

PARTNERS IN TRANSPORTATION

**Nebraska
Department of Roads**

A Performance-based Transportation Agency

2004 Report



Leaders in Public Safety and Service since 1895

FROM THE DIRECTOR

Dear Fellow Nebraskans,

In 1895, the first state agency was formed— The State Board of Irrigation. That first state agency had two missions, both which require engineering expertise: (1) provide for irrigation and (2) build roads. This was the predecessor of the Nebraska Department of Roads.

In 1933, our name changed to the Department of Roads and Irrigation. The traveling public at the time nicknamed us the “Department of Ruts and Irritation.” Some would say, “What’s changed?”

A great deal has changed in that intervening time. We’ve paved most of the state highway system, built the interstate system, and completed two-thirds of a 600-mile expressway system. While vehicle traffic has increased from an estimated 2572 million in 1945 to 18.592 billion vehicle miles traveled in 2003, the fatality rate, per 100 million vehicle miles traveled, has decreased from 7.6 in 1945 to 1.6 in 2003.

The United States enjoys one of the highest standards of living in the world. In Nebraska, the work of the Department of Roads over many years has been central to our high standard of living and economic growth. As the employees of the Department continue to develop a safe and reliable transportation system compatible with the natural environment, they produced the largest program in the history of the state with no additional state revenues, the fewest number of employees in nearly 50 years and the lowest crash rate on record. These are your friends, neighbors and fellow Nebraskans and these great people are literally doing more with less for all of us.

Like the employees of the past 109 years, our current employees, and in conjunction with our many partners, continue to build Nebraska. I am proud of them.

On behalf of every Department employee, I submit to you the Nebraska Department of Roads 2004 Annual Report. We welcome your comments on how we are doing and how we can improve. Drive safely.



John Craig


John L. Craig
Director



TRANSPORTATION - MISSION

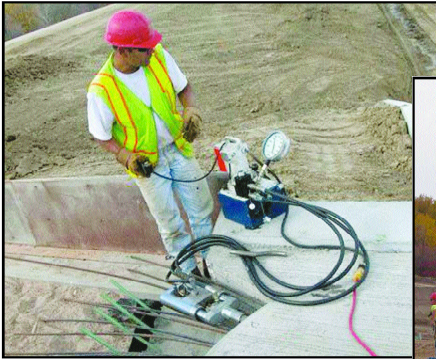
Our Mission Statement

We provide and maintain, in cooperation with public and private organizations, a safe, reliable, affordable, environmentally compatible and coordinated statewide transportation system for the movement of people and goods.

Our Values

➤ Safety

Public safety and service
Employee safety



➤ Integrity

Trust of employees, industry partners,
public, and elected officials



➤ Quality

Build *quality* products,
provide *quality* service
hire *quality* people



The Skyline Bridge, in Omaha, was awarded as co-winner of PCI Journal's prestigious Harry H. Edwards Industry Advancement Award.

HISTORY OF NDOR

Then and Now... the progression of transportation in Nebraska

Since April 24, 1895, there has been an agency responsible for the roads in the State of Nebraska. Though the agency has had many names over the years its mission, whether stated or not, has remained relatively the same.

The first car in Nebraska was reported to have been driven down the streets of Lincoln in 1902. In 2003, there were 2,040,703 registered vehicles in Nebraska. To accommodate the increase in automobile use, the Nebraska highway system has also grown. In 1914, State Engineer Donald Price reported Nebraska had three major highways: The Meridian Highway, present day US-81; the Lincoln Highway, present day US-30; and the Omaha-Lincoln-Denver Highway (O.L.D.), present day US-6 and -34. Today, Nebraska has 109 highways serving all corners of the state. The entire state system has also grown to meet the needs of the traveling public. In 1926, the state highway system totaled 5,330 miles, of which 726 miles were graveled, 127 miles were paved, and 4,477 miles had dirt surfacing. At that time, the Department of Public Works, now known as the Department of Roads, had about 600 employees. Today, the state highway system totals 9,959 miles of road, of which 9,915 are hard surfaced and 44 are gravel roads. NDOR currently has 2,148 employees.

Nebraska is proud of its pay-as-you-go policy of road construction. The policy has served our state well. On July 23, 1938, an article ran in the Toronto Financial Post, the following is a portion of that article. "Motoing through other states en route to Nebraska, where I went to find out how that state does it, and see if there were lessons we could learn in Canada, I was told many times, 'Sure, they have no debt, but have they anything else?' If there is a catch, I failed to find it. Statistics do not show it. The truth is that Nebraska is not a wealthy state and Nebraskans know it. It does not



Survey crew and wagon possibly on Highway 30 in Buffalo County near Kearney, 1929.

undertake services it cannot afford. Having no debt, it can control its expenses. When depression comes or drought dried up the taxpayers' sources of income, state expenses are slashed. But what about the roads? One of the first persons I met in the strikingly-beautiful capital building at Lincoln was Señor Podesta of the Argentine Highways Department, who has settled down for the summer to make a complete study of the Nebraska road building system. 'They get more roads for less money than any other state in the two Americas,' he told me. 'Nebraska has 8,000 miles of surfaced roads in a \$111 million state highway system. Its black top roads are built at a cost of \$4,000 a mile on a gravel base.' Señor Podesta was only one of a number of foreign visitors. Engineers have come from South Africa, Australia, Brazil, and Cuba to study the economy of Nebraska's road building."



4.6 mile paving project in Scottsbluff County between Bayard and Scottsbluff in 1931.

Today with new technology and research NDOR has enhanced the condition and safety of its roads. Roads statistics have been kept since 1945. Since that time, death rates on Nebraska roads have greatly declined. The fatality rate is calculated using the number of traffic fatalities per 100 million vehicle miles traveled. In 1945, the fatality rate was 7.6, in comparison last year the fatality rate was 1.6. To put that into perspective, if the 1945 fatality rate had continued, 1,413 people would have lost their lives on Nebraska roads instead of 293 in 2003.

We are thankful for the hard work, foresight, and planning of those that came before us, so that we can continue our service to Nebraskans.

NEBRASKA TRANSPORTATION AT A GLANCE

Calendar Year 2003

Land Area (*sq. miles*)76,872.4

Population (*2003 Census Estimate*)1,739,291

Annual Fuel Use (*gallons*)

Gasoline512,931,344

Diesel346,192,728

Gasohol.....371,625,696

Total1,230,749,768

Registered Vehicles

Passenger1,081,868

Mobile Home36,066

Bus1,955

Motorcycle.....29,794

Trailers310,205

Dealer13,220

Government36,751

Tax Exempt.....3,776

Truck526,186

Snowmobile.....882

Total.....2,040,703

Licensed Drivers1,342,147

Annual Vehicle

Miles of Travel (*millions*)18,592

State Tax Rates (*cents per gallon*)

Gasoline24.6

Diesel24.6

Gasohol.....24.6

Public Road Miles (*highways, roads, streets*)

City8,280

County.....78,105

State9,959

Total96,344

Accidents and Fatalities

Total Accidents46,602

Fatal Accidents257

Fatalities293

Bridges

State System3,523

County and City System12,119

Total15,642

Airports

Public Use88

Commercial Service6

Commodities Moved (*metric, tons*).....90,243

Transit

Providers71

Counties Served73

Truck Travel (*2002*)

Vehicle Miles on State Highways(*millions*).....1920

Commodities Moved (*billion ton-mile*)25.916

Rail (*2002*)

Miles Operated3,462

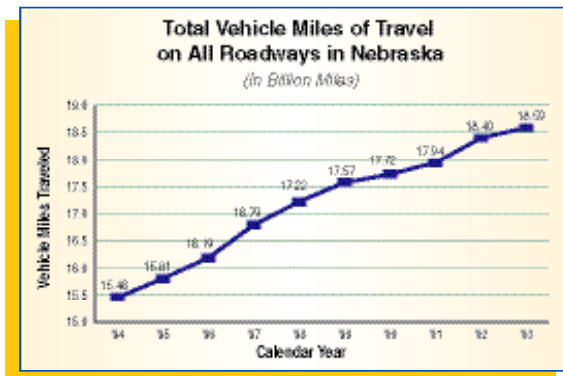
Commodities Moved (*million ton-mile*).....442.2

Waterways

Terminals11

As the steward of the state highway system, the Nebraska Department of Roads has made safety of its employees, contractors, and the traveling public its highest priority. Our mission is to reduce injuries, deaths, and economic losses from motor vehicle crashes in Nebraska.

In 2003, there were 18.592 billion annual vehicle miles of travel on all roadways in Nebraska, an increase of 8.0 percent in 5 years. The approximate 10,000 miles of the state highway system, which is the responsibility of NDOR, carried nearly 64 percent of all the traffic and 87 percent of all the commercial truck traffic. Also over 3.905 billion annual vehicle miles of travel occurred on the Interstate system within Nebraska, an increase of 13.4 percent in 5 years.



Although our traffic has increased, the accident rate per million annual vehicles miles (MAVM) decreased from 1995 thru 2002, and then remained the same in 2003.

In an effort to minimize accidents and fatalities, we continue to build our highways with wider shoulders and bridges, gentler curves and slopes, added recovery areas, improved barrier systems, more advanced traffic devices, and rumble strips to alert drivers.

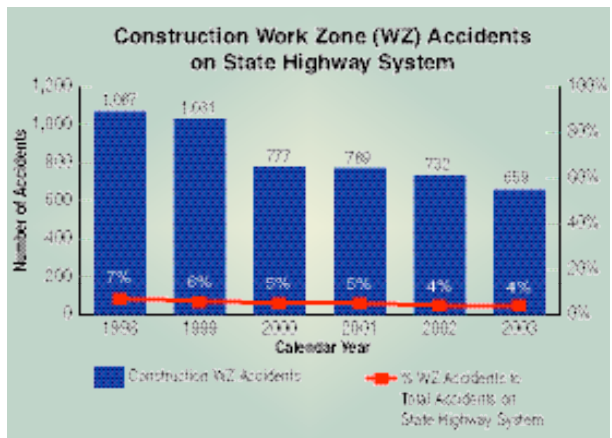
Nebraska Motor Vehicle Traffic Crash Information On All Roadways in Nebraska						
Year	Total Accidents	Persons Injured	Persons Killed	Accident Rate (per MAVM)	Fatality Rate (per HMAVM)	National Fatality Rate (per HMAVM)
'94	44,222	28,253	271	2.91	1.8	1.7
'95	46,436	30,410	254	2.94	1.6	1.7
'96	47,371	30,758	293	2.93	1.8	1.7
'97	47,667	30,311	302	2.86	1.8	1.6
'98	48,183	30,655	315	2.80	1.8	1.6
'99	48,217	29,905	295	2.74	1.7	1.5
'00	47,933	29,216	276	2.70	1.6	1.5
'01	47,894	26,751	246	2.67	1.4	1.5
'02	46,238	23,379	307	2.51	1.7	1.5
'03	46,602	21,984	293	2.51	1.6	1.5
Million Annual Vehicle Miles (MAVM)				Hundred Million Annual Vehicle Miles (HMAVM)		

Department Programs

Work Zone Awareness

Governor Mike Johanns proclaimed April 4-10, 2004, as "Nebraska Highway Work Zone Safety Awareness Week". NDOR and their transportation partners attended the Governor's proclamation signing ceremony and re-dedicated their commitment to enhancing work zone safety for the worker and the traveling public through increased safety training and continued public education. On average, there is a work zone for every 50 miles traveled on U.S. roads.

