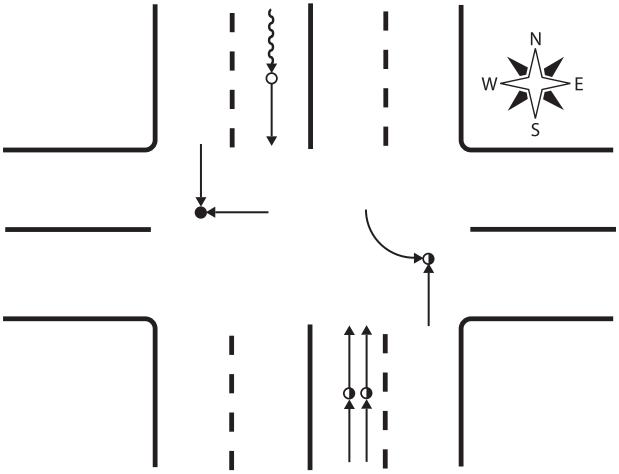


# Programming Highway Construction Projects

## Department of Roads

The Bridge Division periodically furnishes the appropriate District Engineer with Nebraska Bridge Management System (NBMS) recommendations. Information furnished to the district includes a list of all bridges in the district sorted by the structure number (Highway Number followed by mile post). The report also includes bridges that need major improvements in the next 10 years:

**Accident Reports.** Accident reports serve as a great tool in programming safety improvement projects that can help reduce the number of accidents or the severity of accidents. District Engineers and others can use accident information to assist in the prioritization of construction projects already programmed.



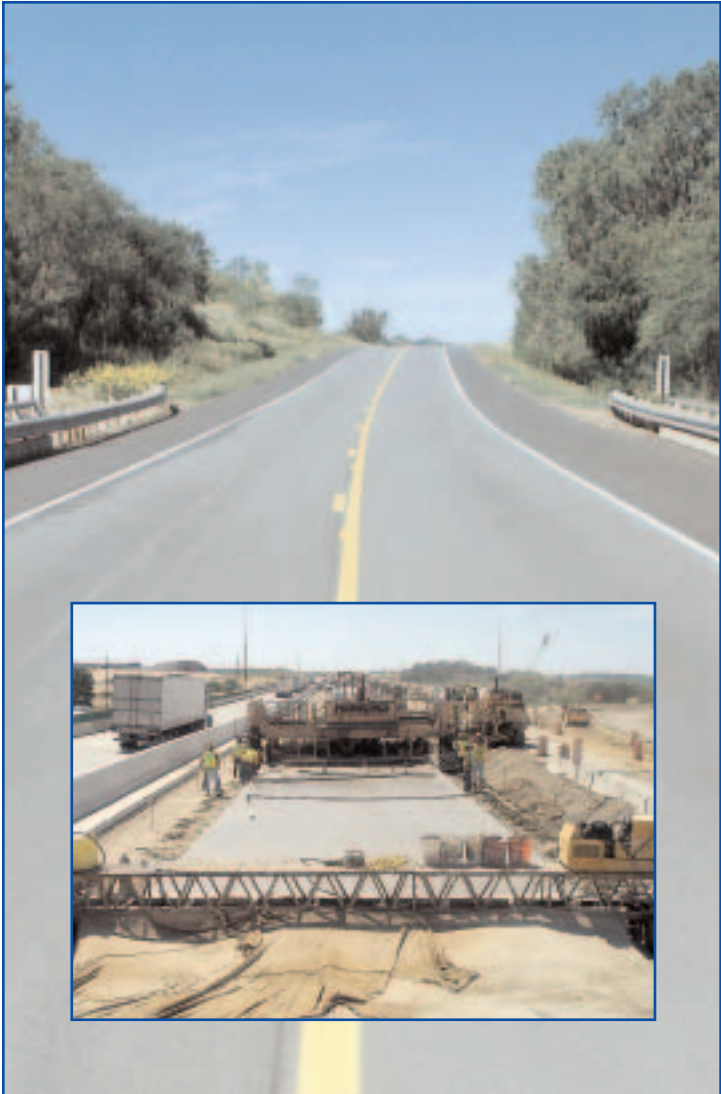
**Statewide Traffic Counts.** The Department's Planning and Project Development Division provides current and future projected traffic volumes for all segments of the Nebraska State Highway System. The projected Average Daily Traffic (ADT) for 20 years beyond the anticipated construction date of a project is used to determine the design criteria to be applied to a specific highway segment. The future traffic volume will affect vertical and horizontal alignment, shoulder width, surfacing type, thickness, and bridge width.

Traffic volumes are also used to analyze the number of lanes needed on high volume highways such as the 6-lane needs of Interstate I-80 from Omaha to the Minden Interchange.

