Partners in Transportation

A Performance-based Transportation Agency

Leaders in public safety and service since 1895

Annual Report 2005

NDOR
Nebraska
Department of Roads

From the Director

John Craig

Dear Fellow Nebraskans,

Transportation and highways are essential to the movement of people and goods, our quality of life and our economy. On many days, I cannot think of more important work to do. This year, the Department of Roads celebrates it's 110th anniversary. We, and the State of Nebraska, have come a long way in the development of our transportation and highway systems. As the cover of this document reflects, we are simultaneously "Partners in Transportation," a "Performance-based Transportation Agency" and "Leaders in public safety and service since 1895."

These past three years, the Department of Roads produced the largest programs in the history of the state with no new state revenues, with the fewest number of employees in 50 years and at the highest level of performance on record. This performance, and with our many partners, includes the lowest fatality and crash rates on record, a reduction of work zone crashes of almost 45 percent in the last seven years, the smoothest pavement on record and the highest percentage of functionally and structurally adequate bridges on record. These are your friends, neighbors, family members, partners and fellow Nebraskans and, once again, these great people are doing more with less for all of us. I am proud of them.

Our society and the Department of Roads face many challenges, including those on page 1, but the future will be what we make it. And, I believe, that future is going to be great!

So, on the eve of the 50th anniversary of the interstate system in 2006, and on behalf of every Department employee and our many partners, I submit to you the Nebraska Department of Roads 2005 Annual Report. We welcome your comments on how we are doing and how we can improve.

Drive safely!

John L. Craig
Director

Critical Transportation Issues

As the 21st century begins, the Executive Committee of the Transportation Research Board (TRB) has outlined what it perceives as the most critical transportation issues facing the nation in this first decade of the new century. The State of Nebraska is affected by many of these issues and strives to address them.

Safety – Sharply reducing annual road deaths will require more than better vehicles and road technology. Driver behavior, speeding, reckless driving, and alcohol or drug impairment, will have to be addressed. Some nations are using such strategies as: automated enforcement of traffic signals and speeding; stronger laws regarding safety belt use and alcohol- and drug-impaired driving; and increased restrictions on teen driving.

Finance – The difference between transportation revenue and needs has grown. In part, the mismatch is due to the way transportation investments are financed. The system of user fees established more than 50 years ago has served the nation well, but in recent years has not kept up with demand and the effects of inflation on revenues.

Aging Infrastructure – The nation built an enormous transportation infrastructure in the 20th century, the replacement cost for which is in the trillions of dollars. Many of the facilities receiving the heaviest use are already well past their intended design lives. These facilities cost a great deal to maintain and upgrade.

Energy and Environment – Transportation's insatiable appetite for, and almost exclusive reliance on, petroleum-derived fuels makes the United States highly dependent upon foreign sources of energy. This dependence has renewed interest in alternative fuels as well as increased domestic production. Most energy and environmental consequences are inextricably intertwined. Environmental problems caused by transportation include impacts on land consumption and water quality, but air emissions are the most urgent.

Security – World-wide, transportation has proven to be the most popular target of terrorists, primarily because people congregate in vehicles, terminals, and airports, which are extremely difficult to protect from attacks.

Institutions – 20th century institutions are mismatched to 21st century requirements. These will include: (1) a systems rather than modal perspective; (2) better integrating priorities across different levels of government; (3) evolving toward more emphasis on operations rather than only focusing on expansion; (4) finding a better balance between national and local interests as more federal responsibilities pass to the state and local levels; and (5) expediting a slow and cumbersome decision-making process. Fragmented authorities and decision making and regulator structures for transportation entities inhibit the ability to address problems from a systems perspective.

Human and Intellectual Capital – Public investment in transportation Research and Development, needed to stimulate innovation, has for years been declining in real terms and as a share of agency budgets. Transportation has not kept up with other sectors, such as manufacturing and medicine, in taking advantage of new technology to improve efficiency or develop better products.

Congestion – The 21st century may be called the congestion century. Estimates show that congestion costs Americans, in today's dollars, roughly $65 billion per year and wastes 2.3 billion gallons of gas.

Equity – Transportation is fundamental to American's quality of life. A passenger transport system dominated by the automobile generates particular challenges for those with limited incomes, or physical disability, or those who do not drive. American society is unprepared to meet the mobility needs of the tens of millions of older citizens living in low density areas who will be unable to drive in coming years.

This sixth annual report shows how the Nebraska Department of Roads is addressing some of these issues.

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

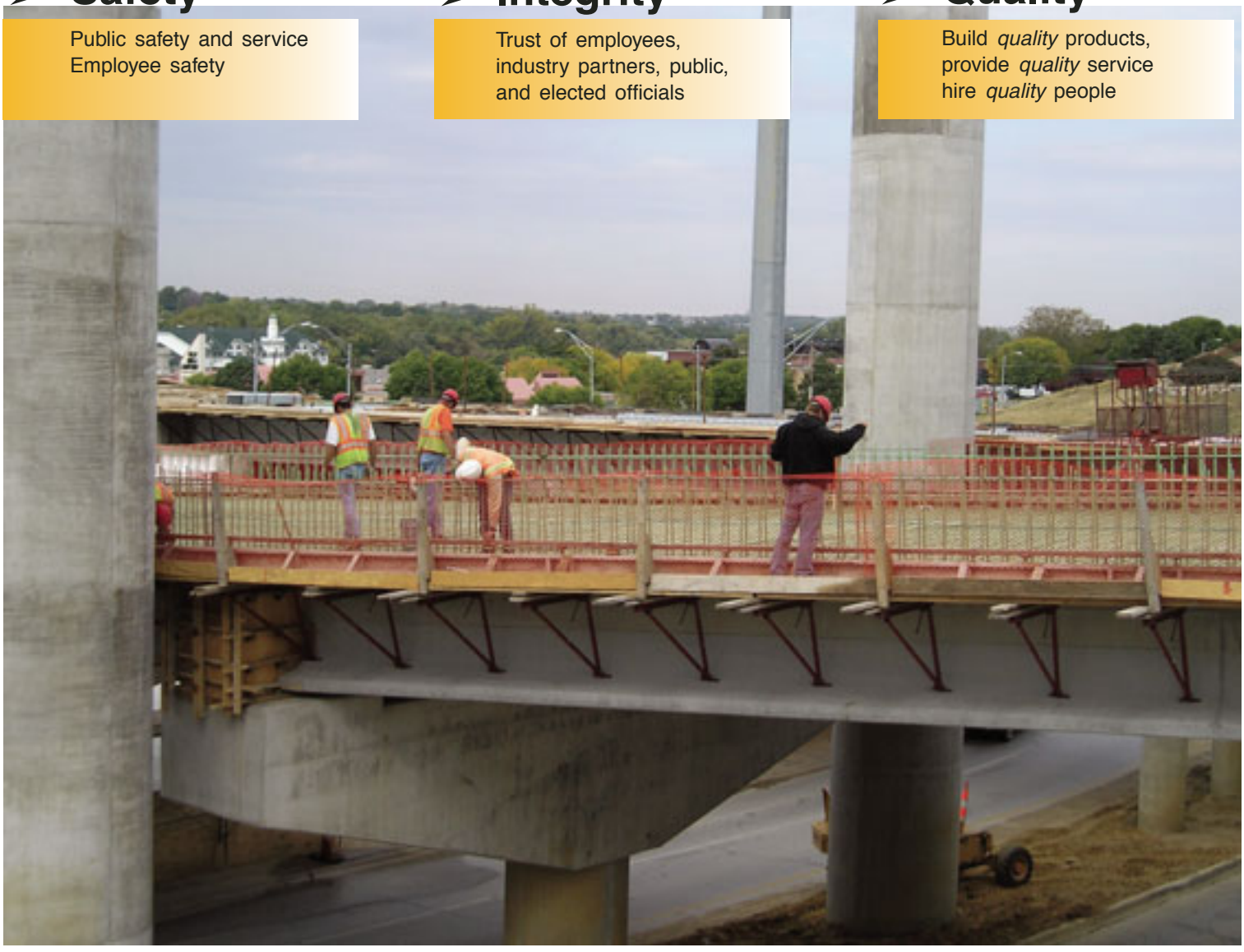
Public safety and service
Employee safety

➢ Integrity

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

➢ Quality

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



History of Nebraska's Interstate 80

Building and Expanding I-80

President Eisenhower had very strong feelings about the condition of the nation's highways. In 1919, he traveled from Washington to San Francisco along the Lincoln Highway as a lieutenant colonel on the U.S. Army's first transcontinental convoy of military vehicles. The trip took two months, due mostly to poor road conditions. In 1922, Congress instructed General John J. Pershing, Army Chief of Staff to study the need for and possible routes of a nationwide system of express highways. Eisenhower and Congress's appeals led to the passing of the 1956 Federal-Aid Highway Act authorizing the construction of a 40,000-mile national system of interstate highways.

Part of the national system, I-80 was planned and designed to be one of the nation's main transcontinental highways. The total length, from New Jersey to California, across 11 states, was 2,904 miles which included 455 miles in Nebraska. Traffic lanes were required to be at least 12 feet wide and designed for speeds up to 70 miles per hour.

It took Nebraska 17 years, 1957-1974, to complete the interstate starting with route selection, through design, and construction. The construction was planned for four phases over an anticipated 15-year period. The first phase, between Omaha and Lincoln, was chosen as a priority as it was the most heavily-traveled traffic corridor along the proposed interstate. The first interstate project was 6.4 miles near Gretna in Sarpy County. It was the first segment of the Nebraska interstate to be completed and opened to traffic in November 1959.

The second phase was a 195-mile section between Grand Island and North Platte. The third phase was a section between Lincoln and Grand Island. Although this area carried heavy traffic loads, there were paved routes in the area, US-30, US-34, and US-6. The fourth phase was between North Platte and the Big Springs junction near the Colorado state line. The last phase was the section west of Big Springs to the Wyoming border.

On October 19, 1974, a "Golden Link" ceremony was held near Sidney and marked the opening of the final mainline segment of I-80 in Nebraska. The "Golden Link" was an embedded brass-top section of channel-iron across all four-lanes of traffic. There is also an informational marker about the I-80 construction. Nebraska was the first state in the nation to complete its mainline interstate system. The final construction cost for the 455.3 miles of I-80 in Nebraska was $390 million, about $800,000 per mile.

Since the initial interstate construction, there has been major rebuilding of approximately 19 miles of the urban interstate system in Omaha. The next step, expansion of the interstate to six lanes, three in each direction, has been started. The future plans call for six lanes from Omaha to the Minden interchange.

Along the I-80 corridor there are 25 rest areas with picnic shelters, lush lawns, sturdy shrubs, trees, and open spaces for children to play. At ten of the rest areas there are computer kiosks which provide weather and traveler information.

Looking west at the I-80/I-680 interchange in the late 1960's.

The same interchange in 2005.

Transportation at a Glance

Calendar Year 2004

Land Area *(sq. miles)* 77,315

Population *(2004 Census Estimate)* 1,747,214

Annual Fuel Use *(gallons)*
- Gasoline 498,992,978
- Diesel 394,481,626
- Gasohol 380,088,535
- Total 1,273,563,139

Registered Vehicles
- Passenger 1,088,620
- Mobile Home 36,518
- Bus 2,000
- Motorcycle 32,916
- Trailers 312,656
- Dealer 13,359
- Government 37,589
- Tax Exempt 3,783
- Truck 531,302
- Snowmobile 810
- Total 2,059,553

Licensed Drivers 1,347,071

Annual Vehicle Miles of Travel *(millions)* 18,812

State Tax Rates *(cents per gallon)*
Effective July 1, 2005
- Gasoline 25.3
- Diesel 25.3
- Gasohol 25.3

Public Road Miles *(highways, roads, streets)*
- City 8,310
- County 78,114
- State 9,959
- Total 96,383

Crashes and Fatalities
- Total Crashes 37,227*
- Fatal Crashes 229
- Fatalities 254

Bridges
- State System 3,526
- County and City System 12,102
- Total 15,628

Airports
- Public Use 88
- Commercial Service 10
- Commodities Moved *(metric, tons)* 91,767

Transit
- Providers 71
- Counties Served 84

Truck Travel *(2004)*
- Vehicle Miles on State Highways *(millions)* ... 1,964
- Commodities Moved *(billion ton-mile)* 27.6

Rail *(2003)*
- Miles Operated 3,466
- Commodities Moved *(million ton-mile)* 439.1

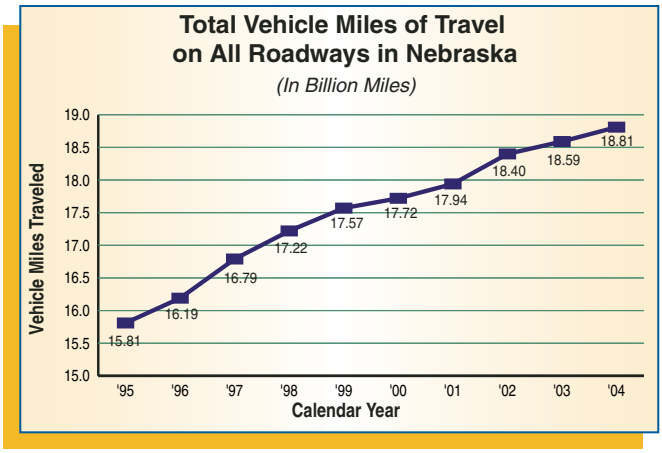
Waterways
- Terminals 11

***On January 1, 2004, the dollar amount for reporting property damage crashes increased from $500 to $1,000, resulting in a decrease in reporting property damage crashes.**

Safety

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

In 2004, there were 18.812 billion annual vehicle miles of travel on all roadways in Nebraska, an increase of 9.3 percent in 6 years. The approximate 10,000 miles of state highway system carried nearly 63.3 percent of all the traffic and 86.3 percent of all the commercial truck traffic. Over 3.957 billion annual vehicle miles of travel occurred on the interstate system within Nebraska, an increase of 14.9 percent in 6 years.