More than 1,000 people were killed and more than 40,000 injured nationwide in construction work zones in 2003. Eleven of those deaths were in Nebraska. It is important to remember that highway work zones are much more than a temporary inconvenience. Work zones are essential to building and maintaining smoother, improved roadways that ultimately enhance safety.



Safety Committee and Safety Improvement Projects

NDOR's Safety Committee was established 30 years ago in response to the 1973 Highway Safety Act which provided safety funds, called Hazard Elimination. Committee members are from Traffic Engineering, Roadway Design, Secondary Roads, Rail & Public Transportation Divisions, Federal Highway Administration, and Lincoln and Omaha Public Works. Projects are selected from those identified through the hazardous location program or from requests from a District Engineer or local agency. In the last several years funding has varied from \$1.6 - \$1.9 million.

In 1999, funds were used to improve the heavily-traveled intersection of US-77 and Lincoln Street in Beatrice, NE. US-77 is the main north-south corridor through Beatrice and is a four-lane, undivided highway with a speed limit of 35 MPH. Lincoln Street is an undivided two-lane street.

The accident pattern at this intersection involved vehicles northbound on US-77 turning left onto Lincoln Street and being struck by southbound traffic. In the safety improvement project, the US-77 intersection was widened to provide left-turn lanes and protected/permissive left-turn signals.

This project was very effective in reducing the accidents at the intersection. There were 36 accidents in the three years prior to the improvement and only three accidents in the three years after the improvement, a decline of 81 percent. The injury accident rate decreased by 87 percent, and the left-turn accident rate declined by 86 percent.

Bicycle and Pedestrian Safety

The Nebraska Bicycle Guide can be found on NDOR's website at www.dor.state.ne.us "Hiking and Biking" link. The guide has bicycle safety tips, a summary of Nebraska's bicycle laws, and a state bicycle map that shows compatible roadways, traffic volumes and surfaced shoulder information. The State Bicycle Coordinator assists groups and individuals bicycling in and through Nebraska. The goal is to minimize conflicts with roadway construction and maximize bicycle safety on the roadways.

The portion of the Nebraska Bicycle Guide, which has bicycle safety tips and a summary of Nebraska bicycle laws, was sent to law enforcement offices and schools for their use in conducting bicycle safety seminars for young children.

In 2004, NDOR again purchased copies of the safety and training booklet entitled "From A to Z by Bike" and sent them to elementary schools that did not get multiple copies in 2003. Information in the booklets teaches children to ride bicycles safely and defensively. It is believed that when children learn the rules of the road and are taught to ride bicycles safely and courteously, they become better drivers of motor vehicles. NDOR will also send the booklet to police and sheriff departments, who are conducting bicycle safety training for school children.



Safety Belt Campaign Team (From Left) Mary Gress, Donna Hosick, Bobbi Olson, Willie Lomack, Walt Pytko and Steve Olson.

NDOR continues to coordinate and consider accommodations for bicycling and walking facilities as a mode of transportation. Our partners in this endeavor include the Game and Parks Commission, Health and Human Services, the Nebraska Office of Highway Safety, and the Nebraska Division of Tourism.

Employee Safety Program

Employee safety is our highest priority. In October 2003, NDOR's Traffic Engineering and Human Resources Divisions started a month-long safety belt campaign. A few of the activities were: publication of informational pamphlets and displays, email updates, sticker day, and a Safety Belt Poster Contest for children of NDOR employees. The six members of the NDOR Safety Belt Campaign Team planned and coordinated all of these activities and conducted the Safety Belt usage surveys.

The goal of the campaign was to encourage safety belt usage by NDOR employees and to qualify for the Governor's Safety Belt Honor Roll. To qualify for the Honor Roll, a business or organization had to have 80 percent participation in two consecutive unannounced safety belt surveys, conducted at least 30 days apart. The results of NDOR's three surveys were:

• Initial	59 percent
• 1st survey	80 percent
• 2nd survey	86 percent

The Governor presented the Honor Roll certificate to the Department at a December 17, 2003, Proclamation Ceremony at the State Capitol. NDOR was one of six businesses that qualified for the Honor Roll in 2003. Through this campaign the use of safety belts by NDOR personnel increased to 86 percent. State-wide safety belt usage increased from 70 percent in 2002, to 79 percent in 2004.

NDOR's Human Resources Division personnel continue to update safety training modules for its employees. The updated Employee Safety Handbook is posted on the Department's website and is available in a binder. The Handbook provides direction for safety related operations and exposures faced on the job.



HIGHWAY PROGRAM

The Nebraska Highway Program consists of several major components: highway resurfacing and reconstruction; bridge repair and replacement; and maintenance.

Pavement Management System

NDOR's multi-year Pavement Optimization Program (POP), with software developed by NDOR personnel, is now being used. POP contains current data and prediction models for specific sections of roadway on the highway system.

- Pavement Management Data – visual and automated pavement ratings and project scheduling information
- Digital images of the highway surface
- Decision criteria for asphalt and concrete
- Life-cycle cost analysis, budgeting strategies, and multi-year benefit cost analyses

The output information from the POP assists in determining what type of maintenance and construction activities should be recommended on certain sections of roadways. Since POP is a multi-year program, it can also provide information for future-year activities such as timing and cost in relation to other roadways. POP can assist in allocating resources between districts and in determining the most cost-effective approach in programming projects for construction, repair, maintenance, and the Pavement Extension Program which has the goal of extending the life of the pavement an additional eight years.

NDOR also uses Pavement CARE which is software that was developed by the University of Nebraska-Engineering Department. Pavement CARE contains historical information on all sections of roadways on the highway system.

- Condition Assessment – detailed rating data for either flexible or rigid pavement
- Rehabilitation Effectiveness – tracks distresses and maintenance costs on seven rehabilitation strategies

Users can select information by districts for the years 1997 to present. Reports and graphs of the Condition Assessment, can be created. For the Rehabilitation Effectiveness strategies, a trend line is graphed for the life of each strategy. Cost data and output reports, linked to the graphs of the strategies, can be produced. Future integration of the output from Pavement CARE into POP will further enhance NDOR's decision-making process.

Maintenance

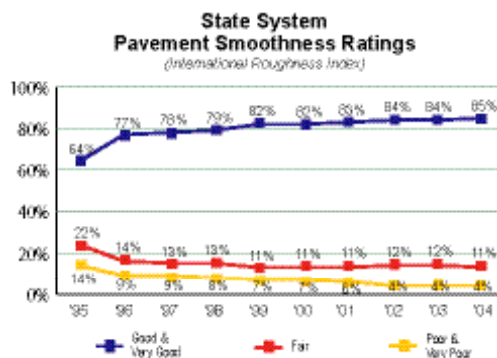
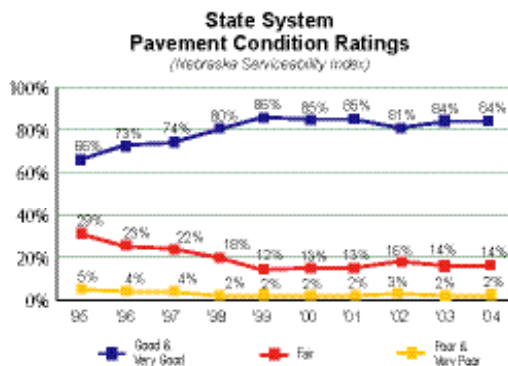
Pavement maintenance is the key to pavement preservation. Nebraska has three types of pavement maintenance: 1) Preventative; 2) Corrective/reactive; and 3) Emergency. All types of maintenance are needed in a complete pavement preservation program. However, emphasizing preventative

maintenance, "completing the right repair on the right road at the right time," may prevent or prolong the need for corrective maintenance. Studies have shown that for every \$1.00 spent on preventative maintenance, the life cycle cost of maintaining a given segment of a roadway can be reduced by \$4.00.

Analyses of the yearly collection of data for the pavement management system are used to develop the annual "State Highway Needs Assessment" document which is published and presented to the Nebraska Legislature each December.

Condition Report

The 9,959 miles of state-maintained roadways in Nebraska had 18.592 billion annual vehicle miles of travel on which 1.906 billion were truck vehicle miles, an increase of 13.3 percent over the past 6 years. Even with this increase in miles of truck traffic, NDOR continues to make progress in improving its roadway condition.



Award for Excellence

In March 2004, NDOR was given the 2003 Perpetual Pavement Award for approximately six miles of US-20 in Holt County. Nebraska was one of eight states that received the annual award which was given by the Asphalt Pavement Alliance. To qualify for this prestigious award, a pavement must be at least 35 years old and never have had a structural failure. The condition of the pavement must illustrate Hot Mix

Asphalt's (HMA) long-life characteristics, excellence in design, quality in construction, and value to the traveling public.

The history of this section of US-20 started in 1938 when it was graded and surfaced with bituminous mat (cold mix asphalt). A second bituminous mat was placed in 1947, a double armor coat in 1955, a three-inch HMA on 1967, another three-inch HMA in 1982 and two inches of asphalt in 1998. Even though this pavement has had more than 65 years of use, with a current average daily traffic of 2,970, 13 percent which is truck traffic, motorists are still using the original pavement structure.

Delivering the Program

The fiscal year 2004 highway construction program contained 175 projects, with an estimated total project cost of \$356.1 million. As of June 30, 2004, 170 of the projects have been let with a total project cost of \$371.2 million. This reflects a 97 percent delivery rate of the one-year construction program.

Progress made through 2004 based on the 1988 Needs Study

1988 Goal	2004 Progress
1. Complete interstate reconstruction in Omaha within 10 years.	→ 100 percent of the interstate projects in Omaha have been completed.
2. Complete 600 miles of the expressway system within 15 years.	→ 426 miles or 71 percent, of the expressway system has been completed or let to contract.
3. Accelerate completion of projects with geometric deficiencies.	→ 564 miles of resurfacing and 133 miles of reconstruction were completed this year.

Public Participation

The Department is very proactive in providing opportunities for public participation. Detailed information is contained in NDOR's "Public Participation Opportunities" booklet on NDOR's website at: www.nebraskatransportation.org/info/.