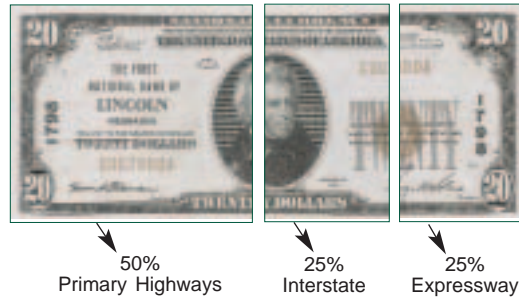


**Public Input.** The NDOR conducts annual program meetings in each of the eight field districts to solicit public input for Department of Roads' projects. The Department has in excess of 1,000 meetings and hearings annually with public involvement, including right-of-way appraisals, negotiations, and purchase of property. The various opportunities for public involvement include:

- Board of Public Roads Classifications and Standards Hearings
- State Highway Commission Meetings
- Nebraska Railway Council Meetings
- Annual District Transportation Program Meetings
- Project-specific Public Information and Open House Meetings
- Informal Meetings with Department of Roads' Staff
- Project-specific Public Hearings
- Nebraska Statewide Long-Range Transportation Plan Workshops



## How Funding is Allocated

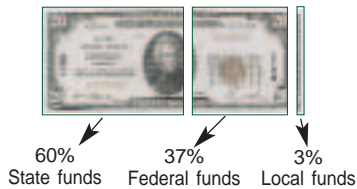


## Fund Allocation

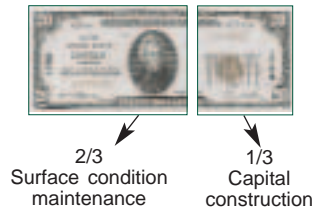
The Nebraska Department of Roads and the State Highway Commission adopted the formula (shown above) for distributing State Highway System funds in August 1997. In December 1997, the Director-State Engineer presented this guideline to the Legislature's Appropriations and Transportation Committees, and the committee members concurred.

The actual percentage will vary from year to year. The annual State Highway Program has the approximate funding percentages shown below.

### Where Funding Comes From



### How Funds Are Used



## Prioritization of projects

**Primary Highways.** One of our eight district engineers, in whose area the project is located, selects the projects. Each district is allocated a construction budget that is calculated as a result of the Department's annual needs study. Each district receives a budget based on that district's 20-year needs for primary highways compared to the total statewide primary highway needs.

**Interstate & Expressway.** The Department of Roads Interstate & Expressway Task Force meets periodically to review the priorities for both systems. The team includes the Deputy-Director for Engineering and the Deputy-Director for Operations. Other members include a Federal Highway Administration representative and members from central office divisions responsible for delivering projects. Input from district engineers is a key part of the project and program selection process.

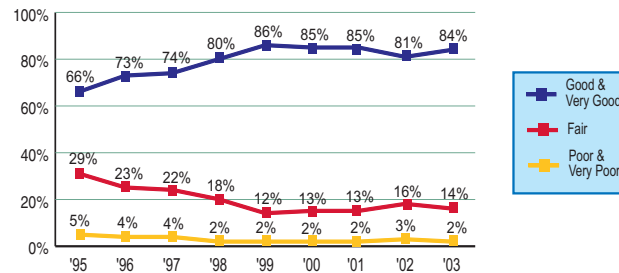
Certain members of the Task Force, along with the appropriate district engineer or their representative, annually travel the entire interstate to visually review the surface condition. The on-site review of the Interstate is usually conducted in March.

## Tools Used to Prioritize Projects

**Pavement Management System.** Pavement data is collected annually on all roads on the State Highway System. Each highway is analyzed and rated in small segments, with pavement information reported using the highway mile posts.

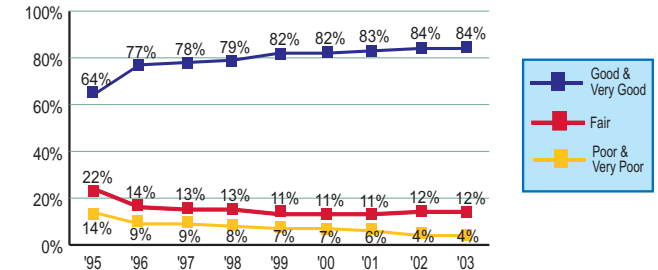
The Nebraska Serviceability Index (NSI) is the rating of the surface condition of pavement and is assigned a numerical value on a scale of 0 to 100, with 0 being the worst condition and 100 the best. NSIs of 70 or greater are considered good and very good. The percentage of pavement in good and very good condition statewide has increased from 55 percent in 1994 to 84 percent in 2003. This is due, in part, to the Department's Pavement Extension Resurfacing Program and the annual resurfacing and construction program.

State System  
Pavement Condition Ratings  
(Nebraska Serviceability Index)



The International Roughness Index (IRI) is a measure of pavement roughness expressed in millimeters per meter. Pavement rated 0 through 0.85 is considered very smooth and 4.22 and over is considered very rough.

State System  
Pavement Smoothness Ratings  
(International Roughness Index)



The data collected on pavement condition is collected during the year and each fall the information is available for Department users to review the condition of specific highway segments. Detailed information on highway surface condition is readily available on the computer for District Engineers and others to use as a tool in prioritizing projects. In addition, the Materials and Research Division (M&R) annually furnishes each District Engineer with various color-coded maps, with pavement condition information that serves as another tool to help prioritize projects. M&R also provides each District Engineer with the annual Pavement Extension Resurfacing Program candidate list.

**Bridge Management System.** In 2003, Nebraska had 15,626 bridges; 3,501 on the state system and 12,125 under the jurisdiction of local governments. Of the total 15,626 bridges, 74 percent meet established bridge standards compared to 73 percent nationally.

Each bridge is inspected and rated every two years. As of 2003, the percentage of structurally-sound and functionally-adequate bridges is as follows:

Percentage of Structurally Sound and Functionally Adequate Bridges

