

50
Years

of

Interstate

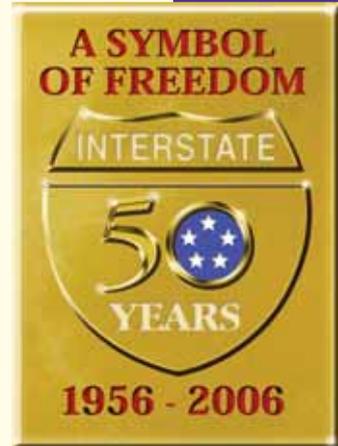
Nebraska and the Nation





National Interstate System – Past, Present, Future...

“Linking the power of the past to the promise of the future.”



June 29, 2006, marks the 50th anniversary of the “Dwight David Eisenhower System of Interstate and Defense Highways,” often called the greatest public works project in history. This year’s national celebration recognizes the signing of the Federal-Aid Highway Act of 1956, by President Dwight D. Eisenhower. This act created the Highway Trust Fund as a dedicated source of funding for the interstate highway system, on a pay-as-you-go basis through the federal gas tax and other motor-vehicle user fees.

Today the national interstate system consists of approximately 47,000 miles of roadway. While interstate highways comprise less than 1 percent of all roadway lane miles in the country, they carry over 24 percent of all vehicle traffic, including 41 percent of total truck miles traveled. There are approximately 15,000 interchanges and over 55,000 bridges.

The Nebraska Department of Roads joins in this commemoration by recognizing the significance of Interstate 80 to the growth and development of Nebraska. Too often taken for granted, the interstate system is responsible for dramatically improving our mobility, public safety, quality of life and commerce.

The 50th anniversary of the interstate system provides a tremendous opportunity to raise public awareness of this vital transportation network and to address its future.

Past

National Interstate System Development – Brief History

As early as 1803, the federal government showed interest in roadways between states (interstate highways) when funding was provided for the construction of the National Pike from Cumberland, Maryland to Wheeling, West Virginia to ease the movement of the westward-bound pioneers.

From 1916 onward, there was a concerted effort to create a national road system and to provide the states with financial assistance to enable them to develop their own highway systems.

1919 Transcontinental Army Convoy

Following World War I, the U.S. Army decided to send a convoy across the continent from Washington, D.C., to San Francisco. The primary purpose was to test various military vehicles and to determine by actual experience the feasibility of moving an army across the continent. The convoy, consisting of 81 motorized Army vehicles, left Washington D.C. on July 7, 1919. The personnel numbered approximately 280, consisting of enlisted men, officers and observers from other branches of the Army.



Dwight D. Eisenhower

One of the observers was Lieutenant Dwight D. Eisenhower. The convoy traveled 3,251 miles in 62 days, with many delays due to the poor road conditions. After

experiencing the long and arduous journey and then witnessing Germany's autobahn system firsthand as Supreme Allied Commander in World War II, Eisenhower had become convinced of the need to improve his nation's road.

Later he said, "The old (1919) convoy had started me thinking about good, two-lane highways, but Germany had made me see the wisdom of broader ribbons across the land."

Planning and Development of the Interstate Highway System

Although the interstate highway system was not completed nationwide until the 1970s, it had been in the planning stages for nearly half a century. In 1922, 52 years before the interstate was completed in Nebraska, 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. His 1923 report to Congress offered two possible routes. One was a north-south route running approximately parallel to the Mississippi River, from the Canadian border to New Orleans. The second was an east-west highway following the approximate route of present-day Interstate 80. Although Congress did not proceed at this time with appropriate funds for further study or construction, Pershing's report sparked interest in the interstate highway system.

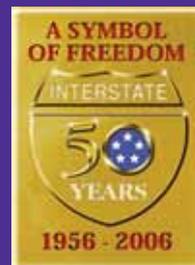
The Highway Act of 1934 gave highway planning a tremendous impetus by providing that up to 1½ percent of the state's apportionment could be used for surveys, plans and engineering investigations. With these funds, the so-called statewide highway planning surveys were inaugurated. The factual information derived from these comprehensive surveys played a most important part in future highway programs.