Public input is solicited every fall during eight District Transportation Program meetings. At these meetings the Highway Construction Program, also known as the one- and five-year construction plan, and published in the Statewide Transportation Improvement Plan (STIP) is addressed. Also long-range planning, public transit, maintenance, intelligent transportation system, and other emerging transportation issues and programs are addressed.

NDOR encourages public participation in all of its transportation projects. Informational open houses, public meetings, and hearings are held during the development and design phases of highway projects. Public meetings were held across the state and averaged nearly seven meetings a month during 2004. Citizen input about projects

is also received through personal contact, in writing, by telephone, and through e-mail through the entire process. Comments and questions can be sent to NDOR's Communication Division, who will respond or direct the correspondence to appropriate divisions for response.

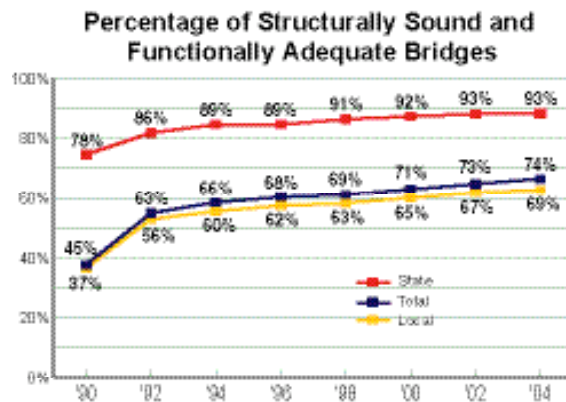
Bridges

NDOR inspects bridges using the Bridge Inspection System of Nebraska (BISON). While in the field, NDOR's bridge inspection personnel input data into computers. The data is analyzed, and the bridges are rated. In addition, BISON links the inspection with digital photography and Geo-Spatial Information System (GIS) mapping.

The bridge ratings are used to establish which bridges will undergo either preventative maintenance; minor or major repair work, or replacement.

Cities and counties use the BISON software to input their bridge inspection data. They send this data to NDOR where it is downloaded into our computer databases. At the end of the year the city and county data is combined with the state data and included in the National Bridge Inventory database.

In 2004, Nebraska had 15,642 bridges; 3,523 on the state system and 12,119 under the jurisdiction of local governments. Of the total 15,642 bridges, 74 percent meet standards compared to 74.6 percent nationally which meet standards.



Project Manager's Conference

In March 2004, NDOR hosted its annual Project Managers' Conference. Information was presented and discussions were held on: construction, homeland security, roadway drainage structures, SiteManager, traffic control, condemnations, and tort liability.

Maintenance Conference

Readiness Response Training was part of the focus at NDOR's May 2004 Maintenance Conference. Nebraska Emergency Management personnel conducted tabletop exercises with responders from each District's Operation Center, and members of the Nebraska State Patrol and the Nebraska Air National Guard.

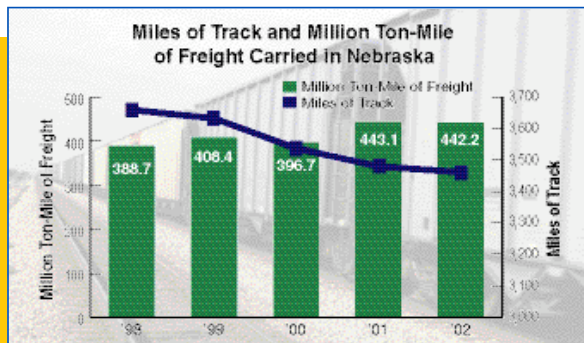
RAIL AND PUBLIC TRANSPORTATION PROGRAM

Twelve railroads operate in the State of Nebraska:

- Two Class I Railroads – Union Pacific Railroad and Burlington Northern Santa Fe Railway.
- Four Regional Railroads – Nebraska, Kansas, and Colorado Railnet, Inc; Dakota, Minnesota, and Eastern Railroad; Kyle Railroad; and Chicago, Central, and Pacific Railroad.
- Three Local Railroads – Nebraska Central Railroad; Nebraska Northeastern Railroad Co.; and NEBKOTA Railway, Inc.
- Three switching or terminal railroads – Brandon Corporation; Omaha, Lincoln, and Beatrice Railway; and Sidney and Lowe Railroad.

Freight-Rail and Truck

Union Pacific Railroad and Burlington Northern Santa Fe Railway are the major rail companies operating in Nebraska, both are privately owned and maintained. Train counts on the Union Pacific corridor between Gibbon and North Platte exceed 140 per day and is the busiest rail freight corridor in the nation. Counts on Burlington Northern Santa Fe corridor between Alliance and Ravenna exceed 70 trains per day. Over the last twenty years rail traffic has doubled in Nebraska.



Freight moved by truck in ton-mile, has increased from 19.251 billion in 1996 to 25.916 billion in 2002.

Some highway/railroad crossings in Nebraska have more train traffic than any crossing in any other state. Nebraska has a total of 6,559 railroad crossings:

- 3,814 public crossings, (265 on state highway system and 3,549 on local roads)
- 2,745 private crossings

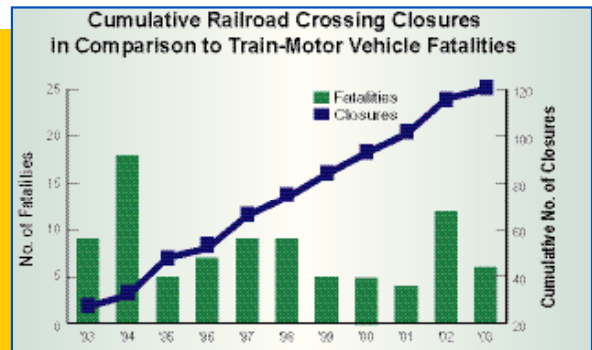


Of the 3,814 public crossings, over 754 carry more than 40 trains per day.



One of these crossings is located in Elm Creek (see photos) and has approximately 129 trains per day on the three mainline tracks. The high exposure factor, which results from the conflict between trains and highway traffic, was a major factor in the Elm Creek community and NDOR conducting a viaduct study with the goal of enhancing the safety of the traveling public. The result was the construction of a viaduct on US-183 which spanned the Union Pacific Railroad and US-30. The project was one-mile-long, included two lanes with surfaced shoulders, and took two years to complete. Local residents recognize the safety improvements to the traveling public with the construction of the viaduct and closure of two railroad crossings.

NDOR's goal is to eliminate railroad crossings and reduce train-motor vehicle accidents and fatalities. Over the past decade, three percent of the public railroad crossings have been closed.



Short-Line Railroads – Light-Density Rail

There are ten shortline light-density railroads in Nebraska, and they are typically operated by smaller railroads. These railroads are vital to Nebraska's economy by providing a valuable service to local shippers who use them to transport their goods to market. NDOR continues to work with the shortline industry and the local shippers to maintain a viable light-density rail system.

Phase I of a study of the light-density rail line system in Nebraska was completed in 2003, and a core network of light-density rail lines were determined. Inspections of tracks and bridges, calculation of cost estimates to upgrade lines to minimum standards, and benefits of upgrading lines for continued operations will be included in the Nebraska Rail Plan Update to be done in 2005.

The federal Light-Density Rail Line Assistance Program provides funds for rehabilitation and improvement projects for these rail lines. The Light-Density Rail Line Assistance Revolving Fund had a balance of \$2,912,207 as of June 30, 2004. The Nebraska Railway Council, appointed by the Governor, administers this program. The Council is an independent agency and meets as needed, but at least once a year. It does not have an office staff, so the Department provides staff support.

Passenger Rail

Passenger rail in Nebraska is limited to Amtrak's California Zephyr that passes through Nebraska on its route between Chicago and San Francisco. It makes stops in Omaha, Lincoln, Hastings, Holdrege, and McCook.

The Nebraska Transit and Rail Advisory Council (N-TRAC), appointed by the Governor, hired a consulting firm to do a feasibility study of the different types of passenger surface transportation systems, including passenger rail. In the report, three corridors were identified: Kearney to Omaha; Norfolk to Omaha; and South Sioux City to Omaha. In January 2004, N-TRAC personnel and the consultant presented the study to the Nebraska State Legislature Transportation Committee.

Public Transportation Passenger Boardings

Fiscal Year	Rural Bus	Urban Bus	Intercity Bus	Total
95	582,648	6,417,445	8,441	7,008,534
96	587,714	6,310,503	8,785	6,907,002
97	567,532	6,349,274	7,767	6,924,573
98	556,623	6,367,468	7,525	6,931,616
99	559,122	6,278,440	6,707	6,844,269
00	573,021	5,914,369	6,854	6,494,244
01	627,327	4,291,003	8,478	4,926,808
02	625,222	5,165,565	12,022	5,802,809
03	641,454	5,149,333	6,400	5,658,315

Current Systems:	61	6	4	71
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Public Transportation Program

Nebraska's public transportation program provides a vital service in the state, particularly in rural areas. This service became even more vital when, in August 2004, the Greyhound Lines, Inc. reduced their bus service to nine cities in Nebraska.

There are 61 rural general public transportation systems which receive state and federal funds to subsidize operations. Four intercity bus systems provide transportation from rural areas to more populated areas of the state, and they also receive federal and state funding. There are six urban bus operations. The operations in Papillion, Bellevue, and Ralston receive state operating funds. The operations in South Sioux City, Lincoln, and Omaha receive both state and federal operating funds.

NDOR administers two federal capital funding programs to assist in the purchase of vehicles and equipment for the transportation of elderly and disabled persons. One program provides funds to the general public transportation systems, and the other one provides funds to private nonprofit organizations.

NDOR is funding a Statewide Public Transit Needs Assessment Study. The study was started in 2004 and is to determine both the short-and long-term transit needs across Nebraska. This will include the quality and location of service, funding, Intelligent Transportation System (ITS), facilities, vehicles, dispatch systems, and related equipment.

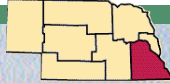
A bus maintenance and storage facility feasibility study has been completed for Kearney's Reach Your Destination Easily (R.Y.D.E.) transit system. Multi-year Congressional earmark funding has been requested. The first-year earmark funds have been received and preliminary design for the facility will begin in 2005.

The National Leadership Forum on Human Service Transportation Coordination was held in Washington, DC in February 2004. Governor Johanns issued an Executive Order creating the Nebraska Transportation Access Working Group in which NDOR has representation. This Group assisted in developing a transportation breakout session at the Governor's Fifth Annual Summit on Workforce Development held in November 2004.

DISTRICT ACTIVITY

Major 2004 Transportation Projects – Construction and Maintenance Costs

DISTRICT ONE



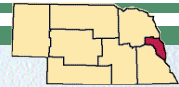
Wilbur to Crete, Hwy N-103

This \$4.4 million, 9.5-mile highway resurfacing project is located between Wilbur and Crete. The project began in November 2002, with culvert extensions. Traffic was not restricted until spring 2003. The road was opened to traffic throughout construction on the existing lanes, temporary lanes, and shoofly detours at the bridges.