In an effort to minimize crashes 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. Safety organizations in Nebraska continue to stress the usage of safety belts, which has increased from 70 percent in 2002 to 79.2 percent in 2005.

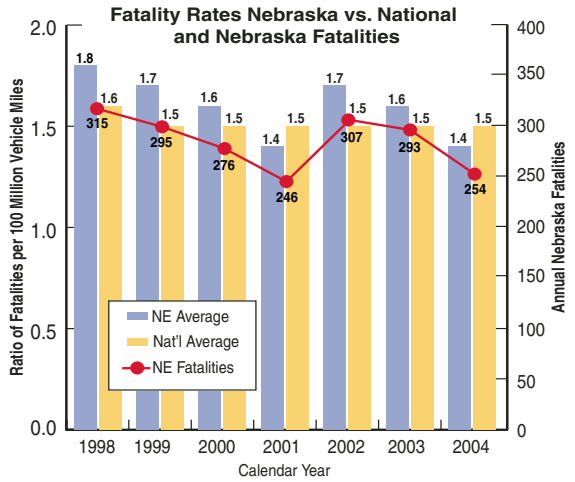
Accident Reporting

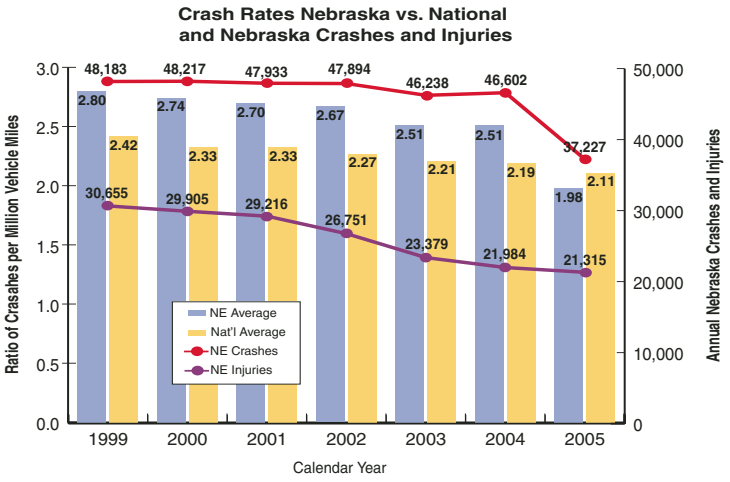
By the end of the fourth quarter of 2005, law enforcement officers investigating traffic accidents were able to submit their reports to NDOR through the internet. The data submitted is inserted directly into NDOR's Highway Safety Information system, the main accident records database, thus reducing data entry time. Paper copies of the electronic reports can be printed.

Highway Safety/ITS Summit

On March 29th, Governor Dave Heineman welcomed nearly 100 attendees to the 2005 Nebraska Highway Safety/Intelligent Transportation System (ITS) Summit held in Lincoln. Personnel from emergency, engineering, enforcement, and educational organizations heard presentations on highway safety issues and discussed innovative tools and strategies to implement safety measures. NDOR, the Department of Motor Vehicles (DMV)/Nebraska Office of Highway Safety (NOHS) and the Federal Highway Administration (FHWA) hosted the event.

Governor Heineman addresses delegates and guests at the Nebraska Highway Safety/Intelligent Transportation System Summit.





Breakout session participants discussing speeding/run-off road crashes.

In breakout sessions, innovative ideas and new collaborations and partnerships were developed to address issues in the following areas: intersection safety, speeding/run-off road crashes, older drivers/younger drivers, work zones, and commercial vehicle safety. Coalitions are being formed to address legislative measures for graduated licensing, red light running cameras/photo enforcement and a primary seat belt law, as well as education and increased enforcement in these areas. Other groups will be looking at data to identify new roundabout and rumble strip locations.

National Work Zone Awareness Week 2005

Governor Dave Heineman proclaimed April 3-9, 2005, 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 49,000 were injured nationwide in construction zones in 2004.

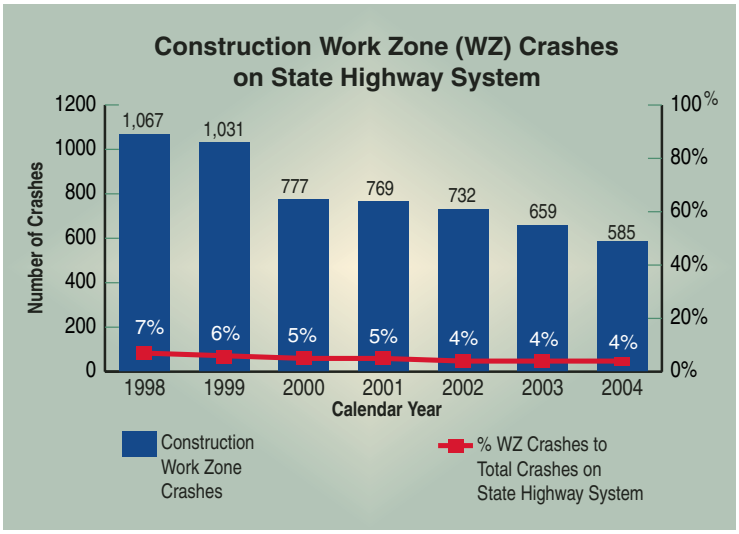
Transportation partners in Warner Chambers at the State Capitol.

This year's focus was on law enforcement. The importance of law enforcement in monitoring highway work zones was stressed with plans for increased staff at the Nebraska State Patrol this year. Work zone safety displays were placed in the State Capitol lobby and at NDOR central offices. Posters and banners were also displayed in the eight NDOR district offices. Work zone safety ads were aired statewide on local radio stations made possible through an agreement between NDOR and the Nebraska Broadcasters Association.

Work Zones – Reports and Reviews

In 2005, NDOR began monitoring accident reports for work zone-related crashes to help Districts identify potential problems in their work zones. Monthly reports sent to the Districts include information from the investigator reports and can help identify possible crash patterns that might indicate the need for adjustments to the work zone set-up. Investigators' and drivers' comments on how the crash occurred can also provide additional information into how drivers perceive the efficiency of the work zone.

NDOR also conducts annual reviews of work zones in each District. Reviews are intended to enhance the safety and operational efficiency of highway work zones for highway users, as well as for highway workers. There are four components – standardization, compliance, evaluation, and innovation. Representatives from Traffic Engineering and FHWA work with District staff to review traffic control devices and suggest ways to correct or improve the traffic flow.



Department Programs

Comprehensive Highway Safety Plan

NDOR, the Department of Motor Vehicles/Nebraska (DMV) Office of Highway Safety (OHS) and the Nebraska State Patrol (NSP) began efforts to initiate a Comprehensive Highway Safety Plan for Nebraska. The Leadership Group is directors and administrators of NDOR, DMV/OHS, NSP, Nebraska Association of County Officials, and Nebraska League of Municipalities. This group will set the parameters for the plan and realistic, data-driven goals to reduce highway deaths and injuries in Nebraska. A Working Group, representatives from the above agencies, will work with agencies and organizations from engineering, education, enforcement, and emergency services across the state to coordinate efforts, reduce redundancy, and leverage resources.

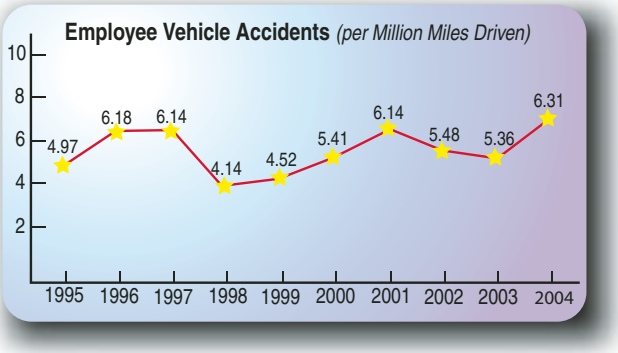
NDOR traffic engineer, Randy Peters, moderates the Safety Conscious Planning forum.

Safety Conscious Planning

NDOR, the DMV/Nebraska Office of Highway Safety, FHWA and the Nebraska Local Technical Assistant Program (NE LTAP) hosted a Safety Conscious Planning (SCP) Forum in September 2005. Attendees were representatives from the Metropolitan Planning Organizations, transit agencies, highway and motor carrier safety, law enforcement, emergency response and education organizations. Speakers introduced the concept of SCP and related how they incorporate this into their organizations to achieve road safety improvements. SCP goes hand-in-hand with the Comprehensive Highway Safety Plan and is a proactive approach to the prevention of accidents and unsafe transportation conditions by planning safe transportation networks from both short- and long-term perspectives.

Employee Safety Program

Employee safety is the Department of Roads' highest priority. NDOR's Human Resources Division personnel continue to update safety training modules for its employees. The 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. Tracking the rate of our employee's injuries is a means to measure the effectiveness of our safety program and to keep our employees productively at work.

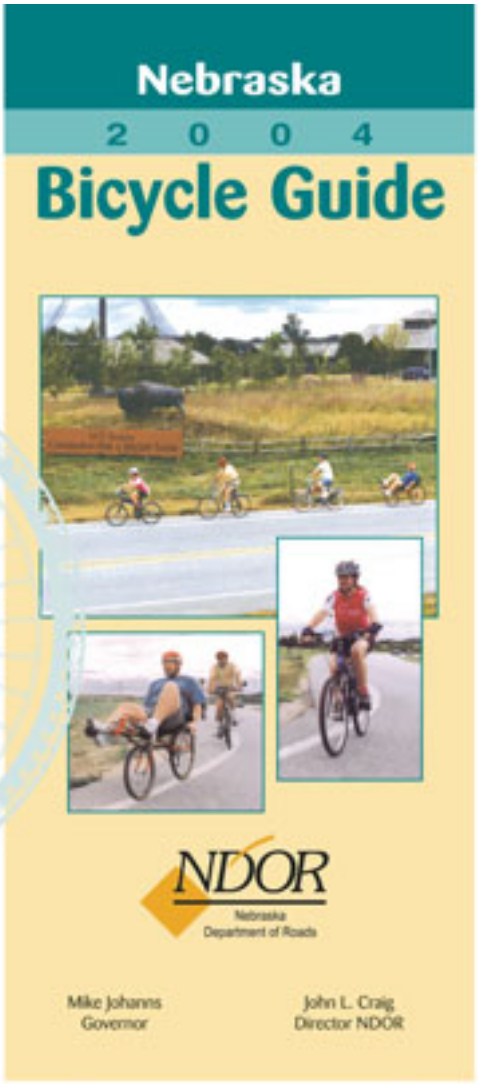


Bicycle and Pedestrian Safety

On NDOR's website at www.dor.state.ne.us "Hiking and Biking" link, is the Nebraska Bicycle Guide. The guide has bicycle safety tips, a summary of Nebraska's bicycle laws, and a state bicycle map showing compatible roadways and surfaced shoulder information. NDOR sends the Nebraska Bicycle Guide to law enforcement offices and schools for their use in conducting bicycle safety seminars for young children.

In 2005, NDOR sent copies of the safety and training booklet entitled "From A to Z by Bike" to police and sheriff departments, who are conducting bicycle safety training for school children. 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 upon request.

