by road category, selected years.</b> |                          |             |             |             |
|--|--------------------------|-------------|-------------|-------------|
| <b>Road Category</b>   | <b>1960</b>              | <b>1970</b> | <b>1980</b> | <b>1991</b> |
|  | <i>----- Miles -----</i> |             |             |             |
| <b>State-Maintained Roads</b>  |                          |             |             |             |
| ---Rural   | 8,890                    | 9,244       | 9,325       | 9,365       |
| ---Municipal   | 392                      | 481         | 555         | 586         |
| -----State Subtotal  | 9,282                    | 9,725       | 9,880       | 9,951       |
| <b>Locally Maintained Roads</b>  |                          |             |             |             |
| ---Rural   | 88,020                   | 84,610      | 79,638      | 78,496      |
| ---Municipal   | 5,423                    | 6,110       | 6,783       | 7,436       |
| -----Local Subtotal  | 93,443                   | 90,720      | 86,421      | 85,932      |
| <b>TOTAL</b>   | 102,725                  | 100,445     | 96,301      | 95,883      |
| <b>Source: Nebraska Department of Roads, <i>Selected Highway Statistics</i>, various years.</b>          |                          |             |             |             |

On December 31, 1991, there were 95,883 miles of public roads in Nebraska, of which the state had maintenance responsibility for 9,951 miles. About 94 percent of the state's roads were in rural areas. The remainder were federal- and state-numbered highways that passed through municipalities. Highways that pass through municipalities also are used as city (village) streets. If the highway is widened or otherwise improved beyond normal state specifications within the city limits, then state and city share in its maintenance costs. However, the actual physical maintenance is carried out by either the state or municipality, using a maintenance agreement with the other party.

Political subdivisions (mostly counties, cities and townships) maintained 85,932 miles, or nearly nine times as much as the state in 1991. Like state-maintained roads, more than 90 percent of the local road mileage was in rural areas.

Between 1960 and 1991, total road mileage in Nebraska declined by 6,842 miles, or 6.7 percent. This reduction resulted entirely from the abandonment of local rural roads, especially in sparsely settled areas of central and western Nebraska. Meanwhile, municipal street mileage grew steadily during the 31-year period, while state-maintained rural road mileage moved irregularly higher.

The DOR estimates that vehicle miles traveled in Nebraska reached a record 14.1 billion in 1991. Of this total, passenger cars accounted for 12.5 billion miles. The remainder was primarily truck mileage. In response to much higher fuel prices, total vehicle miles traveled appeared to be leveling out at about 11.5 billion in the 1979-83 period. However, consumers adjusted to higher nominal fuel prices and, in the last half of the 1980s, real (inflation-adjusted) fuel prices actually declined. Thus, vehicle miles traveled have been in a steady uptrend in recent years.

## Surface Type

Nebraska's roads have steadily improved over time. As indicated in *Table II*, the DOR classifies each road according to one of four surface types, with earth the lowest classification and rigid asphalt, concrete or brick the highest. Note that the general pattern has been to step up from one surface type to the next between 1980 and 1991. For example, rigid surface mileage of state roads in rural areas increased by about 2,000 miles during this period. Meanwhile, non-rigid bituminous mat and asphalt mileage fell by about the same amount. (A non-rigid bituminous mat, asphalt surface is "cold-mixed" on location and applied to the depth of less than seven inches. Rigid asphalt has been "hot-mixed" and has a thickness of seven inches or more.)

In the local road category, gravel, non-rigid and rigid road mileage increased while earth road mileage decreased.

Improvements in road quality benefit most citizens. But at the same time, these improvements have associated costs. Therein lies the funding challenge.