The project consisted of grading, culverts, bridges, asphalt shoulders, asphalt surfacing, intersection reconstruction, lighting, and seeding. This project provided an improved intersection at the Farmland Processing Plant with turn lanes and lighting. The uneven surface of the original concrete pavement was corrected. This project improved the safety of a very busy intersection and the ride of the road.

Several challenges were overcome with partnering efforts with the industry, railroad and the contractor. An early start to allow work on the culverts during the first winter allowed work to be completed without restricting traffic. The bridges were originally designed to be constructed in two phases with traffic maintained by traffic signals. The contractor requested to provide a shoofly detour at no extra cost to the state. The cost of the shoofly was equal to the savings of the traffic control, shoring and increased bridge costs.

DISTRICT TWO



N-50 & N-370 interchanges on I-80

In spring of 2002, work began on the last urban section of I-80 west of Omaha. This segment was widened to six lanes and concrete median barriers were added at the interchanges with N-50 and N-370.

This three-year construction project also extended the four lanes on N-370 through the I-80 interchange ramp connections, widened the mainline I-80 bridge over N-370, built N-370 ramps, finished N-50 ramps, and reconstructed four-lanes of pavement on N-50 from Cornhusker Road to Sapp Brothers Drive.

During Phase I, temporary lanes were constructed so two lanes of traffic were open in each direction. Due to the large volume of truck traffic, and a long period of high temperatures, the temporary asphalt surface began to fail. Therefore, trucks were detoured onto N-50/N-370 west to US-6 then south to I-80. This truck detour allowed continuous use of the temporary asphalt lanes.

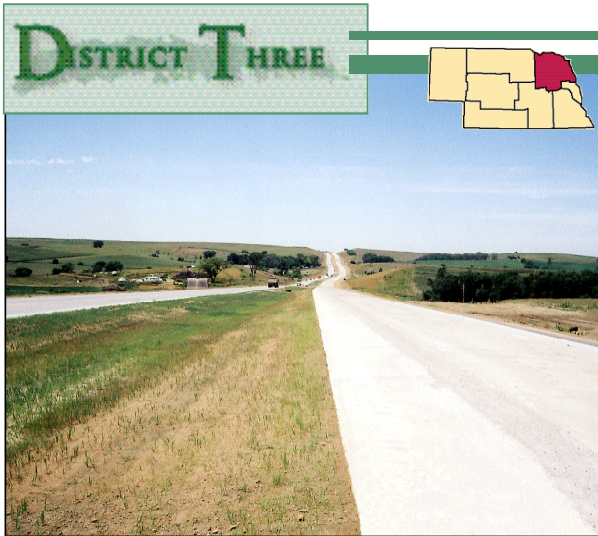
In Phase II traffic was shifted to the newly completed eastbound lanes to allow for the construction of the westbound lanes.

Statistics		Construction Costs	
Area (Square Miles)	7,467	Roadway	\$29,160,885
Population (2003 Census Est.)	403,823	Bridge	6,333,290
Number of Bridges	702	Railroad Viaduct	—
Highway System Mileage	1,576	Total Let to Contract	\$35,494,175
Preventative Maintenance	Reactive Maintenance	Pavement Striping	Snow Removal & De-Icing
\$2,331,000	\$2,300,133	\$678,745	\$1,630,005

FY-2004

Statistics		Construction Costs	
Area (Square Miles)	1,791	Roadway	\$76,271,656
Population (2003 Census Est.)	677,451	Bridge	48,607,784
Number of Bridges	424	Railroad Viaduct	—
Highway System Mileage	504	Total Let to Contract	\$124,879,440
Preventative Maintenance	Reactive Maintenance	Pavement Striping	Snow Removal & De-Icing
\$435,000	\$569,662	\$285,281	\$2,400,218

FY-2004



US-275 Expressway Construction East of Norfolk

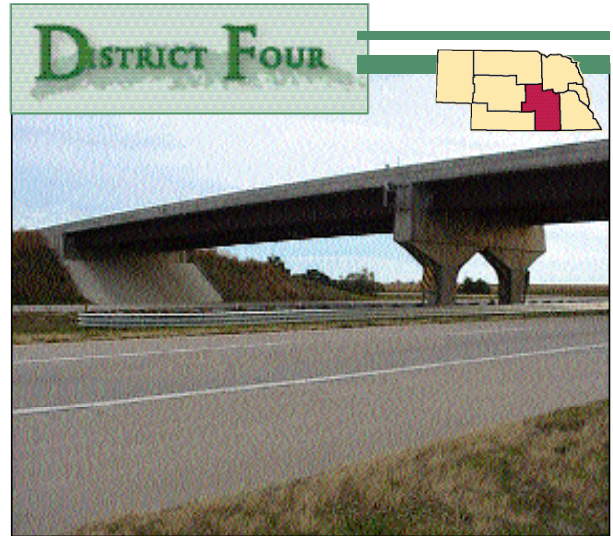
This \$18.3 million project replaced 8.2 miles of two-lane highway with four-lanes of expressway on US-275 just east of Norfolk. The project began in August 2001, and was completed in September 2004. Over 3.5 million cubic yards of dirt were moved, making it the largest single earthwork project performed in the last 30 years. This project consisted of grading, culverts, both concrete and asphalt pavement, and lighting.

In addition to upgrading it to a four-lane facility, the vertical alignment was enhanced to improve sight distance and drivability of this section of highway.

Statistics		Construction Costs	
Area (Square Miles)	8,786	Roadway	\$23,534,095
Population (2003 Census Est)	183,850	Bridge	5,524,961
Number of Bridges	595	Railroad Viaduct	—
Highway System Mileage	1,527	Total Let to Contract	\$29,059,056

Preventative Maintenance	Reactive Maintenance	Pavement Striping	Snow Removal & De-Icing
\$2,174,000	\$2,805,669	\$913,203	\$2,640,907

FY-2004



I-2 over I-80 – Phillips Interchange Overpass

The Phillips Interchange is located on I-80 five miles southeast of Grand Island. The project included the construction of an overpass bridge, replacement of segments of the existing concrete pavement on Highway 2 between the exit ramps, and replacement of the guardrails on the overpass and I-80. Work began May 5, 2003, was accepted on August 24, 2004, and cost approximately \$1.5 million.

The previous overpass was 270 feet long, with a 28-foot wide deck that was in poor condition. The overpass was a concrete girder bridge with 4 spans; the bridge was supported at five locations with three piers and two abutments.

The new overpass is 280 feet long with only two spans, one pier in the center and an abutment at each end, and has a 40-foot wide deck. The new overpass will accommodate the future six-lane interstate. The bridge deck is supported by steel box girders fabricated with High Performance Weathering Steel, which made construction of the longer spans possible. This overpass is among the first bridges constructed using the higher grade weathering steel. Minimizing traffic disruption during construction was a major design consideration for NDOR.

Statistics		Construction Costs	
Area (Square Miles)	9,744	Roadway	\$43,501,221
Population (2003 Census Est)	214,045	Bridge	8,336,387
Number of Bridges	632	Railroad Viaduct	—
Highway System Mileage	1,717	Total Let to Contract	\$51,837,608

Preventative Maintenance	Reactive Maintenance	Pavement Striping	Snow Removal & De-Icing
\$2,093,000	\$3,241,348	\$540,683	\$1,997,895

FY-2004



Scottsbluff – Gering Bypass – Viaduct over BNSF Railway

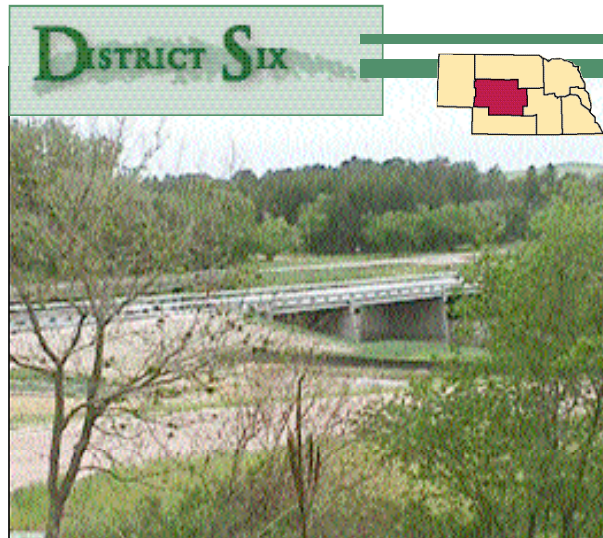
This \$17.2 million expressway project is located on the east side of Scottsbluff and Gering. The project began in August 2003, with a scheduled completion in the fall of 2005. This is the next to the last phase of expressway on N-71, which will link I-80 with Scottsbluff and Gering. This 5.5-mile project connects N-71 with the US-26 four-lane roadway.

The project includes the construction of nine bridges, mechanically stabilized earth (MSE) walls, over 3 million cubic yards of excavation, installation of box- and pipe-culverts and the first use of a dredging operation in the Nebraska Panhandle to build part of the fill. Paving is the next phase of the project and is scheduled to be let in 2005.

Delays caused by rail traffic will be eliminated with viaducts over the Union Pacific and the Burlington Northern Santa Fe railroad tracks. The cities are rezoning the area along the bypass to utilize the expressway as an economic benefit to bring in new businesses to the area.

Statistics		Construction Costs	
Area (Square Miles)	14,187	Roadway	\$18,950,658
Population (2003 Census Est)	89,004	Bridge	996,853
Number of Bridges	377	Railroad Viaduct	—
Highway System Mileage	1,253	Total Let to Contract	\$19,947,511
Preventative Maintenance	Reactive Maintenance	Pavement Striping	Snow Removal & De-Icing
\$1,331,000	\$1,747,874	\$500,705	\$1,360,967

FY-2004



Oconto North – Highway 21

The safety of Highway 21 was enhanced with a new alignment north of Oconto. The last time major construction occurred on this section of highway was 1947. The South Loup River Bridge in Pressey State Park was the longest one constructed in the project. Grading included 2,500,000 cubic yards of dirt, asphalt surfacing, four new bridges, culverts, lighting, and guardrail.

With the completion of the 9.69-mile project, Highway 21 traffic will be on new horizontal and vertical alignment with new bridges. Safety is greatly enhanced with a wider roadway, improved stopping site distances, and passing opportunities. Through grading, gentler sloping roadsides provide recovery areas for run-off-the-road vehicles.

This two-year project was completed in the fall of 2004 at an approximate cost of \$9,181,360.