NDOR continues to coordinate and consider accommodations for bicycling and walking facilities as a mode of transportation. The State Bicycle Coordinator assists groups and individuals bicycling in and through Nebraska with the goal to minimize conflicts with roadway construction and maximize bicycle safety. 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.



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 continues to improve on the collection and analysis of pavement data that is used in the Pavement Management System.

In the fall of 2005, NDOR received two vehicles with pavement data collection equipment, called pavement profilers. These will replace the current ten-year-old profilers. This equipment will enable NDOR to collect a higher quality pavement surface distress data (pavement smoothness, rutting, faulting), enhanced digital images for pavement rating to reduce travel time, and estimate quantities for some maintenance activities.

Pavement profiler van (above) screen of data collection (below).

NDOR continues to use its multi-year Pavement Optimization Program (POP) which has pavement data and prediction models for specific sections of roadway on the highway system. The output assists in determining what types of maintenance and construction activities should be recommended on certain sections of roadways. POP can provide information for future-year activities such as timing and cost, allocating resources between districts and determining the most cost-effective approach in programming projects for construction, repair, and maintenance. The goal of NDOR's Pavement Extension Program (PEP) is to extend the life of the pavement an additional eight years.

NDOR also uses PaveCARE which contains the following historical information on all sections of roadways on the highway system: 1) condition assessment, rating data for flexible and rigid pavement; and 2) rehabilitation effectiveness, tracks distresses and maintenance costs on seven rehabilitation strategies. Information by districts, from 1997 to present, can be selected, and reports and graphs of the condition assessment can be created. A trend line is graphed for the life of each of the rehabilitation effectiveness strategies used. Cost data and output reports, linked to these graphs, can also be produced. Future integration of output from PaveCARE into POP will further enhance NDOR's decision-making process.

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.

Maintenance

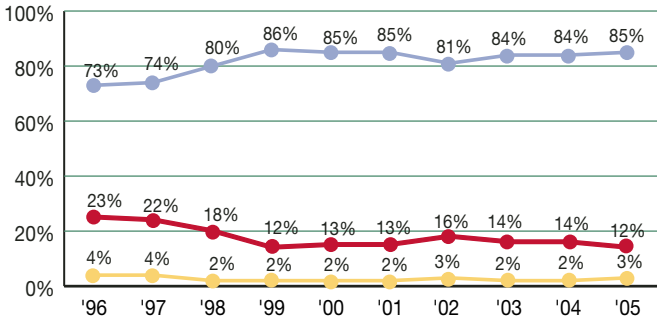
Pavement maintenance is the key to pavement preservation. Nebraska has three types of pavement maintenance: 1) Preventative, 2) Corrective/reactive, and 3) Emergency. All types are needed in a complete pavement preservation program. However, emphasizing preventative maintenance, "completing the right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

Condition Report

In 2004, the 9,959 miles of state-maintained roadways in Nebraska had 11.907 billion annual vehicle miles of travel of which 1.964 billion were truck vehicle miles, an increase of 10 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.

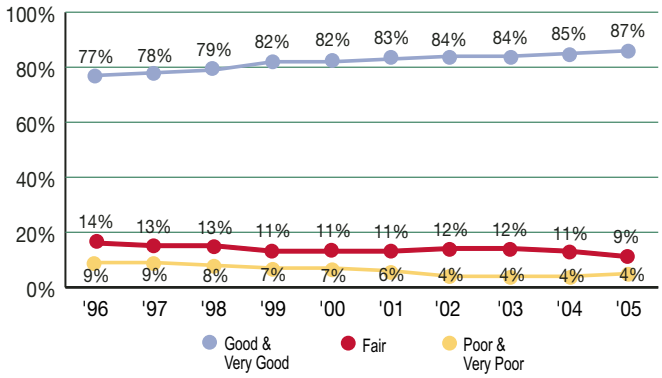
State System Pavement Condition Ratings

(Nebraska Serviceability Index)



State System Pavement Smoothness Ratings

(International Roughness Index)



Delivering the Program

The fiscal year 2005 highway construction program contained 109 projects, with an estimated total project cost of $346.8 million. As of June 30, 2005, 107 projects have been let with a total project cost of $371.9 million. This reflects a 98 percent delivery rate of the one-year construction program.

Progress made through 2005 based on the 1988 Needs Study:

1988 Goal	2005 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.	→ 430 miles or 72 percent, of the expressway system has been completed or let to contract.
3. Accelerate completion of projects with geometric deficiencies within 20 years.	→ 390 miles of resurfacing and 83 miles of reconstruction were completed this year.

Public Participation

NDOR 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 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 four meetings a month during 2005. NDOR also received citizen input about projects through personal contact, in writing, by telephone, and via e-mail throughout 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.

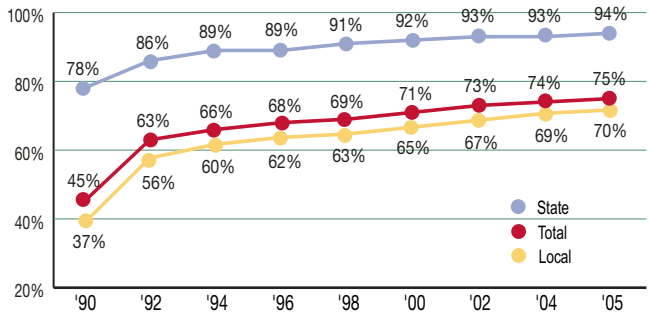
Bridges

NDOR inspects bridges using the Bridge Inspection System of Nebraska (BISON). While in the field, NDOR's bridge inspection personnel input data into computers. This 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, city and county data is combined with state data and included in the National Bridge Inventory database.

In 2005, Nebraska had 15,628 bridges; 3,526 on the state system and 12,102 under the jurisdiction of local governments. Of the total 15,628 bridges, 75 percent met standards, the same percentage that met standards nationally.

Structurally Sound and Functionally Adequate Bridges



Maintenance Conference

More than 200 NDOR District maintenance employees from throughout Nebraska attended the 2005 Maintenance Conference in Kearney. This annual conference provides an information exchange forum for statewide maintenance employees with presentations on operational and maintenance topics, workshops with training, and equipment and technology displays. There was a module on Homeland Security and was part of NDOR's Homeland Security drills and exercises.

Project Manager's Conference

In March 2005, approxmately 200 NDOR employees attended the annual Project Managers' Conference. Employees of some consulting engineering firms who provide inspection and project management services to the counties and members of the Nebraska Chapter of the Associated General Contractors also attended. This conference provides a forum for discussion on construction-related subjects such as: phased bridge construction, erosion control, legal issues, Microstation, and SiteManager.

Ravenna Viaduct Design and Construction Challenge

The newly designed viaduct is situated on N-68 in Ravenna. This roadway is the only access over the railroad tracks and the main roadway through town. The viaduct replaces one which was structurally deficient and functionally obsolete and was a safety hazard due to the close proximity of the piers to the railroad tracks. The railroad also had a number of concerns and needs that had to be met in the construction of the viaduct: 1) This section of track is a major hub for BNSF with approximately 60 trains a day. Therefore, the number of times that the tracks could be closed was limited and then only for a few hours each time. 2) The railroad wanted the viaduct to be long enough to allow for two additional side tracks, for a total of six sets of tracks, under the viaduct. 3) Safety considerations restricted the depth of the superstructure, the top of the bridge deck to the bottom of the bridge structure, to 35 inches. To address these needs and concerns, a long-span viaduct with a shallow superstructure was needed. The designers were able to address these limitations by using a unique twin concrete-filled steel tube arch bridge system. University of Nebraska personnel tested the bridge in its labs to clarify and validate the design issues.

The slender arch system is only possible because of new high-performance steel and concrete and by the recognition of the increased strength of concrete in a confined space. The viaduct is 174 feet long, 56½ feet wide and the peak of the arch is 25 feet above the roadway. The bottom chords are 23-inch by 24½-inch steel boxes filled with concrete and post tensioned. They are the most innovative feature of the system. Each arch's top chord is two 12-inch diameter by ½-inch thick steel tubes filled with concrete. The concrete prevents the buckling of the steel, while the steel confines the concrete. NDOR will consider the use of this design for future viaduct construction. The design offers flexibility in construction and provides increased highway safety.

Setting into place the arch for the viaduct.

Preparing for pouring of the viaduct deck.

Rail and Public Transportation Program

Eleven railroads operate in the State of Nebraska.

- Two Class I Railroads – Union Pacific Railroad and BNSF Railway.
- Three Regional Railroads – Nebraska, Kansas, and Colorado Railnet, Inc; Dakota, Minnesota, and Eastern Railroad; and Kyle 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.

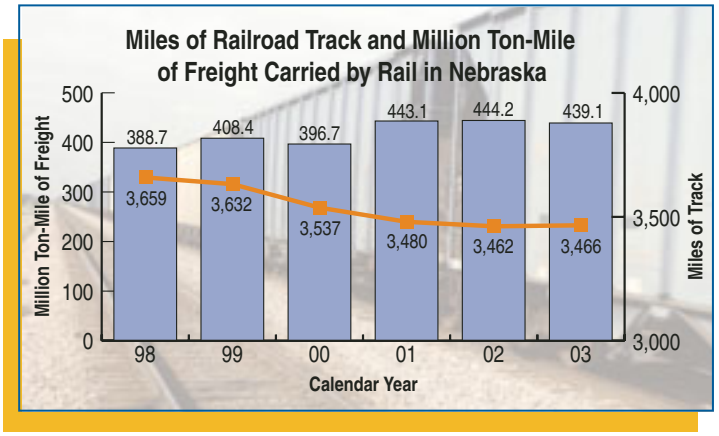
In order to foster better communications, the Department hosted meetings with both the Union Pacific Railroad and the BNSF Railway. Administration, construction and maintenance personnel from the Department's offices in Lincoln and from the eight District offices attended these meetings. Participants from the railroads included public projects managers and field personnel from their maintenance and operations sections.

The main agenda item for the 2005 meetings was a review of the new Rules and Regulations for Railroad Crossings which became effective in December 2004 and are new to the railroad industry and Department personnel. The primary topics discussed were temporary closure of railroad crossings due to railroad maintenance, the emergency closure of railroad crossings due to a catastrophic event, and the attendant notification and detour process. Because communication is an ongoing process, and we want to maintain the excellent working relationship that we now enjoy with the BNSF Railway and the Union Pacific Railroad, these meetings will be held on an annual basis.

Freight-Rail and Truck

Union Pacific Railroad and BNSF 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 BNSF corridor between Alliance and Ravenna exceed 70 trains per day. Over the last 20 years rail traffic has doubled in Nebraska.

Freight moved by truck in ton-mile, has increased from 20.2 billion in 1996 to 27.6 billion in 2004. For that period the miles of the state highway system has stayed relatively the same at just under 10,000 miles.

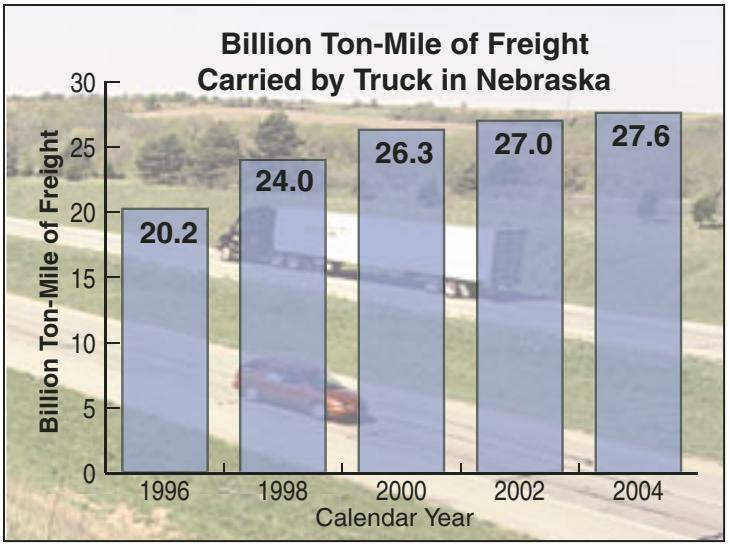


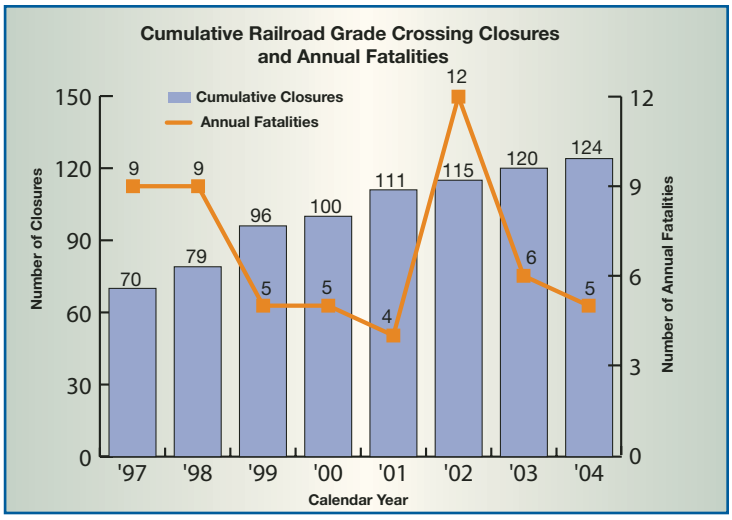
Some highway/railroad crossings in Nebraska have more train traffic than any crossing in any other state. Nebraska has a total of 6,553 railroad crossings:

- 3,808 public crossings, (264 on state highway system and 3,544 on local roads)
- 2,745 private crossings

Of the 3,808 public crossings, over 752 carry more than 40 trains per day.