Interest in the interstate system was renewed in 1938, when Congress directed the Federal Bureau of Public Roads to perform a feasibility study of a national superhighway network. Although feasibility of a six-route national toll road network was examined, it was not recommended, since the then-existing traffic levels would not support its cost.

The study resulted in a 1939 Federal Bureau of Public Roads report advocating the construction of a special 26,000-mile system of direct, interregional highways, with necessary connections through and around cities that would meet the requirements of the national defense in time of war, as well as the increasing demands of traffic. However, the United States' participation in World War II interrupted further progress toward a national system of interstate highways.

Congress commissioned another study in 1943, authorized to investigate national superhighway needs. The 1944 report led Congress to authorize the National System of Interstate Highways as part of the Federal Aid Highway Act of 1944. This act set forth a 40,000-mile system of national interregional highways and the 1947 Act formalized an interstate system of 37,800 miles.

By the 1950s, the proposed interstate highway system had been laid out and strict guidelines for road access had been



established, but funding was still not available. In the 1952 Federal-Aid Highway Act, small funding provisions were made including the creation of a 50/50 matching plan between state and federal governments. Construction and progress on the superhighway system lagged under this financing and Congress made another attempt to finance the highway system in 1954. The Federal Aid Highway Act of 1954 provided for an increase in the federal share from 50 to 60 percent that would go into effect after all funds from the 1954 Act had been expended.

The Federal-Aid Highway Act of 1956

After two years, President Eisenhower's and Congress's appeals led to the passing of the 1956 Federal-Aid Highway Act, which established the layout and financing formula for a national interstate highway system. This Act brought together a system approach, a design concept, a federal commitment, and a financing mechanism and, by so doing, truly changed the face of America.

As part of the Act, Title I increased the system's proposed length to 41,000 miles; nationwide design standards were developed through the American

Association of State Highway and Transportation Officials; a new cost to complete method for apportioning funds among states was established; and the federal government's share of the project cost was set at 90 percent, reducing state funding to 10 percent. In recognition of the importance to the interstate system to the national defense, Congress added the word "defense" to the name of the interstate system.

Title II—the Highway Revenue Act of 1956—created the Highway Trust Fund as a dedicated source of funding for the interstate highway system, on a pay-as-you-go basis through the federal gas tax and other motor-vehicle user fees.

In addition to funding, the 1956 legislation provided that the 41,000-mile highway system be completed within 13-15 years, bringing the interstate to a simultaneous completion in all states. Population centers, known as "control points" were developed, with an agreement made that the interstate would connect these points.

Subsequent acts of Congress extended the mileage of the interstate system to its present length of approximately 47,000 miles.



Designers at work in the State Capitol offices, home of the Roads Department until 1967.

Role of Key Individuals and Groups



President Dwight D. Eisenhower

Horatio Sawyer Earle – In 1901, he formed a national road building group whose goal was to advocate federal support for construction of a “Capital Connecting Government Highway System” that would “connect every state capital with each other and the United States Capital – Washington. A Michigan public official, Earle was likely the first American to put forth a vision for a network of interstate highways.

General John J. Pershing – While Army Chief of Staff, he conducted a study of possible routes for a nationwide system of express highways, and his 1923 report to Congress sparked interest in the interstate highway system.

Thomas H. MacDonald – Commissioner of Public Roads who, in 1941, was appointed by President Franklin D. Roosevelt to head a National Highway Committee. He led the study which resulted in Congress authorizing the National System of Interstate Highways as part of the Federal Aid Highway Act of 1944.

President Franklin D. Roosevelt – Throughout the 1930s, President Roosevelt’s New Deal programs continued to fund road construction and employment during the decade of economic depression.

President Dwight D. Eisenhower, Senator Albert Gore, Sr., Representatives George Fallon and Thomas Boggs, along with **Frank Turner**, chief of what is now called the Federal Highway Administration, are commonly seen as the fathers of the interstate system.

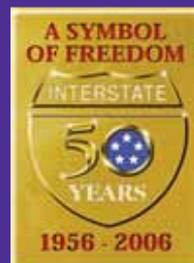
President Dwight D. Eisenhower – As President, Eisenhower was the driving force behind the passage of the Federal Aid Highway Act in 1956 which created the interstate system, and launched the biggest peacetime construction program in the nation’s history.