Statistics		Construction Costs	
Area (Square Miles)	12,803	Roadway	\$24,739,179
Population (2003 Census Est)	83,698	Bridge	854,948
Number of Bridges	351	Railroad Viaduct	—
Highway System Mileage	1,312	Total Let to Contract	\$25,594,127
Preventative Maintenance	Reactive Maintenance	Pavement Striping	Snow Removal & De-Icing
\$574,000	\$2,059,276	\$506,620	\$969,583

FY-2004



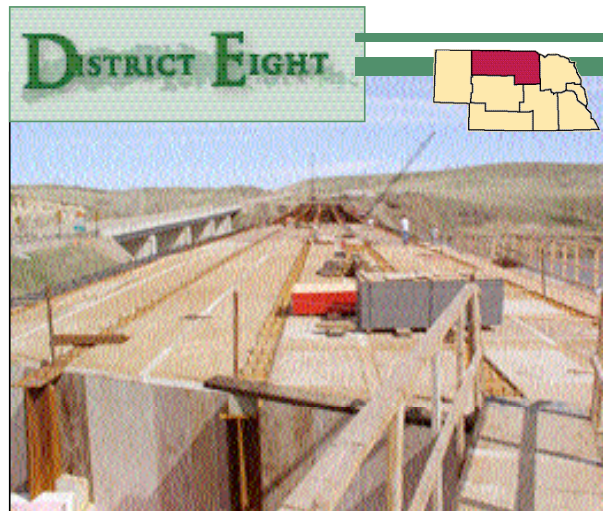
US-6/34/83 – W 4th to E 7th Streets in McCook

This \$3.2 million dollar project was the second of three to reconstruct US-6/34 ("B" Street) through McCook. Work consisted of replacing all of the concrete pavement, storm sewer, water mains, traffic signals, and roadway lighting. The new roadway is a five-lane facility with a common left-turn lane. The new 9-inch concrete pavement was constructed over a crushed concrete base salvaged from the old roadway. In addition, bridge approach repairs to the BNSF Railway viaduct and pavement patching/sealing were accomplished on US-83 south of US-6/34.

Construction began in March 2003, with all work completed in phases under traffic. Temporary traffic signals were used to safely move the nearly 12,000 vehicles, that use this road every day. Temporary driveways and intersections, surfaced with crushed concrete, provided access to businesses along the project. A liaison committee of: McCook Area Chamber of Commerce officials, business owners/managers, and NDOR personnel worked together to keep businesses informed and promote the patronage of stores affected by the project.

The third and final project to rebuild US-6/34 in McCook is scheduled for construction in 2005.

Statistics		Construction Costs	
Area (Square Miles)	9,251	Roadway	\$22,884,610
Population (2003 Census Est)	58,497	Bridge	3,554,066
Number of Bridges	289	Railroad Viaduct	—
Highway System Mileage	1,029	Total Let to Contract	\$26,238,676
Preventative Maintenance	Reactive Maintenance	Pavement Striping	Snow Removal & De-Icing
\$1,675,000	\$1,719,751	\$801,816	\$768,943
FY-2004			



Niobrara River North and South

This project starts 19 miles north of O'Neill and extends for 6 miles north over the Niobrara River basin on US-281 and has an initial estimated cost of \$6,153,291.

The existing asphalt surface will be recycled using a cold-in-place strategy, processing the existing pavement and using it as the base material for the new pavement. Then, an overlay of SuperPave Asphaltic Concrete is applied. The safety of the highway was improved with eight-foot asphalt shoulders, eliminating all cable guardrails, and grading was done to create a flatter foreslope to allow a vehicle to recover if it runs off the road.

The existing bridge, located down stream from the NPPD dam and power plant, shows signs of stress at the south abutment. The constantly changing river channel and natural springs in the area create powerful geological forces, 'shoving' the bridge uphill. Rock riprap keyways have been designed and will be built in an effort to eliminate this threat to the new structure.

The new 651.4-foot bridge is about 267 feet longer than the existing structure. While the existing bridge has four piers, the new structure has only two with a center span of over 246 feet. The project began in September 2003, and is scheduled to be finished by June 2005.

Statistics		Construction Costs	
Area (Square Miles)	13,286	Roadway	\$13,071,937
Population (2003 Census Est)	28,923	Bridge	2,246,971
Number of Bridges	135	Railroad Viaduct	—
Highway System Mileage	1,041	Total Let to Contract	\$15,318,908
Preventative Maintenance	Reactive Maintenance	Pavement Striping	Snow Removal & De-Icing
\$1,095,000	\$1,778,618	\$679,451	\$728,021
FY-2004			

Department Research Highlights

NDOR continues to partner with the public and private transportation industries in its quest to remain in the forefront in using new technology in maintenance and construction activities. Members of the Nebraska Transportation Research Council (NTRC) represent the Department, University of Nebraska, contractors, consultants, cities, counties, and FHWA. The NTRC continues to assist NDOR by reviewing and prioritizing potential Department-funded transportation research. By accessing the Department's Research webpage at <http://ndorapp01.dor.state.ne.us/research/rpms.nsf>, you can view research project summaries and quarterly reports and submit a Research Statement of Need.

Completed Research in FY 2004

Implementation of Bridge Superstructure/Substructure Joint Details

NDOR implemented the new threaded rod concrete bridge continuity system for the first time in the United States on the Clarks Viaduct Bridge.* The threaded rod system is a design to connect the concrete girders over the pier. Using this new system improved the bridge performance and reduced construction costs. This system results in a 10- to 15-percent increase in span capacity when compared to the conventional concrete design, and eliminated distresses at the piers.

*The Clarks Viaduct Project received an American Concrete Institute (ACI) award in 2004.



View of Clarks Viaduct Project using the threaded rod system.



Box girder design which was used on Highway 2 bridge at Grand Island. Note the discontinuity of the girders at the pier, showing two distinct arches. This is the first high performance steel 100 (HPS100) bridge built in the United States.

Development of a Steel Bridge System : Simple for Dead Loads and Continuous for Live Loads

The objective of this project was to evaluate the entire steel bridge system and determine opportunities to improve the design system. Results of the evaluation were the development of a design to replace the previous method of bolting spliced girders in the field, which was time consuming, dangerous, and difficult to achieve. The new steel bridge design details the placement of two simple span girders over the pier and casts the deck slab over the pier. This design was implemented on the N-2 Bridge in Grand Island, and demonstrated a cost savings of four to eight percent. The second phase of this project began in July 2004, and will result in the development of design aid tools for NDOR's Bridge designers. Aside from Nebraska, bridge designers in Colorado, New Mexico, New York, Ohio, and Tennessee have begun to employ this concept, called simple for dead load, continuous for live load.



Sprague Street Bridge over I-680 in Omaha, which replaced a four-span bridge to widen the interstate to six-lanes.

ENVIRONMENTAL STEWARDSHIP

Blanding's Turtle

The Blanding's turtle is listed as a Species of Concern/Species at Risk by the U.S. Fish and Wildlife Service (USFWS). The species is threatened by habitat loss and road kill, particularly in eastern North America. In Nebraska, the species is common at the Valentine National Wildlife Refuge (VNWR), a 71,722 acre management area, where Blanding's conservation has been identified as a wildlife management priority. Within the last decade, road kill of Blanding's turtles has increased within the VNWR on US-83, and the USFWS has been concerned that the long-term stability of the population is threatened.

In 2001, US-83 was reconstructed along the VNWR. During the project's Environmental Assessment preparation, USFWS expressed concern over road kill of Blanding's turtles that was observed near wetlands along the project. In response to the concerns, NDOR designed and installed protective fencing along three wetlands. The fencing was intended to guide the turtles through culverts instead of crossing the road. Wildlife Crossings such as these are being constructed throughout the United States, Canada, and Europe to assist in the safe passage of wildlife through transportation corridors.

In 2002 and 2003, the Blanding's Turtle population was studied by a renowned expert, Dr. Jeff Lang, under a joint contract funded by NDOR and USFWS. The study had three main objectives:

- to determine the distribution and abundance of the species at the VNWR
- to investigate road mortality and effectiveness of the fencing, and
- to develop recommendations for the species' conservation

The study results were received in the spring of 2004 and showed:

- an estimated population size of more than 137,000 Blanding's turtles. (The Valentine National Wildlife Refuge has the largest known population recorded for this species and is an outstanding wildlife resource.)
- fencing significantly reduced road kill of the turtles over the unfenced sites.



Photo by Jon Farrar

Blanding's turtle confronts turtle fence on east side of roadback, Twin Lake wetland along Hwy 83.



Photo by Jon Farrar

Looking north, on Hwy 83, at the Sweetwater Lake wetland. Visible is a culvert beneath the roadway which provides access for turtles to both sides of the wetland.



Photo by Jon Farrar

Adult female Blanding's turtle in shallow water, showing rounded, higher-domed carapace and bright yellow throat characteristic of species.

- recommendations included adding additional fencing at two unfenced wetland areas along the VNWR and US-83, maintenance and improvement of existing fencing, and signage to alert motorists to turtle crossings.



NDOR erected a 'Turtle Crossing' sign within our right of way at the entrance to the VNWR. Additional signs may also be added.



NDOR will move ahead on adding additional fencing at the two unfenced wetland areas identified in the study.

Educational Outreach

NDOR's Environmental Permits Unit initiated a program of educational outreach to schools. The Department's wetland biologists were staff resources, and NDOR's existing wetland mitigation sites were natural resources for science education. The project was initiated in 2003, with a visit to the Lincoln Public Schools (LPS) Head of Science Curriculum. As a result of that meeting, NDOR's biologists created a field trip for a dozen interested LPS science teachers to review two of our sites and determine how they could be incorporated into LPS's wetland science education program.

In the spring of 2004, NDOR hosted more than 120 seventh grade students at our Waverly wetland mitigation bank site. At the site the students received hands on experience with plant, insect, soils, and wildlife identification. Department personnel also worked with North Star High School students in the wetland adjacent to their school to educate them about the wetland and offer education about a career in field biology. NDOR owns and manages 18 wetland mitigation bank sites throughout Nebraska. It is our intent to contact schools near the bank sites to offer them as an educational resource, and to develop educational materials pertinent to each site.

Photo by Steve Duecker



Migratory Birds

NDOR has developed a Cooperative Agreement with the United States Department of Agriculture - Animal and Plant Health Inspection Service (USDA - APHIS) to assist us and our construction project contractors in meeting *Migratory Bird Treaty Act* obligations. The *Migratory*

Bird Treaty Act was originally enacted in 1918 between the United States and Great Britain to make it illegal to 'take' migratory birds, their eggs, feathers, or nests. Migratory birds are any species or family of birds that live, reproduce, or migrate within or across international borders at some point during their annual life cycle.

This affects NDOR's road projects because many of our projects require clearing and grubbing of trees and brush to make way for the new or reconstructed roadway. In Nebraska, during April, May, June, and July, migratory birds build nests in trees and brush. During this time period, if nests with eggs or young are destroyed during construction, it would result in a violation of the Act. Of all the bird species in Nebraska only three are not considered migratory, thus a large number of species are protected by the Act. The agreement with USDA - APHIS will assist us in taking proactive measures to avoid the 'take' of egg nests or young through advance planning, or in the event of an unavoidable conflict, will assist the contractor in obtaining a permit from USFWS.