| Table II. Surface type of state and locally maintained road mileage in Nebraska, by category, 1980 and 1991. |                   |        |                                      |                                   |        |
|--|-------------------|--------|--------------------------------------|-----------------------------------|--------|
| Road Category  | Earth             | Gravel | Non-Rigid Bituminous<br>Mat, Asphalt | Rigid Asphalt;<br>Concrete; Brick | Total  |
|  | ----- Miles ----- |        |                                      |                                   |        |
| State Roads, Rural   |                   |        |                                      |                                   |        |
| 1980   |                   | 201    | 4,020                                | 5,104                             | 9,325  |
| 1991   |                   | 79     | 2,237                                | 7,049                             | 9,365  |
| State Roads, Municipal   |                   |        |                                      |                                   |        |
| 1980   |                   |        | 105                                  | 450                               | 555    |
| 1991   |                   |        | 57                                   | 529                               | 586    |
| Local Roads, Rural   |                   |        |                                      |                                   |        |
| 1980   | 15,217            | 58,879 | 4,651                                | 891                               | 79,638 |
| 1991   | 12,142            | 60,535 | 4,754                                | 1,065                             | 78,496 |
| Local Roads, Municipal   |                   |        |                                      |                                   |        |
| 1980   | 146               | 1,431  | 1,424                                | 3,782                             | 6,783  |
| 1991   | 123               | 1,217  | 1,421                                | 4,675                             | 7,436  |
| Source: Nebraska Department of Roads, <i>Selected Highway Statistics</i> , various years.                    |                   |        |                                      |                                   |        |

## Funding for Roads in Nebraska

While political subdivisions have the authority to levy property taxes for local road improvements, no property tax revenues have ever been used for the construction and maintenance of state highways. Instead, the state generates revenue entirely from "user funds," so named because these funds come from those who use the roads (*Table III*).

| <b>Table III. Funding sources for constructing and maintaining public roads, streets, and highways in Nebraska, by funding source, 1990 and 1991.</b> |                                     |             |
|---|-------------------------------------|-------------|
|   | <b>Millions of Dollars Received</b> |             |
| <b>Funding Source</b>   | <b>1990</b>                         | <b>1991</b> |
| <b>State "Highway User Funds"</b>   | \$329.3                             | \$347.7     |
| -----Motor Fuels Taxes  | 213.0                               | 225.9       |
| -----Motor Vehicle Registrations  | 51.1                                | 49.8        |
| -----Motor Vehicle Sales Taxes  | 64.4                                | 71.4        |
| -----Miscellaneous/Investment Earnings  | .8                                  | .6          |
| <b>Local Property Taxes and Special Assessments</b>   | 60.8                                | N.A.*       |
| <b>Federal Aid</b>  | 117.7                               | N.A.*       |
| <b>TOTAL</b>  | 507.8                               | N.A.*       |
| *Not available.<br>Source: Nebraska Department of Roads, unpublished data.  |                                     |             |

State collection of tax revenues from highway users began in 1906 with the licensing of motor vehicles. Later, in 1925, the first tax was imposed on gasoline, and in 1953 taxes were initiated on special fuels such as diesel. In 1970, after the state had shifted from the property tax to sales and income taxes, motor vehicle sales taxes became yet another source of user funds.

In contrast to counties and municipalities, the purpose of subdivisions such as townships and road improvement districts is almost exclusively limited to the construction and maintenance of roads. While most locally generated funds come from property taxes, some funds come from citizens who directly benefit from road improvements. For example, if a city street is upgraded from gravel to asphalt, citizens who own property on that street may be assessed for that improvement.

Federal funds have been made available to the DOR and political subdivisions through numerous programs, of which the Intermodal Surface Transportation Efficiency Act of 1991 is the most recent. Sometimes federal aid is specified for a particular road or bridge project; other types of federal aid may be used at the discretion of the DOR or local officials. Frequently, federal funds are available only if matched by a required percentage of state or local funds. Moreover, construction or maintenance partially paid for with federal funds generally must meet exacting specifications.

### The Highway Trust and Allocation Funds

The crucial links to financing Nebraska's road system are the Highway Trust and Allocation Funds. Established by 1969 legislation and subsequently amended several times, these funds act as dual funnels, with each of them being both a collection and distribution point for funds used in road construction and maintenance.

The Highway Trust Fund is administered by the state treasurer, with cooperation and assistance from numerous other governmental entities, including county treasurers, the Department of Revenue, the Department of Motor Vehicles, and the Department of Roads. Funds for the Highway Trust Fund come primarily from three separate user funds (*Table III*). In 1991, \$347.7 million flowed through the Highway Trust Fund, more than double the \$168.8 million of 1980.