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.





Shortline Railroads - Light-Density Rail

There are nine 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.

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 $3,016,844 as of June 30, 2005. 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.

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, Greyhound Lines, Inc. reduced their bus service to serve only Omaha, 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.

The Statewide Rural Transit Study will be completed in late 2005. This study will provide information for gauging conditions for rural transit in Nebraska, which will assist NDOR and the rural transit systems in immediate, mid- and long-term management.

The feasibility study for a bus maintenance and storage facility has been completed for Kearney's Reach Your Destination Easily (R.Y.D.E.) transit system. Preliminary design has begun and continued Congressional earmarks have been requested for final design, site layout, and construction. A site has been selected in cooperation with the University of Nebraska at Kearney.

The Nebraska Transportation Access Working Group, created by a Governor's Executive Order, meets monthly to facilitate coordination between several state agencies' transportation programs and their funding sources. This group has received a $35,000.00 grant from the Federal United We Ride program to help in this effort.

Public Transportation Passenger Boardings

Fiscal Year	Rural Bus	Urban Bus	Intercity Bus	Total
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	7,711	5,798,498
03	641,454	5,149,333	6,392	5,797,179
04	661,861	4,906,305	5,705	5,573,871
Current Systems:	61	6	4	71

In June of 2005, Butler County Public Transportation received an award from the Federal Transit Administration for the highest growth in passenger boardings of 58 percent in Nebraska.

District Activity

Major 2005 Transportation Projects – Construction and Maintenance Costs

District 1

I-80 Six-Lane Reconstruction

The six-lane reconstruction of I-80 between Omaha and Lincoln began with bridge replacements at Oak Creek, Cornhusker Highway, 250th Street, and Arbor Road. The roadway sections from Northwest 27th Street, West Bypass to the I-180 interchange and from Mahoney to Ruff Road are in progress. These projects consist of grading, culverts, bridges, shoulders, concrete paving, lighting, interchange reconstruction, Intelligent Transportation System message boards, and seeding.

There have been several challenges in the phasing and scheduling of work. Most of the work is to be completed adjacent to a traveled roadway, and maintaining smooth traffic flow is a major concern. Short time periods in which lanes can be closed created the need for tight progress work schedules. Incident management was a major part of the planning, and alternate routes were set up and signed. Coordination efforts involved our partners in transportation, the Nebraska State Patrol, county sheriffs, city police, and county and city officials.

Erosion control is a major process on all of our projects. Using a Storm Water Pollution Prevention Plan helped NDOR monitor and control the grading operations. The roadway is also being constructed next to some environmentally-sensitive areas which include the Saline Wetland areas and the Tiger Beetle habitat. Several efforts have been made to protect these areas.

FY-2005

Statistics			
Population *(2004 Census Est.)*	404,838	Area *(Sq. Miles)*	7,467
		Bridges	704
		Highway System Miles	1,576

Maintenance Costs		Construction Costs	
Preventative	$1,954,515	Roadway	$59,023,430
Reactive	2,935,813	Bridge	9,453,322
Pavement Striping	741,664	Railroad Viaduct	---
Snow Removal & De-Icing preparation & application	2,834,381	**Total Let to Contract**	**$68,476,752**

District 2

Modification of I-680/West Maple Road Interchange - Expanding I-680 from West Maple Road to Fort Street

I-680 between the West Maple Road interchange and the south end of the Fort Street interchange was expanded to three lanes in each direction with an auxiliary lane connecting the ramps. A 28-foot-wide median with a raised concrete barrier was constructed. The reconstruction of the I-680/West Maple interchange included the addition of entrance loops to I-680 in the northwest and southeast quadrants and constructing three lanes in each direction on West Maple Road from 102nd Street to west of 108th Street.

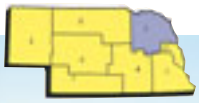
Construction in 2005 included the removal and reconstruction of southbound lanes with the traffic shifted to the newly constructed northbound lanes. To accommodate construction, traffic was separated by temporary concrete barriers. Work at the West Maple Road interchange included the completion of the north portion or westbound lanes of the West Maple bridge over I-80. The new entrance loop in the northwest quadrant and entrance ramp in the southwest quadrant were completed in 2005.

Two lanes of traffic in each direction on West Maple Road and I-680 were open to traffic during peak hours. Entrance and exit ramp/loop movements at the I-680/West Maple Road interchange were also open to traffic.

FY-2005

Statistics			
Population *(2004 Census Est.)*	686,592	Area *(Sq. Miles)*	1,791
		Bridges	431
		Highway System Miles	504

Maintenance Costs		Construction Costs	
Preventative	$1,212,485	Roadway	$74,791,385
Reactive	369,018	Bridge	27,947,033
Pavement Striping	383,096	Railroad Viaduct	---
Snow Removal & De-Icing preparation & application	2,202,229	**Total Let to Contract**	**$102,738,418**



District 3

US-30 and 23rd Street in Columbus

This $1.6 million intersection is located in the center of Columbus. With a 2004 average traffic count of over 60,000 vehicles a day it was very critical to continue traffic flow while adding lanes for additional traffic storage and a safer intersection. Therefore, the project was done in phases. The project included widening northbound US-30 to five lanes and widening, both westbound and eastbound 23rd Street, to four lanes.

During the initial phases, center medians, islands and curb inlets were removed and additional lanes were constructed at all four corners of the intersection. During the final phases a 3½-inch asphalt surface was laid over a new 8-inch base course. Temporary traffic signals with cameras were used to maintain uniform traffic flow.

Well attended weekly partnering meetings were held with the local businesses. The local paper and radio station were also at the meetings and disseminated information to the public to keep them informed and to promote good rapport with the businesses and the traveling public.

FY-2005

Statistics

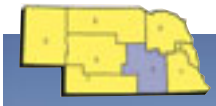
Population *(2004 Census Est.)*	183,049
Area *(Sq. Miles)*	8,786
Bridges	594
Highway System Miles	1,527

Maintenance Costs

Preventative	$2,317,122
Reactive	3,097,052
Pavement Striping	800,988
Snow Removal & De-Icing preparation & application	3,038,965

Construction Costs

Roadway	$26,693,315
Bridge	5,847,471
Railroad Viaduct	---
Total Let to Contract	**$32,540,786**



District 4

Grand Island-Locust Street Interchange over I-80

This $8.1 million project is an I-80 interchange for South Locust Street. The construction consists of: 1) an eleven-span steel girder bridge over the Platte River, 2) a two-span concrete girder bridge over I-80, and 3) a three-span concrete double-tee-bridge north of the interchange on South Locust over the middle branch of the Platte River. Work also included grading, concrete pavement, culverts, box culverts, seeding, guardrail, fencing, electrical, and signing. The interchange provides another access to the City of Grand Island, as well as access to the South Locust area of Grand Island. It will reduce the amount of traffic using the other two interchanges into Grand Island.

This project was tied to the $1.9 million Grand Island south project which improved the 5.4-kilometer South Locust Street county road from Grand Island to the interstate. This project began in 2002 and included construction of three bridges, culvert work and grading, asphalt concrete pavement on South Locust Street, and concrete pavement on the interchange ramps. Construction was completed and the interchange was opened to traffic in August 2004.

FY-2005

Statistics

Population *(2004 Census Est.)*	214,555
Area *(Sq. Miles)*	9,744
Bridges	631
Highway System Miles	1,717

Maintenance Costs

Preventative	$2,391,509
Reactive	3,565,793
Pavement Striping	549,840
Snow Removal & De-Icing preparation & application	2,405,445

Construction Costs

Roadway	$22,171,051
Bridge	7,301,616
Railroad Viaduct	2,149,401
Total Let to Contract	**$31,622,068**

District 5

US26 - Oshkosh Northwest Viaduct

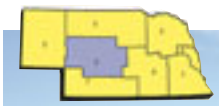
The Oshkosh Northwest project is a prime example of the NDOR's continuing effort to increase the traveling public's safety while working in cooperation with our transportation partners towards a common goal.

The $5.8 million viaduct project crosses over the Union Pacific Railroad just west of Oshkosh and relocates about 1.5 miles of US-26 to a new alignment. The project includes a grade separation over the railroad, lighting, grading, surfaced shoulders and roadway. Traveler delay was minimized by use of temporary roads and traffic signals which also removed the need for a lengthy detour. The project was started in the fall of 2004 and was completed in the fall of 2005.

FY-2005

Statistics			
Population *(2004 Census Est.)*	87,917	Area *(Sq. Miles)*	14,187
		Bridges	391
		Highway System Miles	1,253

Maintenance Costs		Construction Costs	
Preventative	$1,755,838	Roadway	$33,369,409
Reactive	2,244,609	Bridge	2,204,281
Pavement Striping	564,043	Railroad Viaduct	1,114,798
Snow Removal & De-Icing preparation & application	1,894,249	**Total Let to Contract**	**$36,688,488**



District 6

Brady South

The Brady South project is on Link 56D which connects US-30 with I-80. Construction began in June 2005, with a completion date of June 2007, and a cost of $9.965 million. The south mile of the project will follow the existing roadway location and then shift to a new location for the remaining mile.

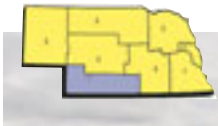
The project, when complete, will have five structures: bridges – I-80 interchange, flood control structure, and North Platte River; viaduct over the Union Pacific Railroad and US-30; and pedestrian walkway over the Union Pacific Railroad. The project will include 363,000 cubic yards of embankment, 2800 feet of 40-foot wide concrete pavement and 10,700 ton of asphaltic concrete pavement, interchange lighting, and lighting over the viaduct.

With the completion of the Brady South project, safety of our highway system will be greatly enhanced as two more "at-grade" crossings will be closed on the busy Union Pacific Railroad corridor. Currently, an estimated 160+ Union Pacific trains travel through Brady in a 24-hour period on three mainline tracks.

FY-2005

Statistics			
Population *(2004 Census Est.)*	83,642	Area *(Sq. Miles)*	12,803
		Bridges	351
		Highway System Miles	1,312

Maintenance Costs		Construction Costs	
Preventative	$2,793,966	Roadway	$28,297,666
Reactive	2,077,080	Bridge	7,918,230
Pavement Striping	600,158	Railroad Viaduct	2,176,467
Snow Removal & De-Icing preparation & application	1,099,508	**Total Let to Contract**	**$38,392,363**



District 7

US-136 Alma to Republican City

This $9,000,000 project on US-136 began at the intersection of US-183 in Alma and extends 8.1 miles to Republican City. Work started on the project in February 2004 and was completed in the fall of 2005.

The project includes four new bridges, 907,000 cubic yards of excavation, box culvert, and 61,000 tons of asphalt. The existing pavement in Alma was repaired and overlaid. The finished roadway has seven inches of asphalt on four-inch bituminous foundation course. The project provided sight distance improvements as well as shoulders and safety slopes.

Traffic was detoured during construction. Temporary gravel surfacing was used to maintain access for residents on the project.

FY-2005

Statistics			
Population *(2004 Census Est.)*	58,126	Area *(Sq. Miles)*	9,251
		Bridges	289
		Highway System Miles	1,029

Maintenance Costs		Construction Costs	
Preventative	$1,186,737	Roadway	$9,404,795
Reactive	2,150,824	Bridge	786,529
Pavement Striping	945,823	Railroad Viaduct	--
Snow Removal & De-Icing preparation & application	1,750,877	**Total Let to Contract**	**$10,191,324**

District 8

US-20 Long Pine to Bassett

The US-20 project starts one mile east of Long Pine and extends for 6.3 miles east to the west edge of Bassett at the initial cost of $1,359,830. The work on this project was done under traffic.