Four species of geese gather at Grand Island Wetland Mitigation site. Clustered geese include: Canada, Snow, White-Fronted and Hutchinson's Geese.



Operations Centers

Nebraska is moving from a strictly construction and maintenance organization to a highway operations organization. Intelligent Transportation Systems (ITS) have a major role in that effort, and 2004 will see significant ITS deployments in both urban and rural areas. Plans are underway to develop a District Operations Center (DOC) in each of NDOR's eight field districts. The DOC will serve as a regional operational center and be linked to a statewide system. Roadside ITS devices in rural Nebraska will provide communications directly to the DOC in their respective areas. The devices will include cameras, electronic message boards, weather sensing devices, traffic counting and classification tools, and anti-icing systems.

The District 2 Operations Center/Omaha Freeway Management Center will be the most technically sophisticated of the operations centers and will have the capacity to provide limited backup for other centers. The ability to have backup communications to keep the information flowing is the key to coordination in monitoring such crucial elements as: incident management, weather, and emergency response.

Radio communications, at the District 1 office in Lincoln, consist of a hub which allows it to connect with towers in the northern portion of the district. Recently the radio hub was expanded to include the Palmyra yard tower, which provides transmitting and receiving enhancements to the eastern portion of the district. By the end of 2004, the District 1 communications' hub should be connected to the District 1 DOC, moving the DOC closer to full operation.

District 6 has dedicated space and staff for their DOC. In both 2002 and 2003, the DOC was activated and responded very efficiently when disasters occurred on I-80. District 6 is currently in the process of obtaining advance tools to upgrade their DOC and to integrate it into the statewide system. In Districts 3, 5, 7, and 8 the DOCs are "virtual", but plans are in process for obtaining dedicated space and equipment.

Camera Integration Project

The entire 459 miles of Nebraska's I-80 will become a "smart" ITS corridor. Travelers will see electronic message boards at critical locations, and nearly 100 video cameras will be deployed at strategic locations along Nebraska's Highway System. Cameras will be used for traffic management by providing transportation officials visual verification of conditions affecting traffic flow. To date, 10 cameras have been deployed, two in each of the five Districts along I-80. In early 2005, installation of approximately 45 more is planned.

NDOR will maintain exclusive control of the cameras.

Cameras will be kept zoomed out and on the highway system at all times, so as to not invade the privacy of the travelers. The cameras should enhance the quality of Nebraska's transportation system by enabling public viewing of weather-related conditions, and also allowing specific incident information to be gathered more quickly by officials.

Monitoring of the West Dodge Road Construction

Traffic on Omaha's West Dodge Road is expected to surpass 157,000 vehicles per day by 2025. Seventy-percent of the current traffic is bound for points east and west of this heavily developed commercial area. The current construction project will provide grade separation and access control along the roadway. Activities on the West Dodge Project are available on NDOR's website at www.dor.state.ne.us.

An ITS project will be initiated during this major construction. Cameras at 108th and 126th Streets have been installed to allow for traffic monitoring and detecting incidents or closures. Four dynamic message signs will be installed to enable the re-routing of traffic onto one system or another. Bridge deck anti-icing systems will be electronically activated when the conditions dictate their use. From July 2003 through Oct 2004, the West Dodge Project website has been visited 30,585 times.



West Dodge Project between 108th and 114th Streets. The ITS camera is located to the right at 108th Street to monitor traffic along this route.

Roadway Weather Information Systems (RWIS)

Currently, NDOR has approximately 45 Roadway Weather Information Systems (RWIS) in operation throughout the state. The RWIS' equipment collects data, such as temperature of surface and humidity and many have cameras. The data is sent to a computer database at NDOR, where personnel can check the data and react to incidents. Eight new RWIS, all with cameras, will be installed during 2004.



Amber Alert

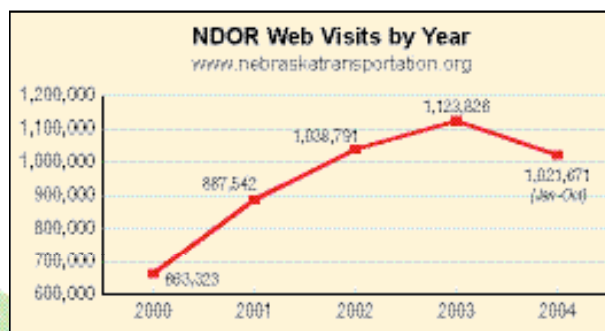
NDOR supports the Amber Alert Program with the use of electronic traffic message signs. Nebraska is

also leading the nation in addressing other means of distributing Amber Alert information, including through the 511 travel information number and other electronic media alerts. The Nebraska Amber Alert Program is a joint venture that includes the Nebraska Attorney General's Office, the Nebraska State Patrol, and the Nebraska Broadcaster's Association.

Homeland Security – Exercises

During 2004, NDOR was involved in three Homeland Security Exercises: 1) Tabletop exercise conducted at NDOR's Maintenance Conference; 2) Full-scale, functional exercise with the scenario of major flooding of the Platte River - NDOR's Lexington and Kearney I-80 maintenance yards moved their personnel and equipment to safety; 3) Functional exercise with major flooding of the Platte River – involved all major State Agencies which address statewide emergencies and all of NDOR's district offices and many divisions. These exercises test our emergency plans and procedures and serve to confirm our planning efforts and lead us to better ways of conducting business.

Intelligent Transportation Systems (ITS) and statewide communications are major factors in NDOR's Homeland Security planning. Members of NDOR's Homeland Security team have satellite telephones which allow for statewide communications. Information collected by ITS elements across Nebraska will assist responders by: assessing the vulnerability of physical assets; developing measures to deter, detect, and delay threats; and improving security operations for increased protection and response.



Nebraska Transportation Portal Website

NDOR's website continues to grow in usage as well as in the amount and variety of information available. The website can be accessed from www.dor.state.ne.us or www.nebraskatransportation.org. Website accessibility has been enhanced by adding a Text Transcoder which allows people with visual impairments to translate our web information instantly into pure text. Information in a table

will be translated into a logical text format. Also, text pages can be downloaded with Personal Digital Assistants (PDAs) and other handheld internet enabled devices.

Other enhancements to the website include full activation of the Automated Truck Permit System, where drivers of overweight vehicles can obtain their permits online. Since the automated truck permits system was activated on February 18, 2004, approximately 51,000 permits have been issued. The system provides excellent service to our customers and saves them time. NDOR's Permits personnel are also available to provide customer support.

Nebraska 511 Traveler Information System Expands to Include Alert System

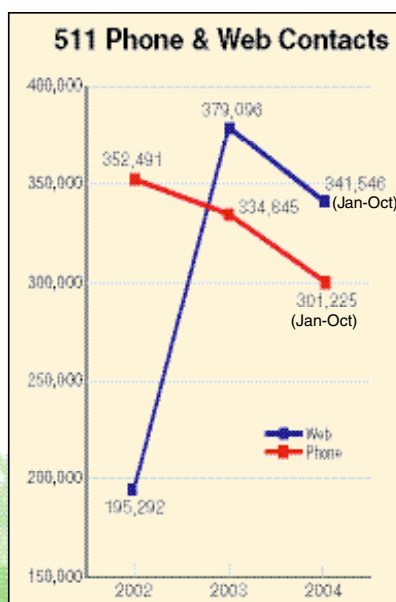


In October 2001, Nebraska became the first state to offer travelers advanced road and weather information by roadway segments on a statewide basis. Travelers can retrieve route-specific information by

dialing 511 on their cellular or landline telephones or by clicking on the 511 Internet link available at www.safetravelusa.com or www.nebraskatransportation.org. As a safety and convenience factor, in 2003, voice recognition software was added to the 511 telephone system with the option to turn it on or off.

In the event of security or disaster situation, NDOR uses the 511 system as a method to quickly disseminate alerts on a statewide basis. In early 2004, three new alert options were added to the 511 telephone system: Amber Alert, Homeland Security, and General Transportation. Authorized 511 administrators can record messages related to the transportation system and load them directly into the 511 telephone system. When someone calls into 511, they will be welcomed to the system, and then the alert message is played. Once the alert

has been played, the system reverts to normal activity and a caller may proceed to make a selection.



Forming partnerships with other governmental agencies and the public helps NDOR better serve the traveling public by combining resources and talents. NDOR strives to seek out partners and go to the extra effort to bring these partners together to create synergy.

Lewis and Clark Bicentennial

This past year Nebraskans stepped up their preparations to celebrate the Lewis and Clark Bicentennial with events planned along the eastern border of our state. The Lewis and Clark Bicentennial Commission coordinated with communities, state and local agencies, other Bicentennial states, and historians from around the nation for Nebraska's commemoration of the original expedition. NDOR has served in an advisory capacity to the Commission since 2000. Some of the Department's efforts are listed below:

- The 2003-2004 Nebraska State Map features artwork paying homage to America's Frontier and the land explored by Lewis and Clark's Corps of Discovery.
- NDOR provided and installed Lewis and Clark Trail signs along the trail areas of Nebraska highways.
- Transportation Enhancement Funds were used in the construction of the Lewis and Clark Visitors Center in Nebraska City.
- Message boards provided for traffic control at the Fort Calhoun Lewis and Clark events in July and August.
- A listing of the 50 permanent Nebraska Lewis and Clark Trail sign locations is posted on NDOR's website at: www.nebraskatransportation.org/info/.

People and communities up and down the Missouri River have worked hard to showcase our state's role in the 200th Anniversary of the Corps of Discovery's expedition. NDOR is proud to recognize the historical undertaking and to provide a supportive role in the 2004 celebrations in its honor.

Transportation Enhancement Program

Over the past ten years, NDOR has made approximately \$65M of Transportation Enhancement funds available to local, state, and regional governmental entities. These funds have been used to fund 515 projects to construct and restore off-system transportation projects. Currently one out of every three communities in Nebraska has received funding.

In December 2000, the Nebraska Game and Parks Commission was awarded \$215,960 in Transportation Enhancement funds to construct a 1.0-mile trail inside the Ponca State Park. The trail begins at the entrance of the Park, and continues north to the Ponca Missouri River Discovery Center. Also, \$60,000 of Transportation

Enhancement funds and \$325,000 of Public Highway Lands funds were used to build a 1.7-mile trail between the Park and the community of Ponca.



Ponca Missouri River Discovery Center, Ponca State Park.

The Nebraska Game and Parks

Commission was awarded \$156,032 in December 2000. The money was used to construct the Ponca Missouri River Discovery Center which was completed in January 2004. At the center, information is provided about the Outlaw Trail Scenic Byway, the National Scenic River, and the Niobrara State Park.