The major source of income for the Highway Trust Fund is the tax on motor fuels. In 1991, this tax generated \$225.9 million, up from \$104.6 million in 1980. Most tax revenue from motor fuels continues to come from gasoline, although gasoline has declined in importance relative to gasoline-ethanol blends. As of July 1, 1992, Nebraska had the fourth highest gasoline tax in the nation; only Rhode Island, Illinois and Connecticut were higher (*Table IV*).

**Table IV. Motor fuel taxes levied in Nebraska, by unit of government and purpose, 1992.**

| Government Unit/Purpose  | Tax Rate Per Gallon/July 1, 1992                   |                 | Total Taxes Collected, 1991 |
|--|--|-----------------|-----------------------------|
|  | All Motor Fuels Except Ethanol Blends <sup>a</sup> | Ethanol Blends  |                             |
|  | <i>cents</i>                                       | <i>(\$ mil)</i> |                             |
| <b>State:</b>  |  |                 |                             |
| -----For Highway Trust Fund  | 10.5   | 8.5             | 95.9                        |
| -----For City and County Road Fund   | 2.0  | 2.0             | 19.1                        |
| -----Variable Excise Tax for DOR   | 11.1   | 11.1            | 110.9                       |
| State Subtotal   | 23.6   | 21.6            | 225.9                       |
| <b>Federal</b>   | 14.1   | 8.7             | 150.4                       |
| <b>TOTAL</b>   | 37.7   | 30.3            | 376.3                       |
| <sup>a</sup> Federal tax on special fuels (diesel) is 20.1 cents.<br>Source: Nebraska Department of Roads, unpublished data. |  |                 |                             |

Part of the motor fuels tax is fixed; the remainder varies on a quarter-by-quarter basis. Ethanol-blended gasoline continues to be taxed at a lower rate than gasoline at both the state and federal levels.

The second most important source of revenue, and the fastest growing, is the sales tax on motor vehicles. In 1991 it amounted to \$71.4 million, up from \$24.0 million in 1980. Both higher motor vehicle prices and higher sales tax rates contributed to the near tripling of collections during this period.

A third major revenue source for the Highway Trust Fund is motor vehicle registration fees and permits. In 1991, \$49.8 million came from this source. Registration fees vary greatly, depending on the type of vehicle and whether it is for private or commercial use. In 1991, fees ranged from \$17.50 for a passenger automobile to \$1,146 for a 7-axle tractor-trailer combination. Registration fees have changed little since 1980. However, motor vehicle registration revenues increased about \$10 million during the 11-year period because of increased numbers of motor vehicles.

Before the state treasurer makes a monthly transfer from the Trust Fund to the Allocation Fund, state statutes require certain deductions to be made. For example, motor fuel tax refunds are paid to agricultural and industrial users. More significantly, the portion of the motor fuels tax that varies quarterly is diverted to the state Highway Restoration and Improvement Bond Fund.

If bonds are outstanding, this fund is used to pay interest and principal on those bonds; otherwise, it may be used for direct cash expenditures by the state DOR. In 1991, \$109.6 million went into this fund, none of which was needed for debt servicing. A smaller amount, \$19.2 million, was diverted into a separate account for use by cities and counties. This was equivalent to two cents of the motor fuels tax.

After all deductions are made from the Trust Fund, the DOR receives 53 1/3 percent of the remaining balance. In 1991, the remaining balance was \$194.6 million, leaving the DOR with \$103.8 million. The rest of the Trust Fund (\$90.8 million in 1991) is then transferred to the Allocation Fund, where monies are distributed on a dollar-for-dollar basis to counties and municipalities.

But before apportionments can be determined for individual counties and cities from the Allocation Fund, two further deductions must be made. First, incentive payments are made to counties and cities which either have qualified road or street superintendents, or contract with an engineering consultant. Second, \$384,000 is subtracted annually from the county portion and matched by the DOR to create a special funding program for local bridge construction and maintenance.

Individual counties and cities receive monthly payments out of the Allocation Fund. A number of factors are used to determine specific payments from the fund. These factors and their relative weights are as follows:

| <b>Counties</b>                  |     |
|----------------------------------|-----|
| Rural population                 | 20% |
| Total population                 | 10% |
| Lineal feet of bridges           | 10% |
| Rural motor vehicle registration | 20% |
| Total motor vehicle registration | 10% |
| Local rural roads                | 20% |
| Farm products sold               | 10% |
| <b>Cities and Villages</b>       |     |
| Population                       | 50% |
| Lane miles of streets            | 20% |
| Motor vehicle registrations      | 30% |

In 1991, cities and villages received \$55.0 million from the Highway Allocation Fund, slightly more than the \$54.6 million received by counties.