The existing asphalt surface will be recycled using a cold-in-place strategy. With this strategy, the existing pavement is removed, processed with hydrated lime slurry stabilization, and replaced to make a four-inch base course material for the new pavement. Then, an overlay of SuperPave Asphaltic Concrete is applied. This strategy is designed to eliminate reflective cracking from the base up through the new asphalt, and at the same time using recycled materials without removing them from the roadway. This project will improve safety by removing ruts, improving the driving surface, adding skid resistance and smoothness.

FY-2005

Statistics			
Population *(2004 Census Est.)*	28,495	Area *(Sq. Miles)*	13,286
		Bridges	135
		Highway System Miles	1,041

Maintenance Costs		Construction Costs	
Preventative	$1,556,153	Roadway	$5,436,265
Reactive	1,936,950	Bridge	113,233
Pavement Striping	512,558	Railroad Viaduct	---
Snow Removal & De-Icing preparation & application	841,300	**Total Let to Contract**	**$5,549,498**

Research

NDOR Research Work Program FY-2006

In April 2005, NDOR's Research Advisory Committee established the FY-2006 Research Program. NDOR Research Advisory Committee (RAC) received nineteen proposals for consideration this year; the seven projects listed below were funded:

- Concrete Pipe Load and Resistance – evaluation of NDOR's concrete pipe policy.
- Pozzolan Stabilized Subgrade – investigation of the application of pozzolan-stabilized mixtures for subgrade soil and help to establish specifications for their use.
- Fatigue Failure of Asphalt Mixtures Pavements – investigation of fatigue damage and resistance characteristics of local materials and the quality of these materials with the addition of lime.
- Optimal Design of Work Zone Crossovers – intended to provide guidelines for improving the design of work zone crossovers.
- Acceleration Ramps Along High-Operation-Speed Multilane Roadways and Freeways – provide guidelines to improve operational characteristics of acceleration lanes on high-speed roadways.
- Blowout Penstemon - Endangered Species – research to provide more complete knowledge of this endangered plant species and valuable information for future mitigation options.
- Development of a State-of-the-Art Traffic Micro-Simulation Model – provide a micro-simulation model of the Nebraska State Highway System that can be used and calibrated to Nebraska conditions using NDOR's data.

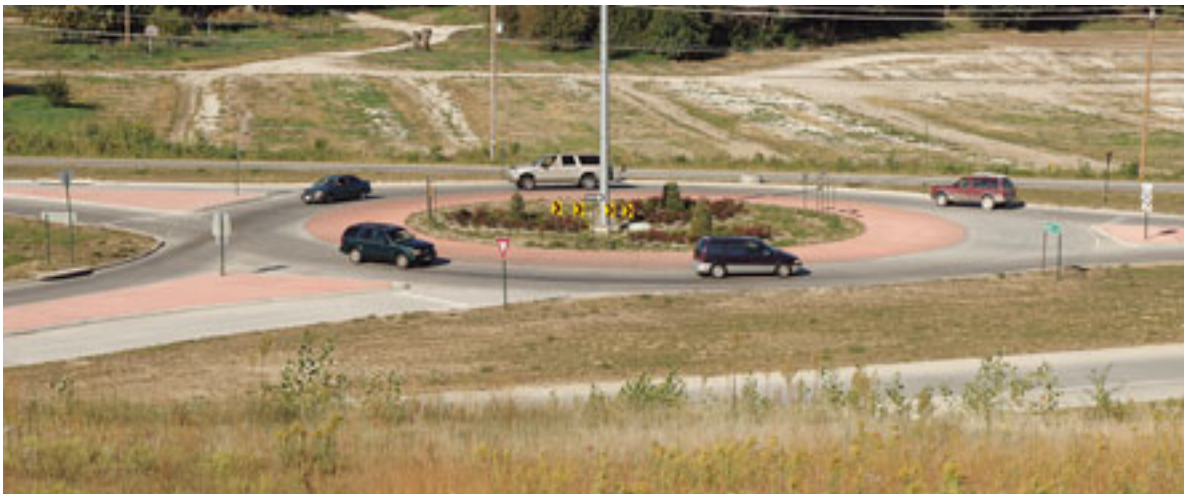
By accessing NDOR's Research webpage at http://ndorapp01.dor.state.ne.us/research/rpms.nsf, you can view research project summaries and quarterly reports, or submit a Research Statement of Need to be considered for funding in the next year.

Completed Research and Implementation

The Blair Project served as a location to implement new design techniques and perform in-house research.

The first, three-way roundabout intersection which connects US-30 and N-133 near Blair was opened to traffic in late 2004. The initial roundabout research was conducted in 2002 by Karen Schurr, Principle Investigator at University of Nebraska-Lincoln (UNL), with input from NDOR's Traffic and Roadway Design Divisions. The goal of the research was to document the experience of surrounding states and to study the effects that landscaping, or visually reducing the sight distance over the central island of a roundabout has on drivers, bicyclists, and pedestrians. As a result of this research, UNL researchers developed guidelines for NDOR designers to use during the design and construction of the first roundabout on the state highway system. NDOR designers and UNL researchers continue to work together to evaluate the latest guidelines for developing the most efficient operational, safe, and aesthetically pleasing design for roundabouts. The final report of the initial research is available from the NDOR Research Section.

During construction of the roundabout project, NDOR's District 2, and Materials and Research personnel worked with the private construction and materials companies to cooperatively perform an in-house materials' investigation. The objective of the study was to collect concrete mix performance data and identify ways to increase the service life of Portland cement concrete pavements. The study focused on identifying how varying the air content, mixing time, and vibration frequency would affect the service life of the concrete. The results indicated a potential increase in service life by ensuring that the appropriate air content is achieved. As a result, NDOR is currently updating the concrete specifications, to require that air content be measured after the paver, in an effort to verify that the appropriate air content is present.



Traffic flows through the Blair roundabout at the intersection of US-30 and N-133.

Environmental Stewardship

Nebraska's Historic Highway Survey –

Looking to the Future While Preserving the Past

In 2001, the Nebraska State Historic Preservation Office (SHPO) and NDOR initiated a comprehensive statewide study of historic properties along five of the State's earliest automobile routes. The goal of the year-long study was to solve the problems facing both agencies: a lack of understanding of where historic roads and related resources are located, and how they should be evaluated. These problems could delay projects and result in inadequate consideration of historic resources at the earliest stages of project planning, when the greatest flexibility in avoiding and minimizing negative impact is possible.

Historic and architectural features were identified for: Lincoln Highway (US-30), Detroit-Lincoln-Denver Highway (US-6 and US-34), Meridian Highway (US-81), Potash Highway (N-2), and the Grant and Blue Pole Highways (US-20). These are major highways of regional or national scope that were developed in the early to mid-20th century. The study focused on properties associated with the historic transportation routes frequented by automobile tourists, including sections of early roads and waysides, bridges, gas stations, cabin courts and motels, diners and drive-in restaurants, and vintage tourist attractions.

NDOR and SHPO are using the survey results for future project planning, compliance activities, and outreach efforts to educate the public about the significance of the State's historic properties. As a result, NDOR has an early understanding of what historic properties may be affected by their projects, which in turn provides greater opportunities to avoid potential conflicts.

Long-term benefits will be realized through cost and time savings, because the historic properties already have been identified prior to road improvements or bridge replacement projects. In 2003, the Federal Highway Administration-Nebraska Division provided funding through NDOR to SHPO for a two-year project to enter the survey results into a geographic information system (GIS) along with the results of Nebraska's Historic Bridge Survey done in 1991 and 1996 and being updated in 2005. NDOR and SHPO will use the GIS information to identify the locations of all potentially eligible sites when planning projects.

Historic Wyoming Bridge Relocated To Enhance Rare Wetland

The Wyoming Bridge, built in 1878 near the town of Wyoming, Nebraska in Otoe County, is a King bowstring pony truss bridge. The town of Wyoming no longer exists, but until November 2003, the bridge remained in place as one of the last surviving trusses of its type in Nebraska. In 2001, the Otoe County Highway Superintendent determined that the bridge had become obsolete for the traffic demands. In an attempt to preserve the bridge, NDOR and Otoe County began working with the Lower Platte South Natural Resources District (LPS-NRD) on a plan to relocate the bridge to the 100-acre Lincoln Saline Wetlands Nature Center, in Lancaster County east of Capitol Beach Lake.

The Wyoming Bridge was removed from its original piers on Goose Hill Road, spanning Squaw Creek in Otoe County and on September 29, 2004 was moved to Lincoln. It took eleven hours to move the 80-foot long, 14-foot wide, 15,000-pound

US-34 project between York and Seward in 1921.

Transporting the Wyoming Bridge to its new location in Lincoln.

From the Wyoming Bridge visitors can observe the Nature Center or walk along the woodchip trail.

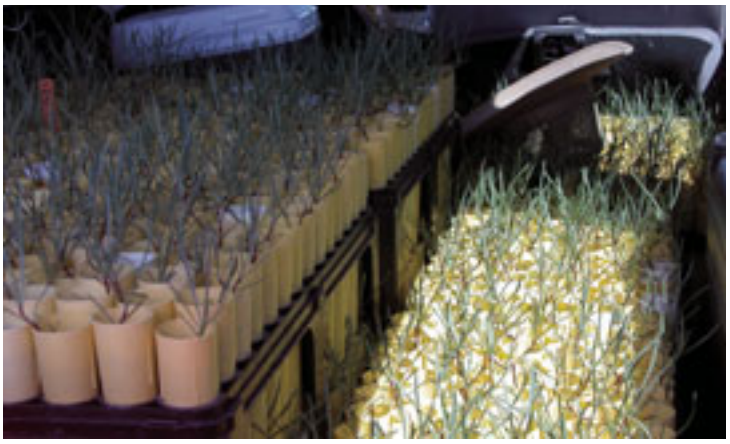
bridge. LPS-NRD restored the bridge and installed it on new piers at the Nature Center, and it was commemorated on National Trails Day in July, 2005. The bridge serves as a viewing platform and is part of a woodchip trail through the wetland which provides visitors a close-up view of one of the rare saline wetlands in Lancaster County. The project was jointly funded by the LPS-NRD and the Nebraska Department of Roads Transportation Enhancement Program.

Blowout Penstemon - Endangered Species Research Project

Prior to letting, NDOR road improvement projects are evaluated for presence and potential impacts to endangered or threatened species. Blowout penstemon is listed as endangered in Nebraska by state and federal agencies, and it is the only federally endangered plant species in Nebraska. If an NDOR project was to affect this plant species, mitigation measures would be required to lessen the project's impacts and the mitigation process can cause project delays.

NDOR is currently funding a research project on blowout penstemon. The University of Nebraska-Lincoln (UNL) is conducting this research which supports environmental stewardship initiatives within NDOR. Through research, NDOR may gain more knowledge about this endangered plant species, and it may provide an opportunity for additional discoveries about the species' life history and survival rates. Research results may provide NDOR with mitigation options if unavoidable impacts affect an existing blowout penstemon population. The numbers of blowout penstemon plants may also increase and help to populate the plants to a level that may eventually lead to delisting of this species as endangered.

NDOR owns the Bassett Northeast wetland bank site in Rock County, and a small parcel within this tract was identified as suitable habitat for the introduction of blowout penstemon. With guidance from UNL researchers, NDOR operators graded the site to improve conditions for planting. Six hundred blowout penstemon seedlings, grown in the UNL greenhouses, were planted at the site. Additional seedlings will be planted in 2006 and will be monitored by UNL students and staff.



Blowout Penstemon's wait to be planted.

NDOR operators grade the planting site.

Operations - Technology - Homeland Security

Intelligent Transportation System (ITS)

Intelligent Transportation Systems (ITS) are becoming the eyes and ears of the Nebraska public roadway system. ITS is comprised of roadway field devices such as cameras, road weather stations, bridge anti-icing systems, traffic sensors, and the large overhead message boards along the I-80 Corridor. ITS sensing technologies can count and classify traffic and have communications that transmit ITS field data from the roadway to Nebraska's eight operations centers. Operators have access to data from an array of ITS field devices and are able to better verify and react to situations on Nebraska's 10,000-mile highway system.

Operations Centers

The evolution of the public roadway systems in the United States began with the construction of the interstate highway in the 1950s and maintaining and expanding the interstate system in the later part of the 20th century. Today the focus is on operating the system.

Nebraska's eight engineering districts are developing operations centers to maintain and operate Nebraska's state highway system 365 days per year. Each district operations center (DOC) will become the focal point for operations and control of ITS field devices.