Scenic Byways Program

Nebraska has nine Scenic Byways highway routes which are highlighted in white on the Nebraska State Highway Map. Over the past five years approximately \$2.6M have been provided to locals for tourism enhancements to these byways. The Nebraska Scenic Byways Committee, consists of representatives from NDOR, Division of Travel and Tourism; Nebraska Game and Parks Commission; Nebraska State Historical Society; and Nebraska Natural Resources Commission.

Travelers in Nebraska now have access to state-of-the-art informational kiosks. The system called N-View is the first of its kind in the nation to combine tourism information such as nearby locations for lodging, food, and fuel and weather updates from the National Weather Service. During 2004, the kiosks will be installed at the start and end of each of the nine Scenic Byways and at the ten I-80 rest areas. A project to enhance the available information by adding a display of real-time road conditions and alerts is underway. NDOR used Scenic Byways funds to purchase and install the informational kiosks, and the Department of Economic Development, Division of Travel and Tourism will update and maintain the information.

Local Transportation Assistance Program

The Local Technical Assistance Program (LTAP) was established as a means to provide technical assistance to local government to help them understand new transportation technologies. Since 1985, the Nebraska LTAP has been funded by the Federal Highway Administration and NDOR.

Staff of the Nebraska Technology Transfer (T2) Center, located at the University of Nebraska, manages LTAP. The Center's mission is: "To facilitate the transfer of transporta-

tion knowledge and technology to local transportation agencies and thereby enhance their skills in providing a safe, efficient, environmentally sound transportation system". Training, technical assistance, and technology transfer are used to accomplish the mission, with emphasis on safety, maintenance, equipment operation, and traffic management.

The Center focuses on assisting Nebraska county road offices, city street departments, and transportation construction personnel in road and bridge maintenance, repair, and management systems. It promotes the efficient use of scarce resources through the sharing of technical information.

The Center has an advisory board of 16 transportation professionals. "The Interchange" newsletter, is published quarterly and is on the web at <http://www.nuengr.unl.edu/t2>.

Daily the staff answers technical assistance calls and has made 18 field assistance visits to various Nebraska counties and villages. During 2004, over 50 events were presented, co-sponsored, coordinated, or attended by the Center's staff. The following list is a few of those events.

- Assisted with the Nebraska Concrete Paving Conference
- Coordinated the Nebraska Asphalt Paving Conference
- Attended and presented updates at the five Nebraska Association of County Officials' district meetings
- Presented the Superintendent pre-exam workshop
- Developed and presented the Nebraska Bridge Inspectors' conference
- Coordinated and assisted with the Nebraska Bridge Inspection Certification School for two weeks
- Conducted ten in-county three-day motor grader operator safety courses
- Presented Manual of Uniform Traffic Control Devices, sign management, and workzone safety courses
- Attended the National Association of County Engineers and the National LTAP conferences



NECTAR

The Nebraska Enterprise Centerline Transportation Attribute Resource (NECTAR) uses Global Positioning System (GPS) Web Mapping technologies and various

transportation related data to produce interactive maps on the NDOR Intranet for use by its employees. It is anticipated that by the first of 2005 NECTAR will be available for use by Nebraska's counties and cities. Work is underway to add Asset Management modules so the counties and cities can produce interactive maps for making management decisions.

Hallam, Nebraska

In the early evening of Saturday, May 22, tornadoes ripped through the village of Hallam and the surrounding area. The destruction left millions of dollars in damages and tremendous personal and emotional turmoil.

Within a couple of hours after the tornado struck, NDOR provided traffic control by rerouting traffic around downed

power lines and flooded roadways, setting up message boards, and providing traffic cones and barricades. NDOR also provided trucks, loaders, and a backhoe, with operators. Staff was provided for the State's Emergency Operations Center and the District Operations Center which worked closely with law enforcement and emergency agencies. Many NDOR employees also volunteered their own time to provide help.

Motorist Assist Program

The Nebraska Motorist Assist Program is available in the Lincoln, Grand Island, and Omaha areas. The program operates during the high volume times on the Interstate and motorists are provided emergency services such as jump-starts, changing tires, giving directions, and cell phone assistance. Motorist Assist Program volunteers receive training from the Nebraska State Patrol (NSP) which also operates and manages the Program.

The Nebraska Motorist Assist Program (NEMAP), based in Lincoln, was initiated in 2000, and serves I-80 from the Platte River to Lincoln and has provided approximately 19,914 assists at a value of \$259,500. On Thanksgiving Day 2003, the Central Nebraska Motorist Assist Program (CNMAP), based in Grand Island, began service on I-80 from Elm Creek to Grand Island and west to Waco and has provided 1,389 assists at a value of \$20,935.

Metro Area Motorist Assist Program (MAMAP), based in Omaha, celebrated five years of public service in 2004 and have provided more than 39,000 assists at the value of \$393,100. MAMAP, in partnership with Omaha's Metro Area Transit (MAT) System, uses a Transportation Management Support System which provides access to MAT's Advance Vehicle Locator Processing Center. MAMAP personnel use the technology to monitor their fleet of vehicles.

NDOR, the Nebraska Office of Highway Safety and numerous sponsors provide governance and financial support to the Program. Program sponsors provide about half of the annual program costs with the remainder coming from private sector sponsors.

Adopt-A-Highway

In 2004, over 20,000 volunteers in 1,379 groups picked up litter and debris along Nebraska roadsides. These Adopt-A-Highway groups save the taxpayers of Nebraska approximately \$800,000 annually in maintenance costs for litter removal along 2,700 miles of right-of-way.

As participants in the program, adopting groups agree to pickup litter on both sides of their adopted section, two times a year for two years. Each spring, NDOR sponsors the "Great Nebraska Trash-Off". This statewide event gives each group an opportunity to complete their first litter pick up of the year.

As stewards of Nebraska's natural resources, NDOR partners with private citizens and civic groups in a grassroots effort to

keep the roadsides clean and litter free. NDOR has been part of the internationally acclaimed Adopt-A-Highway litter program since 1990. The Adopt-A-Highway Application/Agreement is available on the NDOR website, in the Frequently Requested Information Section.

Long Range Transportation Plan (LRTP)

NDOR is in the process of updating the state LRTP. The LRTP will be a broad-based statewide transportation-planning document that identifies important transportation issues and provides direction for the future. It will include identification of existing and future multi-modal transportation needs and provide guidance for cooperating and coordinating with other agencies that are responsible for transportation-related facilities/issues in Nebraska.

To review or make comments about LRTP draft goals and objectives, go to www.nebraskatransportation.org/lrtp. Future progress documents will also be posted on the website.

Comprehensive Plan Assistance Program

Annually, NDOR makes available \$200,000 for the Comprehensive Plan Assistance Program which is available for Nebraska communities with populations between 5,000 and 50,000. NDOR will provide up to \$75,000, to assist a community in creating and updating its comprehensive plan and long-range transportation plan with future traffic projection models. The plans are normally for a 15-20 year time frame, project future growth areas, and help the communities formulate long-term plans for such things as utilities and roadway capacity.

Grand Island, Columbus, Kearney, and Blair have completed their Comprehensive Plans and traffic projection models. This will help NDOR coordinate future planning of the state road system to complement the community's growth needs.

Summit and Conferences

Utilities Summit

In February 2004, NDOR sponsored a Utilities Summit with attendees from the Association of General Contractors (AGC), American Council of Engineering Companies (ACEC), League of Municipalities, and public and city utilities. The purpose was to educate those involved in highway projects with the steps to be taken when utilities are involved. Presentations were given in the order the steps are taken: 1) locate the utility; 2) conduct survey; 3) incorporate surveys into the plans; 4) acquire right-of-way; 5) coordinate utilities' activities within NDOR, with public and city utilities, and with One-Call; and 6) work with the contractors constructing the highway project. The result of the Summit was a better understanding of "what each other does" when utilities are involved in a highway project.

GeoPak Conference

The inaugural Nebraska MicroStation/GEOPAK User Group Conference was held in Lincoln on March 30, 2004. Approximately 200 people attended the conference that was sponsored by NDOR and the City of Lincoln.

IHEEP Conference

NDOR hosted the International Highway Engineering Exchange Program's (IHEEP) annual conference, September 12-16, 2004, in Lincoln, NE. IHEEP is an international organization which promotes the exchange of information relating to highway and bridge engineering, and specifically the use of computers in the process. Annual meetings have been held each year since 1959.

Department Rates Well with Nebraska Citizens

In early 2004, the University of Nebraska conducted a statewide customer satisfaction survey for NDOR. Over 1,800 Nebraskans responded to a telephone survey in which they were asked to rate NDOR on eleven attributes. The results shown in the report card are the percentage of satisfied Nebraskans. This survey is part of NDOR's overall performance initiative.



Net Asset Value of Nebraska Department of Roads

The net asset value of an organization is very important to its employees and its owners, which in our case, are the residents of the State of Nebraska. The Department's Net Assets approximate \$7.0 billion and include:

- Current assets: cash and receivables
- Long-term assets: highways and bridges, land, buildings, equipment, and inventory

Surface Transportation Financing – Early History

Our surface transportation system is the lifeblood of Nebraska and our nation and plays a vital role in the quality of our lives and our economy. Funding for this system began in 1913, with the State collecting motor vehicle registration fees. In 1925, a State gas tax was imposed and additional revenue was collected. Then in 1969, the State Legislature authorized the Motor Vehicle Sales Tax receipts to be deposited into the State Highway Trust Fund, instead of the General Fund.

At the federal level, the *Federal-Aid Road Act* was passed in 1926, and provided federal funds that were matched with State funds. In 1956, Congress passed the *Federal-Aid Highway Act* which created the *Federal Highway Trust Fund* and established funding for the National System of Interstate and Defense Highways, today's interstate and state highways.

Surface Transportation Financing – Today

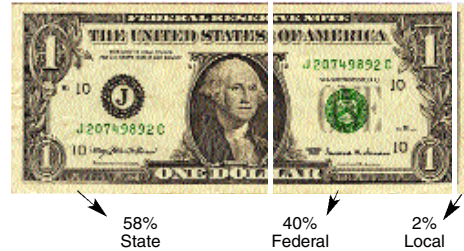
NDOR receives revenues from fees and taxes assessed to the users of the transportation system. The three primary revenue funding sources and the percent of the total are: state 58 percent, federal 40 percent, and local 2 percent. The revenues are initially deposited in state and federal highway trust funds and distributed to the state through formulas established by state and federal laws. In FY-2004, NDOR received \$590 million to fund the state's surface transportation needs.

Department of Roads Revenues

State Funds

State revenues provide 58 percent of our transportation financing. Highway-user fees and taxes generate the largest portion, approximately ninety-five percent. These fees and taxes are; fuel taxes, sales tax collected on purchases of new and used motor vehicles, and motor vehicle registration fees. This is the most stable funding source for NDOR. The fees and taxes are deposited into the State Highway Trust Fund, distributed to the Highway Cash Fund, and used specifically for surface transportation purposes.