Highway allocation funds for counties and cities have a local matching requirement. Counties desiring to receive their full apportionment in a current year must have raised an amount in the previous year equal to at least 25 percent of the highway allocation revenue received, exclusive of incentive payments. Cities with a population less than 5,000 have the same matching requirement. For cities over 5,000, the local match is 50 percent.

## **Expenditures for Roads in Nebraska**

In 1990, total expenditures on Nebraska's roads, streets and highways amounted to \$585.5 million (*Table V*). The state Department of Roads accounted for \$321.6 million of this total with rural subdivisions and municipalities roughly splitting the remainder.

| <b>Table V. Expenditures for roads in Nebraska, by function and unit of government, 1990.</b>   |                        |               |               |              |
|---|------------------------|---------------|---------------|--------------|
|   | -----Function-----     |               |               |              |
| <b>Government Unit</b>  | <b>Admin.</b>          | <b>Maint.</b> | <b>Const.</b> | <b>Total</b> |
|   | ----- \$ million ----- |               |               |              |
| State DOR   | 9.4                    | 51.7          | 260.5         | 321.6        |
| Municipalities  | 23.4                   | 36.1          | 67.5          | 127.0        |
| Rural <sup>a</sup>  | 14.9                   | 85.0          | 37.0          | 136.9        |
| <b>TOTAL</b>  | <b>47.7</b>            | <b>172.8</b>  | <b>365.0</b>  | <b>585.5</b> |
| <sup>a</sup> Counties, Townships, Sanitary Improvement Districts, and Road Improvement Districts.<br>Source: Nebraska Department of Roads, unpublished data |                        |               |               |              |

Most money spent on Nebraska roads at the state level goes for constructing new roads. Construction expenditures include capital outlays for new construction, purchase of right-of-ways and payments to other units of government for construction work. Included in the maintenance function are salaries for employees (except administrators) and highway equipment purchases.

Municipalities also spend most of their street budget on construction. However, counties, townships, sanitary improvement districts and road improvement districts spent more than twice as much on maintenance as construction in 1990.

Between 1980 and 1990, expenditures on roads, streets and highways by all levels of government in Nebraska increased by 59.5 percent. During the same period, the general price level (as measured by the gross domestic product deflator) increased by 55 percent. Thus, real (inflation-adjusted) expenditures changed relatively little during the decade.

### **Issues in Financing Roads**

An adequate roads system is a high priority for most Nebraskans, but not all citizens use all roads. Human nature dictates that "my roads" are more important than "your roads." Arriving at an appropriate balance in funding priorities is an ongoing challenge for the State Highway Commission and administrators in the Nebraska Department of Roads. Similarly, counties and cities also are faced with balancing road expenditures with other needed public services.

Beyond this, there are several specific concerns:

1. Should Nebraska have roads that are generally better than adjacent states? Equal to other states?
2. Should we tax ourselves about the same as other states to provide road construction and maintenance? More? Less?
3. Should more state user funds be made available to counties and cities (primarily through the Highway Allocation Fund)?
4. Should some revenues that now flow into the Highway Trust Fund be redirected to other functions of government? In particular, any increases in sales tax rates on motor vehicles?
5. Should ethanol-blended gasoline continue to have a lower effective tax rate than other motor fuels?
6. Are motor carriers taxed appropriately (especially through motor vehicle registration fees), given the amount of road and bridge deterioration they cause?



7. Should additional roads be considered for abandonment in light of budgetary constraints?
8. Should additional roads be placed in the minimum-maintenance category to reduce road and bridge maintenance costs? (As of July 31, 1992, minimum maintenance was designated for 3,758 miles of the state's roads.)
9. Should a statewide effort be made to narrow the gap in individual counties' ability to fund road and bridge maintenance, given its potential impact on economic development?
10. Should the current state Department of Roads be changed to a Department of Transportation to more fully reflect all the transportation functions currently being addressed or likely to be addressed in the future?

Since there are no final answers to any of these questions, vigorous public debate seems assured for the foreseeable future.

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