The District 2 Operations Center, an 8,000-square-foot facility to be located in Omaha, is in the final planning stages. NDOR and Nebraska State Patrol operators will both be located at the facility. This will provide 24-hour system coverage and faster response and recovery times to roadway incidents. The Center is also expected to play a back-up and support role for Nebraska's seven other district operations centers.

Personnel at the District 2 Operations Center in Omaha will work closely with the Iowa Department of Transportation in managing the more than 100 miles of freeway lanes that span Nebraska and Iowa in the Omaha-Council Bluffs metropolitan area. Collaboration on metropolitan operations policies and projects by Nebraska and Iowa provides a means for officials from both states to combine knowledge, expertise, and information so as to improve regional transportation operations.

District 6 DOC– Response to disaster

Thursday, March 10, 2005, 2:28PM – I-80 west of North Platte – High winds and dry conditions resulted in a dust storm that reduced the visibility to zero. Drivers panicked and instinctively began to stop resulting in a pileup of fifteen vehicles; fire erupted and there was confusion and chaos. As the fires ceased the scene was burned out shells of cars, trucks, trailers and cargo. The accident claimed the lives of three people.

Witnessing the accident, an NDOR employee phoned the District 6 office in North Platte, and the District Operations Center (DOC) was activated. NDOR employees were dispatched and alerts were sent to the Nebraska State Patrol, local law officials, and emergency responders. NDOR crews closed six mainline interstate gates and three ramp gates. Detours were set up to route I-80 traffic to US-30 using two new structures. On the west end, traffic was detoured over the Sutherland railroad viaduct. On the east end, detour traffic was routed over the West 12th Street railroad viaduct on US-30. This eliminated detouring traffic through North Platte on US-83. DOC operators were able to monitor the traffic flow and gate closure through the camera located at the North Platte interchange.

Dynamic Message Board is placed on I-80 to warn traffic of closure during dust storm.

Firemen on the scene of 15-car-pileup west of North Platte.

When the fire and winds decreased, assessment of the damage began. Light plants, equipment, and materials were dispatched to begin vehicle removal and clean-up operations. While the emergency responders, Nebraska State Patrol and fire crews completed their duties, NDOR employees controlled traffic to facilitate movement through the affected area and monitored the detour routes. Permanent message boards, vehicle-mounted message boards, and arrow boards were used to alert the traffic of the disaster and detours. Citizen Band (CB) wizards were used to broadcast the detour route and provide directions to truckers and vehicles who monitor the CB channels.

Approximately 500 feet of the eastbound lanes of I-80 were burned with the top two to three inches of concrete reduced to powder and chips. NDOR crews quickly placed a layer of asphalt as temporary surfacing. Interstate traffic returned to normal at 1:15 AM, Friday, March 11, 2005.

Thanks to our partnerships with numerous agencies there was a quick response and reaction to this incident. Having railroad viaducts and established alternate routes built to a standard capable of handling interstate traffic provided the means to safely keep I-80 traffic moving. Documentation of this incident will be used to evaluate response and aid in the response to incidents in the future.

RWIS tower with camera at I-80 bridge over Platte River near Brady, Nebraska.

Nebraska 511 Traveler Information

Nebraska was the first state to offer road condition and weather information statewide on our state highway system using the 511 travel information number. Nebraska's 511 travel information number has become a popular tool for motorists. The travel information data that is available on 511 is gathered throughout the state by the following two major means:

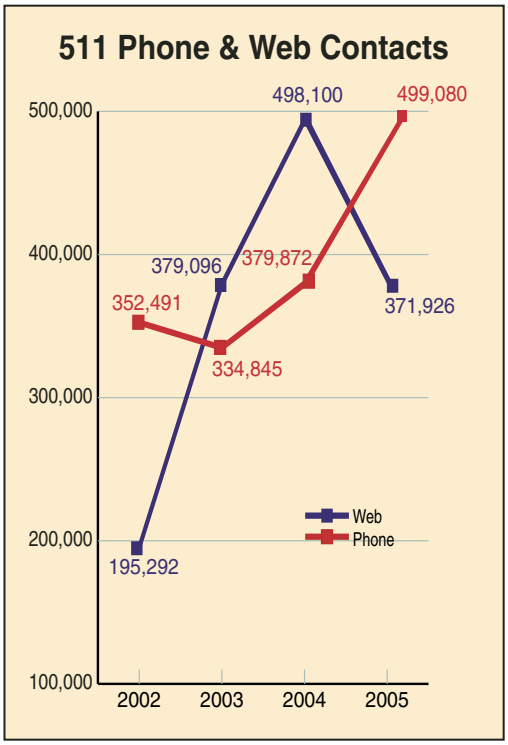
Road Weather Information Systems (RWIS)

Road Weather Information Systems provide localized weather data from 60 weather stations, 23 with cameras, strategically located across Nebraska. With the RWIS data, NDOR has up-to-date information to use as a roadway management tool. RWIS sites provide continuous updates to Nebraska's 511 travel information number, so motorists are provided road weather information on the entire state highway system.

The RWIS, at I-80 bridge near Brady, collects air and surface temperature, precipitation, dew and freezing points, and wind speed and direction. This information is used to turn on the fixed automated spray system that applies a liquid anti-icing chemical to the bridge deck when conditions are conducive to ice formation.

Highway Condition Reporting System

Over 200 NDOR employees across Nebraska provide highway system data for NDOR's Highway Condition Reporting System (HCRS). The HCRS then provides continual updates to the 511 system on conditions such as motor vehicle crashes, road surface conditions, work zones, and other real-time information and provides motorists information for making sound and safe travel decisions.



The Nebraska Amber Plan

The Amber Alert Program is a voluntary program through which emergency alerts are issued to notify the public about non-family abductions of children. The abduction alerts are distributed through a variety of means including radio and television stations, highway overhead message signs and other media.

In Nebraska, the Amber Plan is a partnership among the following public agencies: NDOR, Nebraska State Patrol, Nebraska Educational Telecommunications (NET), Nebraska Lottery and some private organizations. The Plan is administered by the Nebraska Department of Justice, and the Nebraska State Patrol is responsible for determining when an Amber Alert can be issued. The Nebraska Educational Television broadcasts alerts on the statewide Emergency Broadcast System, and commercial television and radio stations also broadcast the alerts.

There have been seven Amber Alerts in Nebraska since the program began two years ago. When the first alert occurred, NDOR had only nine operational interstate highway message boards. Today there are more than fifty message boards along Nebraska's I-80 corridor. Amber Alerts are placed on the 511 travel information number and the NDOR's website. Plans are underway to broadcast alerts to Nebraska rest areas in cooperation with NET.

Amber Alert on message board on I-480 in Omaha. The Amber Alert was issued July 14, 2005 from Lincoln.

Homeland Security

2005-2006 Homeland Security Training Exercise

NDOR continues to plan statewide homeland security exercises that test the department's readiness for a wide range of potential threats. These exercises include: tabletop, drills, functional and full-scale, and are designed to develop a collective level of preparedness among key state agencies. One of the objectives of NDOR's training is to shorten the duration of disruptive events of any origin. Exercise participants follow a scenario designed to test such objectives as: primary and secondary communications strategies, mutual assistance to other NDOR districts and state agencies, and the ability to deliver public information.

On November 3, 2005, NDOR had the opportunity to test these objectives when they participated in the statewide functional exercise TERREX 2005. The exercise addressed a critical health issue within the state. Participating agencies performed actions associated with initial response to an incident resulting from violent extremism, including victim rescue, triage, treatment, decontamination, hazard identification, site security, crowd control, and contamination monitoring and control. NDOR tested alternate uses of staff, buildings and equipment; mutual aid, public information, and recovery capabilities. Response times in terms of "response levels" considering weather, vacations, absences and other variables were measured.

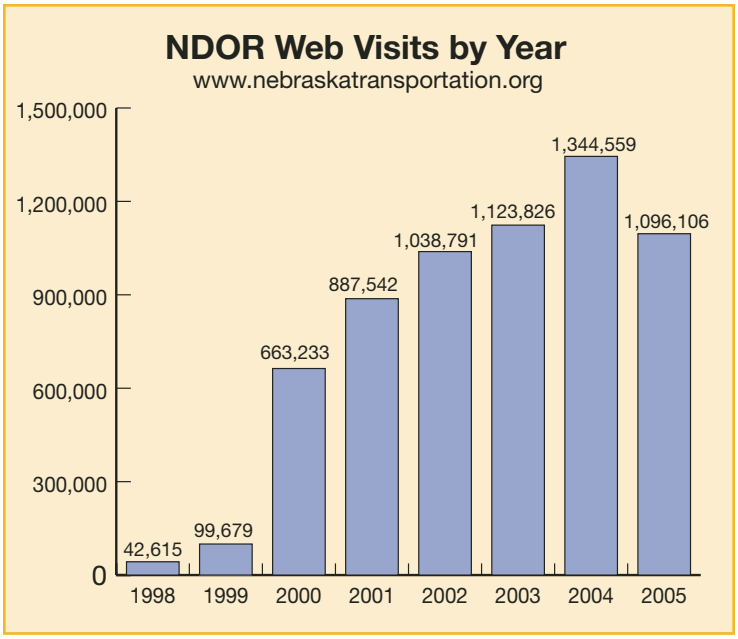
NDOR's Homeland Security training strategy has been designed to develop readiness for all hazards, including chemical, biological, radiological, and explosive incidents. The cycle of exercises provides NDOR with opportunities to work closely with other state agencies and local jurisdictions with an Incident Command Structures (ICS). ICS defines the operating characteristics, interactive management components, and structure of incident management and emergency response organizations engaged throughout the lifecycle of an incident.

Nebraska Department of Roads' Trans-Portal Web

NDOR's Web Portal continues to grow and is used not only by visitors who want to get information about travel to and within Nebraska, but also contractors and others who do business with NDOR. The web is popular with visitors who wish to view the variety of information within the Trans-Portal.

Visitors who want information about specific projects, still in the planning stages, are helped by the additions to the Highway Projects area of the web. The site for the West Dodge Project averages 3,000 visits monthly by those looking at current detours/closures or viewing the photos of the progress.

A major addition this year was a link where users can access regularly updated camera views of highways across Nebraska. Plans are in place to link to additional cameras in 2006. All of the main pages are accessible with screen readers and can be downloaded to handheld devices such as PDAs. The website can be accessed from www.dor.state.ne.us or www.nebraskatransportation.org.



Serving our Customers by Working Together

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

Transportation Enhancement Program

The Transportation Enhancement (TE) Program has had many positive results in Nebraska. Since 1993, NDOR has awarded approximately $70 million for 760 transportation enhancement projects, with funds being spent in one of every three Nebraska communities. These projects make a significant contribution to the quality of life in Nebraska, from the smallest village to the largest city.

The Transportation Enhancement Program, part of the federal highway bill, provides funding to local, state, and regional governmental entities to construct and restore transportation infrastructure that are not eligible to be funded through other programs. Following are two projects that have been accomplished with the use of transportation enhancement funds:

Wayne Trail

The City of Wayne was awarded $473,333 in TE funds for a 2.6-mile segment of their Master Trails' Plan. This segment provides residents and college students a safe and alternative means of transportation across the city. It was completed in the fall of 2004. Beginning at a campground/park at the south edge of Wayne, the trail travels east under N-15, following Logan Creek towards the city's softball complex, arboretum, and tree farm. It travels northeast along an abandoned railroad right-of-way, crosses N-35, and extends northwest through a residential area. It then connects to Sunny View Park and Princeton Medical Facility, finally connecting to a trail system within Wayne State College's campus.

Underpass on the Wayne Trail, Wayne, NE.

The trail enhances industrial areas, where native plantings of wildflowers and grasses will add color and texture to the landscape. The trail's access to the city's lagoon will also provide an opportunity to view waterfowl and many types of birds.

Restored brick section of the historic Lincoln Highway.

Lincoln Highway Resurfacing

Recognized as a historic resource, a three-mile segment of the Lincoln Highway, east of Elkhorn between 174th Street and 204th Street, is believed to be the only existing rural brick segment of the highway in Nebraska. Douglas County was awarded $443,097 in TE funds for restoration of the brick surfacing on this historic highway with a one-mile portion, between 180th Street and 192nd Street, being listed on the National Register of Historic Places.

The Lincoln Highway, the nation's first transcontinental road, was built between 1913 and 1928, with the existing brick three-mile section being constructed in 1920. The Lincoln Highway was envisioned as the transcontinental road that would link New York with San Francisco. The coast-to-coast highway started in Times Square and traveled west 3,400 miles ending at Lincoln Park in San Francisco. In Nebraska, the 450-mile route entered Omaha on the east, crossed 13 counties and 47 towns, and exited near Bushnell, the state's western border with Wyoming.