Department of Roads Revenues



Changes in the level of state revenue from year to year normally represent the results of increased or decreased consumption of motor fuel and purchases of motor vehicles.

Federal Funds

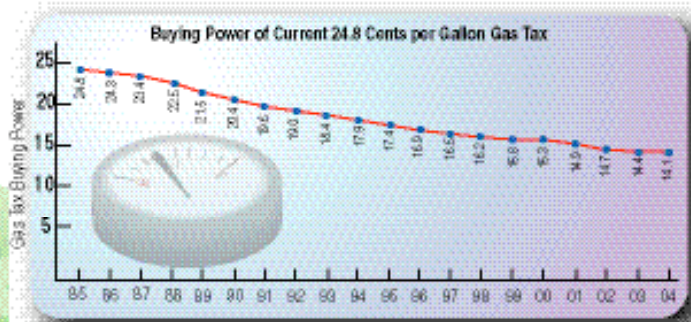
Revenue received from the federal government, 40 percent, is the second largest source of funding. Federal revenue is the return of fuel and excise taxes that are levied at the national level. These taxes are collected and deposited in the Federal Highway Trust Fund (FHTF) and then returned to the state by the Federal Highway Administration through a reimbursement process. These funds are used on eligible projects in all areas of the state.

Local Funds

Revenue received from local governments represents 2 percent of the total NDOR revenue. Local revenues are funds contributed by cities and counties for their share of construction projects. This local revenue is funds that match federal-aid revenues and are used for local roads and street projects that are administered by NDOR.

Gas Tax Buying Power

Over 63 percent of all state revenue is derived from taxes on motor fuels which is currently 24.8 cents per gallon. The buying power of the 24.8 cents motor fuel tax has declined to just over 14 cents in today's dollars. Stated another way \$1.00 in 1985 would only be worth 57 cents today.



Department of Roads Expenditures



NDOR spent \$607 million in FY-2004 to move people and goods across and throughout the state by means of a safe and reliable surface transportation system.

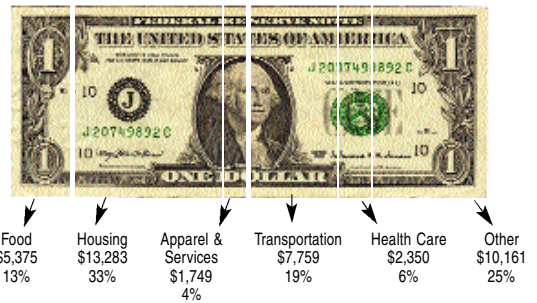
- Approximately 79 percent of the department's expenditures are for surface transportation construction. Two-thirds of this is for system preservation of the existing \$6.6 billion infrastructure investment and one-third is for new construction and improvements.
- Routine maintenance, approximately 15 percent of total expenditures is spent on activities that include: mowing, snow removal, ditch cleaning, litter pickup, sign and signal repairs, striping, guard rail repairs, pothole patching, etc.
- Only 5 percent is spent on services and support, i.e. administrative salaries, heavy road equipment, supply inventories, computers, office furniture, engineering and

technical equipment, etc. Expenditures for administrative costs are one of the lowest in the nation.

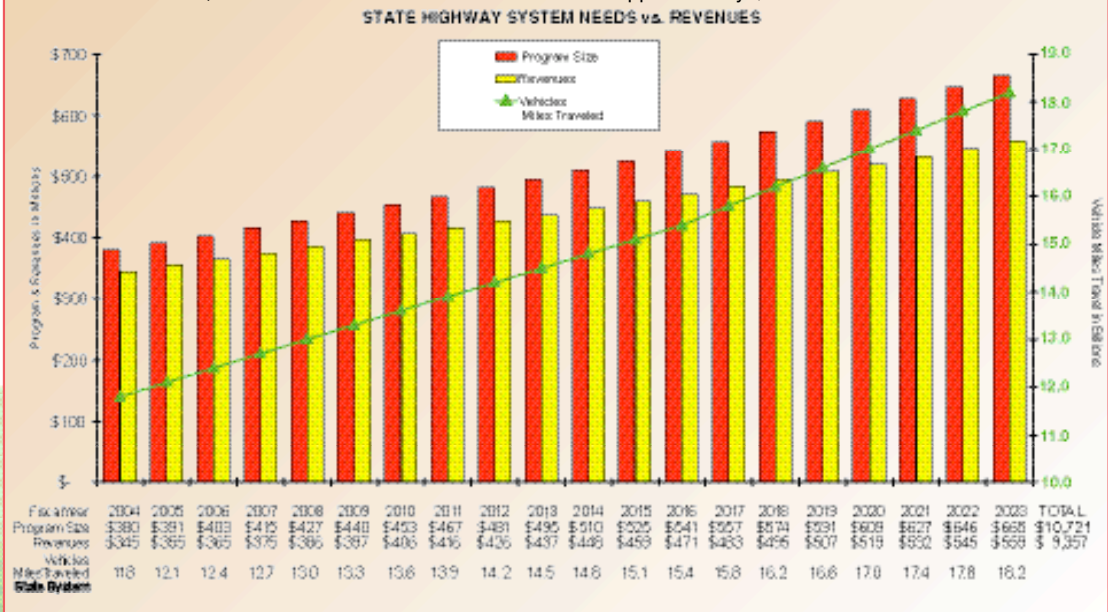
- Expenditures of 1 percent of the total are for public transit and rail functions that are administered by NDOR.

Transportation Costs for Consumers

According to the Consumer Expenditures Report prepared by the U.S. Bureau of Labor Statistics, dated February 2004, the average annual income prior to taxes in 2002 was \$49,430 and average annual expenditures were \$40,677 for consumers in the United States. On the average, for each dollar spent by the consumer, approximately 19% went to transportation.

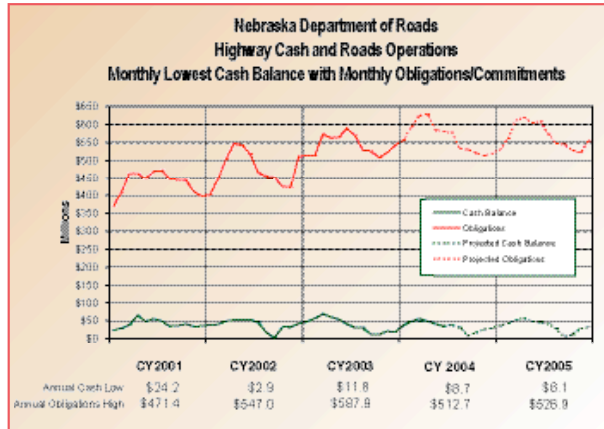


The "2004 State Highway System Needs Assessment" report identified current needs at \$8.0 billion. Those projected needs, with an inflation factor of 3 percent per year over the next 20 years, would cost an estimated \$10.7 billion. At the same time, considering conservative increases in state and federal revenues, total funds available would accumulate to approximately \$9.4 billion.



Highway Cash Fund Balance

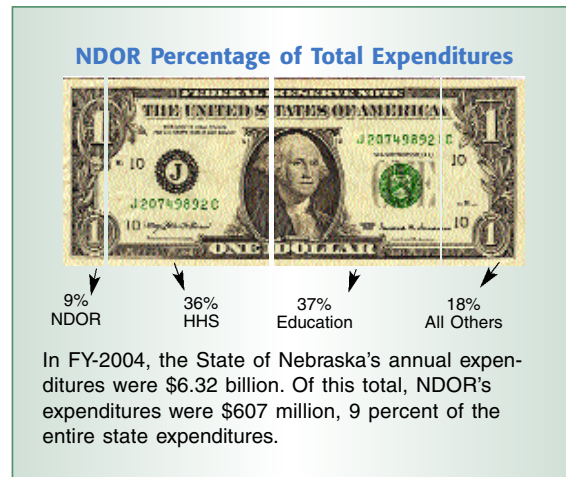
NDOR accounts for all of its revenues and expenditures by means of a cash flow management system. This system is managed on a daily basis and projections are made for future revenues and expenditures. Also, the system reports actual daily cash balances and projects low point balances that are anticipated throughout the current fiscal year and into the following fiscal year.



Revenues in NDOR's Highway Cash Fund are from the month-end distributions made from the State Highway Trust Fund, weekly reimbursements of federal-aid highway funds, and daily receipts of state revenues from miscellaneous sources. Actual cash balances can range from a high point of \$100 million to a low point of less than \$3 million on any given day of the year. The difference between funds received and dollars spent is reflected as cash balances.

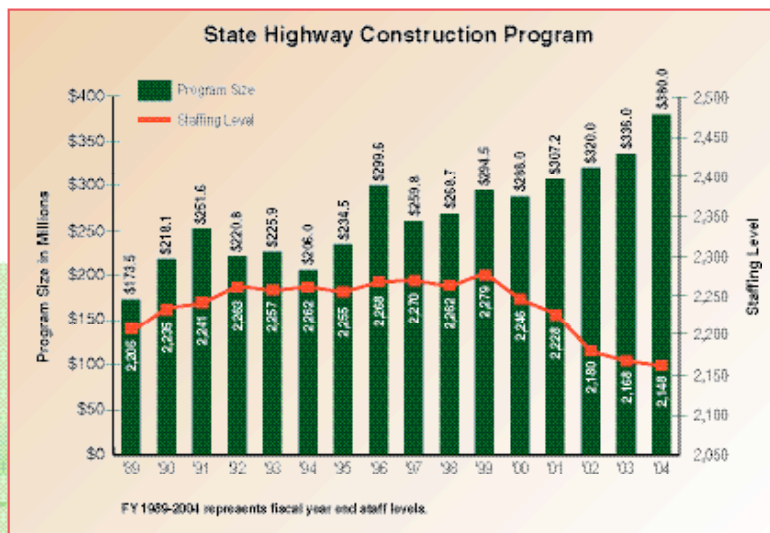
During the winter months as the contract construction season slows, revenues begin to accumulate. In the following summer and fall months, these cash balances are reduced as contractors are paid for the work they perform and low cash balances occur.

In FY-2004, NDOR's Cash Fund Balance was also affected by the non-passage of a *Federal Transportation Reauthorization Bill*. Since October 2003, NDOR has received federal funds under numerous extensions of the expired *1998 Transportation Act*. This affects our ability to plan future construction projects and has created a negative impact on the Department and Nebraska in a variety of ways.



NDOR Total Construction Program Compared to Staffing Levels

NDOR's mission is to provide and maintain, in cooperation with public and private organizations, a safe, reliable, affordable, environmentally compatible and coordinated statewide transportation system for the movement of people and goods. The Department achieves this mission by continuing to produce a state highway system program that has shown a modest but steady growth since fiscal year 1989. While the highway construction program has grown, NDOR workforce has declined.





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