The restoration of brick paving along the Old Lincoln Highway is just one of many items that must be accomplished in preserving a unique historic resource for future generations. The public is encouraged to use this road and experience a unique visual experience.

Scenic Byways Program

Highlighted in white on the Nebraska State Map are nine Scenic Byways highway routes. Over the past five years, approximately $2.6 million has been provided to local communities for tourism enhancements to these byways. The Nebraska Scenic Byways Committee has 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 have access to state-of-the-art informational kiosks. The system is the first of its kind in the nation to combine tourism information such as: lodging, food, fuel, and weather updates from the National Weather Service. The kiosks are at the start and end of each of the nine Scenic Byways and at ten of I-80 rest areas. NDOR used Scenic Byways funds to purchase and install the informational kiosks, and the Department of Economic Development, Division of Travel and Tourism updates and maintains the information.

Local Transportation Assistance Program

The Local Technical Assistance Program (LTAP) provides technical assistance to local government to help them understand new transportation technologies. Since 1985, the Nebraska LTAP (NE LTAP) has been funded by the Federal Highway Administration and the NDOR. In 2005, NE LTAP moved into its new offices in the West Lincoln Airpark, which is open to the public.

NE LTAP assists 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 local transportation agencies' resources by sharing technical information. Its stated mission is: *"To facilitate the transfer of transportation knowledge and technology to state and local transportation agencies and the contractors that work for these agencies thereby enhancing their skills in providing a safe, efficient, environmentally-sound transportation system."*

Training, technical assistance, and technology transfer are used in all transportation areas with emphasis on safety, maintenance, equipment operation, and traffic management. In 2004, the LTAP delivered 49 workshops to 2,588 participants for a total of 45,737 participant hours. LTAP publishes a quarterly newsletter "The Interchange" and maintains a website at www.ne-ltap.unl.edu/.

2005 LTAP Activities

- Conducted the Nebraska Asphalt Paving Conference.
- Presented updates in the spring and fall at the five Nebraska Association of County Officials district meetings.
- Conducted two Superintendent pre-exam workshops.
- Coordinated the development of the agenda for the National LTAP conference.
- Conducted eight work zone safety courses (training tools purchased with grant from the Nebraska Office on Highway Safety).
- Conducted ten in-county three-day motor grader operator safety courses.

Work Zone Management Course attendees – course purpose was to study highway and street work zone setups and management practices with hands on training on simulation boards.

Motor Grader Operator Short-course Attendees – purpose was to discuss best practices, safety, and problem solving on unsurfaced local roads.

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. Nebraska's counties have access to NECTAR.

Metro Area Motorist Assist

Omaha's Metro Area Motorist Assist Program (MAMAP) is a partnership that includes NDOR, the Iowa Department of Transportation, and several corporate sponsors whose logos are displayed on the Motorist Assist vehicles.

MAMAP began in 1998 and is supervised and managed by the Nebraska State Patrol Troop A with administrative support provided by the Omaha-Council Bluffs Metropolitan Area Planning Agency. The Omaha-Council Bluffs freeways are served during peak hours and assistance is provided for: disabled vehicles, debris removal, jump starts, directions, cell phone use, abandoned vehicle tagging and law enforcement during roadway incidents. MAMAP volunteers have provided approximately 46,000 assists at a value of $446,300.

Two other Motorist Assist Programs operate in Nebraska. The Nebraska Motorist Assist Program started in 2000, is based in Lincoln, and serves I-80 from the Platte River to Lincoln and has provided approximately 24,930 assists at a value of $254,395. The Central Nebraska Motorist Assist Program started in 2003, is based in Grand Island, and serves I-80 from Elm Creek to Waco and has provided approximately 3,889 assists at a value of $58,334.

Adopt-a-Highway

Nebraska's Adopt-a-Highway Program is a volunteer-driven public service that is in its 15th year of operation. Across Nebraska, 1,332 Adopt-a-Highway groups show their commitment to the environment by keeping state highways clean and free of litter. The program has 14,200 participating volunteers, covering 2,572 miles, at an annual savings of $771,600.

Long-Range Transportation Plan (LRTP)

NDOR is in the process of updating the state LRTP which will be completed in 2006. It will be a broad-based statewide transportation-planning document that identifies transportation

issues and provides direction for the future. It will include 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.

On March 2, 2005, NDOR hosted a stakeholder's meeting in Lincoln with 40 attendees from the state's transportation-related agencies. Information was presented on existing and future conditions of Nebraska's transportation system, the process and timeline for the LRTP, and the draft goals and objectives. The attendees had several opportunities to provide input on the development of the LRTP, suggestions on the goals and objectives, and identify key issues that the LRTP should address.

To review the LRTP draft goals, objectives, current progress documents, or to make comments, visit the LRTP website, www.nebraskatransportation.org/lrtp.

Attendees at the LRTP Stakeholders' meeting.

Comprehensive Plan Assistance Program

Each year, $200,000 is available for the Comprehensive Plan Assistance Program to 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 to 20-year time frame, quantify future growth areas, and help the communities formulate long-term plans for such things as utilities and roadway capacity. This will help NDOR coordinate future planning of the state road system to complement the community's growth needs. Four communities have completed their plans, and six more communities are in the process of updating their plans.

Summit and Conferences

Utilities Summit

In March 2005, NDOR sponsored a Utilities Summit with attendees from Omaha Public Power District (OPPD), Metropolitan Utilities District, North Public Power District, Cox Communications, and Lincoln Electric System. The purpose of the summit was to improve the flow of information between NDOR and utility companies. A presentation was given on the current coordination process used by NDOR and OPPD, followed by an open discussion to solicit ideas for improvements. Other topics discussed: 1) recent changes in NDOR's right-of-way permit application process, and 2) proposal to require Geospatial Information System (GIS) coordinates of buried utilities located in state right-of-way. NDOR and the utility companies pledged to continue to look for ways to improve coordination.

GEOPAK Conference

The Nebraska MicroStation/GEOPAK User Group Conference was held in Lincoln on March 22, 2005. A total of 210 people attended and received information on the functionality of the GEOPAK 2004 and 2005 editions.

Western Association of State Highway and Transportation Officials (WASHTO) Conference

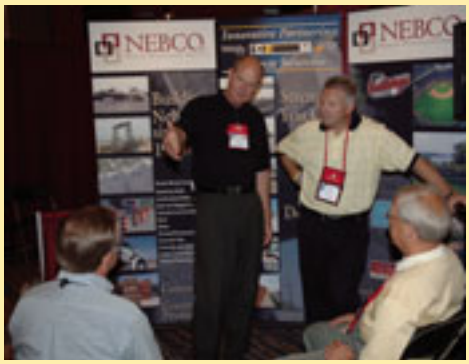
NDOR hosted the 84th annual meeting of WASHTO, July 10-13, in Omaha. The theme for this year's meeting was "Moving America." This was the first time that the conference was held in Nebraska, the newest of the 18 WASHTO member states. More than 600 state delegates and industry partners attended.

Conference delegates were welcomed by: Nebraska Governor Dave Heineman; Omaha Mayor Mike Fahey, NDOR Director John Craig; WASHTO President Thomas Norton, CO; and American Association of State Highway and Transportation Officials (AASHTO) President, Jack Lettier, Jr., NJ.

WASHTO members and their industry partners shared transportation updates and observations during technical breakout sessions and tours. In addition to a variety of informative sessions, two keynote speakers, Ken Stinson, Chairman of the Board and Director of Peter Kiewit Sons', Inc., and Robert Turner, Senior Vice President, Corporate Relations of Union Pacific Corporation, provided remarks during the conference. Conference attendees also had the opportunity to view Transportation EXPO Hall displays and exhibitor presentations.

The WASHTO meeting offered those committed to improving the safety and mobility of the nation's transportation system the opportunity to build valuable relationships with peers, understand leading trends, learn solutions to current challenges and take proven solutions home to their organizations.

Governor Heineman addresses WASHTO delegates and guests.



Delegates learn of new products visiting Transportation Expo Hall at WASHTO 2005.

Geospatial Information Systems for Transportation (GIS-T) Symposium

Geospatial Information Systems (GIS) leaders from 31 state transportation agencies, three foreign countries, and four Canadian provinces gathered for the GIS-T Symposium held in Lincoln, Nebraska, April 3-6, 2005. Attendees from as far away as Australia attended the eighteenth annual symposium.

The symposium was hosted by NDOR and provided a forum for transportation officials, industry executives, and public and private professionals from state, province, federal, and municipal agencies to discuss GIS and transportation issues. The migration of GIS was emphasized and the many uses of geospatial technologies relating to the transportation industry were highlighted.

Attendees of GIS-T conference discuss transportation issues.

Omaha-Fremont Freeway System

There are currently four projects under construction between I-680 and Fremont along the West Dodge Road and US-275 corridors which will complete the Omaha to Fremont Freeway System.

1) The West Dodge elevated freeway construction is a five-year, $100 million project that begins just east of 108th Street and extends west to approximately 131st Street. This project is necessary to improve traffic operations, capacity, and safety on West Dodge Road from I-680 to the 132nd Street interchange. West Dodge Road will remain as a local road, with ramps to the elevated freeway lanes.

This project consists of constructing freeway bridges with three lanes both east- and westbound for approximately one mile from 108th Street to 120th Street. Traffic not having a destination at 120th Street, 114th Street or the Old Mill area may use the elevated freeway lanes to bypass those areas.

Three lanes in each direction along West Dodge Road are being maintained during peak hours. Properties along the frontage roads are accessible from at least one direction throughout. Project completion is scheduled for fall of 2008.

2) Reconstruction of West Dodge Road between 174th Street and 198th Street began in spring 2004. Traffic is being maintained using the entrance and exit ramps for the 192nd Street and 180th Street interchanges. Project completion is scheduled for fall of 2006.

West Dodge Roadway elevated freeway, from 108th to 120th Street.

Looking west past the US-6/N-31 interchange at three new bridges over West Dodge Road.

With the completion of these two projects, West Dodge Road will be three lanes in each direction for nine miles from I-680 to the 204th Street (US-6/N-31) interchange.

3) The Waterloo Southeast project includes construction of three new interchanges located at 228th Street, West Dodge Road/ US-275 and Blondo Street. Traffic is being maintained head-to-head in the westbound lanes and on shoo-fly detours at the three interchanges. Project completion is scheduled for fall of 2006.

4) Fremont East Bypass project includes the construction of the two remaining lanes, plus three interchanges located at US-275/US-30, Military Avenue, and Morningside Road. Traffic will be maintained head-to-head on the existing lanes during construction. Project completion is scheduled for fall of 2007.

The Omaha-Fremont Freeway System has been and continues to be a successful project through the combined efforts and partnering among NDOR; prime construction contractors, Hawkins, Chas Vrana and Warner; consultants; utilities companies, electrical, water, gas telephone, and cable; TV, radio and newspapers; and property and business owners.

Preconstruction meetings were held and weekly meetings are being held with our partners. Through these meetings, problems are addressed, solutions found, and actions are taken. The public can also keep informed by logging onto NDOR's web site at www.westdodge.info. The news media continues to distribute information about the project.

Financial

Department of Roads Financial Status and Sources

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. NDOR's net assets are approximately $7.0 billion.

Surface Transportation Financing

Our surface transportation system is the lifeblood of Nebraska and our nation. Our economy and quality of life depend upon a well-functioning transportation system. Nebraska serves as a mid-west connection for the movement of goods and products by commercial trucks and railways, and our transportation system provides connectivity for foreign trade. Transportation connects people to jobs, family, medical care, entertainment, and the goods and services we need for everyday life.

Historically, Nebraska has been a pay-as-you-go state. We receive highway-user fees and taxes from dedicated sources – federal, state, and local revenues. During its history, Nebraska has only borrowed once. In 1969, we issued $20 million in highway bonds to complete our interstate system. We do not have toll roads or bridges on the state highway system.

In recent years, our revenue stream has become fairly static. Fuel consumption has begun to show a small decline, as the price of fuel has escalated. Sales taxes have decreased, presumably resulting from people beginning to buy smaller, more fuel efficient vehicles and at a lower cost.

Federal revenues should begin to increase for Nebraska, as a result of the recent transportation reauthorization bill, passed by Congress in August 2005. We expect to see revenue increases beginning in federal fiscal year 2006 and continuing through 2009. However, higher inflationary costs continue to erode revenue gains.

Department of Roads Revenues

State Funds

State revenues provide 55 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. 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.

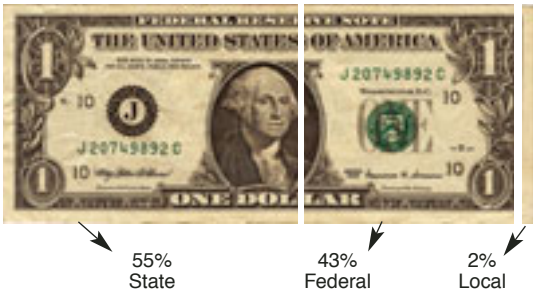
Federal Funds

Revenue received from the federal government, 43 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.

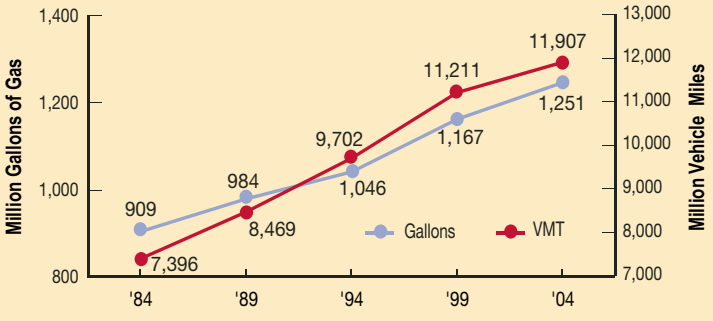
Department of Roads Revenues

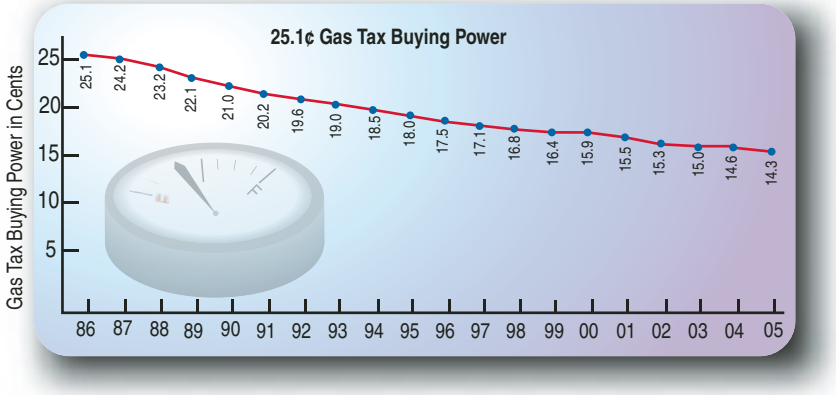


Fuel Consumption versus Vehicles Miles Traveled

In the past 20 years, motor fuel consumption in Nebraska has increased only 37 percent while vehicle miles traveled on the state system has increased over 60 percent. Stated another way, highway usage has increased at a much faster rate than the revenue generated to support that system.

Fuel Consumption vs. Vehicle Miles Traveled (VMT)





Gas Tax Buying Power

Over 63 percent of all state revenues is derived from taxes on motor fuels which averaged 25.1¢ per gallon in 2005. The buying power of the 25.1¢ motor fuel tax has declined to just over 14¢ in today's dollars. State another way, $1 in 1986 would only be worth 57¢ today.

Department of Roads Expenditures

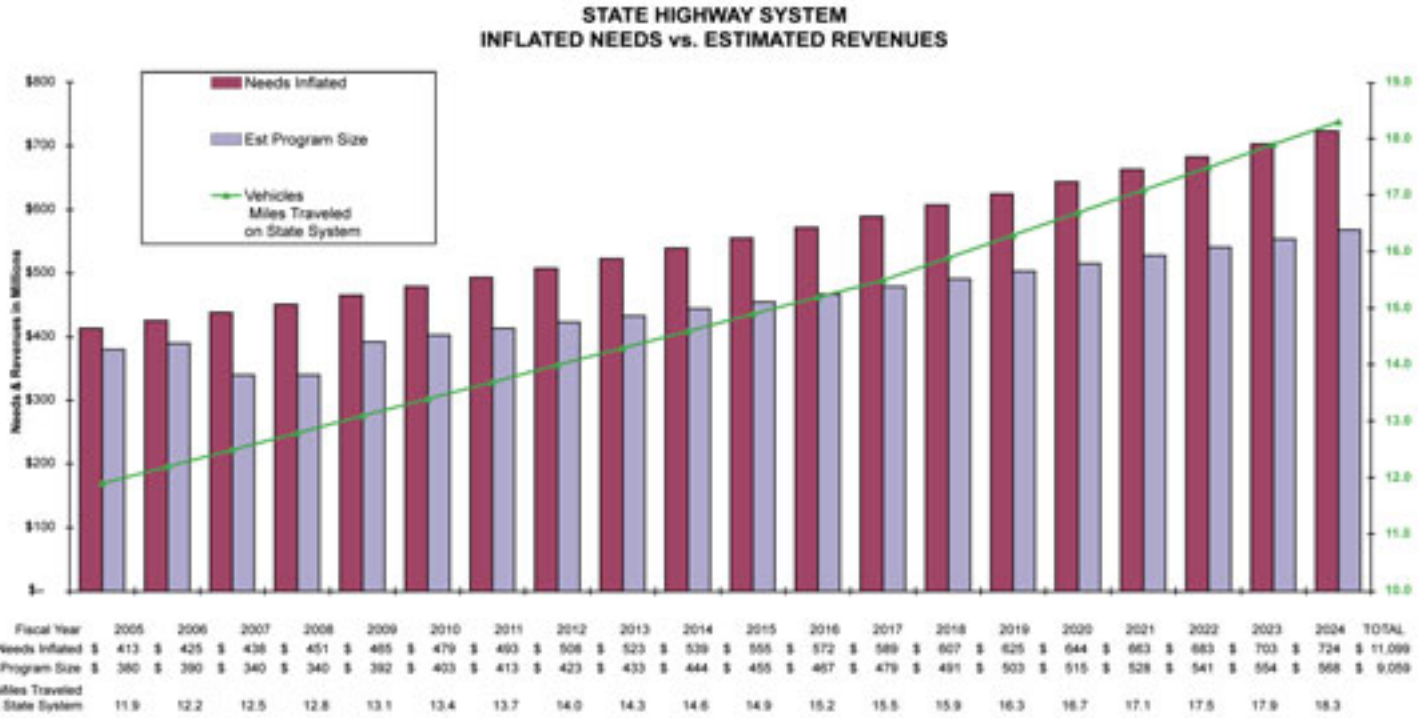
NDOR spent $621 million in FY-2005 to move people and goods across and throughout the state by means of a safe and reliable surface transportation system.

- 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.
- Approximately 15 percent of total expenditures are spent on routine maintenance activities that include: mowing, snow removal, ditch cleaning, litter pickup, sign and signal repairs, striping, guard rail repairs, pothole patching, etc.
- Only 5 percent are spent on services and support, i.e. administrative salaries, 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.

(Approximately $6 million annually is expended by NDOR to support 147 employees from various state agencies, as well as $160,000 for two employees of the federal government.)

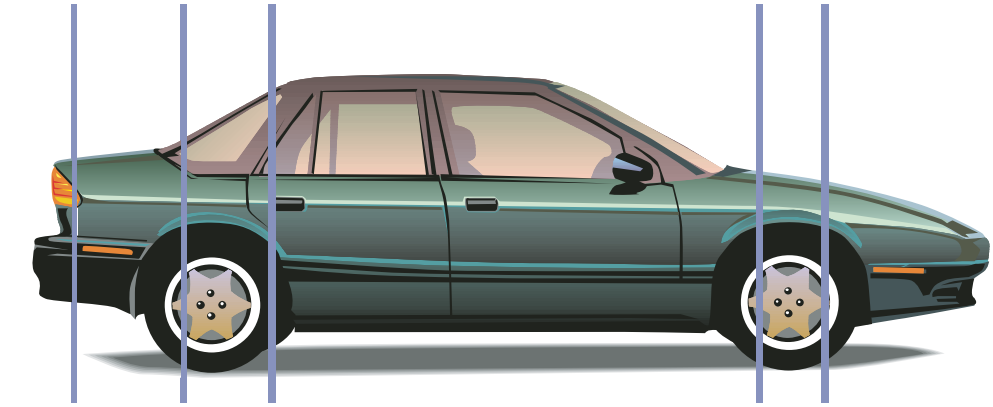
Inflated Needs versus Estimated Revenues

The "2005 State Highway System Needs Assessment" report identified current needs as $8.3 billion. Those projected needs, with an inflation factor of 3 percent per year over the next 20 years, would cost an estimated $11.1 billion. At the same time, considering conservative increases in state and federal revenues, total funds available would accumulate to approximately $9.1 billion. Consequently there will be a revenue shortfall of $2.0 billion in meeting the "needs" over the next 20 years.



Fiscal Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	TOTAL
Needs Inflated	$ 413	$ 425	$ 438	$ 451	$ 465	$ 479	$ 493	$ 508	$ 523	$ 539	$ 555	$ 572	$ 589	$ 607	$ 625	$ 644	$ 663	$ 683	$ 703	$ 724	$ 11,099
Est Program Size	$ 380	$ 390	$ 340	$ 340	$ 392	$ 403	$ 413	$ 423	$ 433	$ 444	$ 455	$ 467	$ 479	$ 491	$ 503	$ 515	$ 528	$ 541	$ 554	$ 568	$ 9,059
Vehicle Miles Traveled on State System	11.9	12.2	12.5	12.8	13.1	13.4	13.7	14.0	14.3	14.6	14.9	15.2	15.5	15.9	16.3	16.7	17.1	17.5	17.9	18.3	

Passenger Car Operating Costs



Taxes	Fuel	Financing	Depreciation	Repairs	Insurance
5.0%	10.6%	9.6%	50.3%	7.7%	16.7%

Transportation Costs for Consumers

According to the American Automobile Association, the average operating costs for a vehicle that travels 10,000 miles annually is 68.2 cents per mile. Taxes and fees are only 5 percent of the total expenditures to own and operate a vehicle.

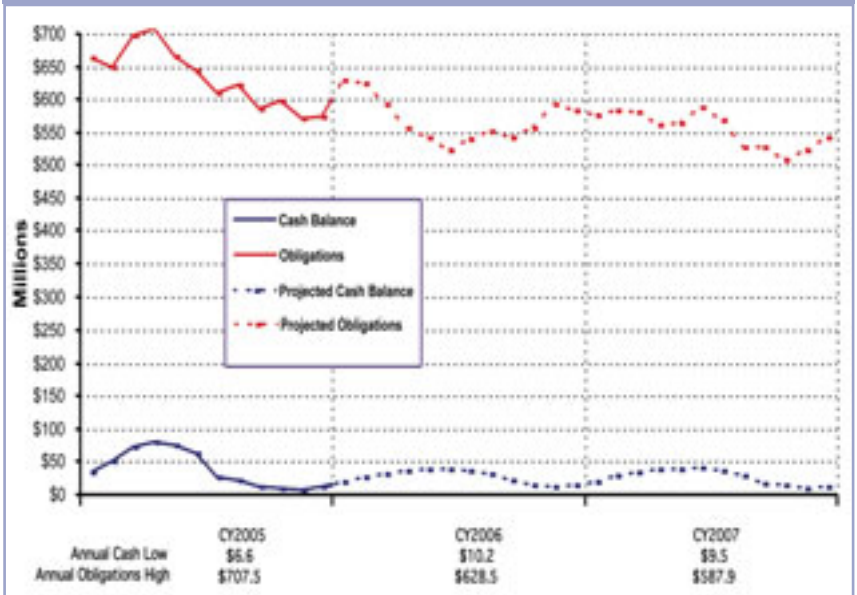
Highway Cash Fund Balance

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 that $3 million on any given day of the year. The difference between funds received and dollars spent is reflected as cash balances.

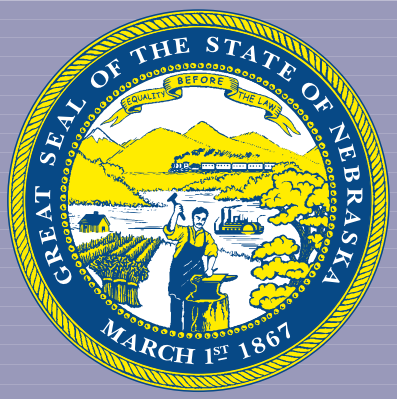
During the winter months as the contract construction season slows, revenues begin to accumulate. In the following summer and fall months, these cash balances are reduced as contractors are paid for the work they perform, and low cash balances occur.

Nebraska Department of Roads - Highway Cash and Roads Operations
Monthly Lowest Cash Balance with Monthly Obligations/Commitments



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 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. We continue to do more with less.



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