Frank Turner – In his 43 years with the Bureau of Public Roads (later the Federal Highway Administration), Turner was the chief architect of the interstate highway system. Turner also was the primary liaison between the BPR and congressional committees during the deliberations and passage of the Federal Aid Highway Act of 1956 which established the interstate system. He was integral in establishing the Highway Trust Fund and the current system of federal-state highway funding.

Senator Albert Gore, Sr. – Argued in the Senate for the interstate system.

Congressman George Fallon – Argued in the House of Representatives for the interstate system.

Congressman Thomas Boggs – Argued in the House of Representatives for the interstate system.



Chronology – by the year

1803 – Before the national interstate highway system, the federal government provided funding for the construction of the National Pike from Cumberland, Maryland to Wheeling, West Virginia to ease the movement of the westward-bound pioneers.

1919 – Dwight D. Eisenhower's participation in the Transcontinental Motor Convoy

1922 – General John J. Pershing, Army Chief of Staff, was instructed by Congress to study the need for, and possible routes of, a nationwide system of express highways.

1923 – General John J. Pershing's report to Congress offered two possible routes, a north-south route and an east-west route that was similar to the present-day Interstate 80.

1938 – The Federal-Aid Highway Act of 1938 was the first serious attempt to develop a national roadway system. Officials advocated for a 26,700-mile network financed by the federal and state governments.

1940 – The Pennsylvania Turnpike opened—the first limited-access, divided highway in the country.

1941 – A strategic highway network of about 78,800 miles of principal routes was approved by the Secretary of War.

1944 – The Federal-Aid Highway Act of 1944 created a 40,000-mile "National System of Interstate Highways," but with no increase in federal funding.

1947 – Commissioner Thomas H. MacDonald and Federal Works Administrator Phillip B. Fleming announced selection of the first 37,700 miles on routes proposed by state highway agencies and approved by the Department of Defense.

1952 – The Federal-Aid Highway Act of 1952 authorized funds on a 50/50 state/federal matching level.

1953 – When President Eisenhower assumed office, only 6,000 miles of the interstate system had been completed at a cost of \$955 million.

1954 – President Eisenhower signed The Federal-Aid Highway Act of 1954, authorizing the first funding of the interstate system. However, additional funding was needed.

1956 – On June 29, 1956, President Dwight D. Eisenhower signed the Federal-Aid Highway Act of 1956, creating the interstate highway system.

1956 – On August 2, the first three contracts under the new program were signed in Missouri.

1956 – The first stretch of interstate, an eight-mile segment in Topeka, Kansas, opened November 14, barely five months after the 1956 Act was signed.

1960s – Construction on the interstate system proceeded at a rapid pace.

1972 – 1,214 rest areas were located along the interstate system.

1974 – Nebraska was the first state to complete its 455-mile portion of the I-80 interstate system.

1975 – Initial designated completion date of the national interstate system.

1977 – As of December 31, work had either been completed or was under way on 99.4 percent of 42,225 miles of the national interstate system.

1990 – President George Bush signed legislation changing the original name, the "National System of Interstate and Defense Highways," to the "Dwight D. Eisenhower System of Interstate and Defense Highways."

1990 – The interstate system included a total of 45,530 miles, with a few small projects remaining in areas with special needs, such as Hawaii.

1993 – The last link, Interstate 105 in Los Angeles, was completed.

1994 – The American Society of Civil Engineers declared the Interstate system one of the "Seven Wonders of the United States."

1996 – On the 40th anniversary of the interstate highway system, only 30 miles remained to be built, with 25 of those 30 miles already under construction and the other five in the design phase.

2006 – 50th anniversary of the national interstate highway system...

Unusual Facts, Myths and Miscellanea



Myth: One Mile in Five...Legend has it that the Eisenhower Interstate Highway System required one out of every five miles of highway to be straight enough to use as an airstrip.

False! Although it was discussed many times that the interstates could be used as emergency airstrips, there is not, nor has there ever been any sort of regulation mandating that the roads meet standards so they can be used as airstrips.

Myth: I-76 in the Philadelphia, Pennsylvania, area was given its number as part of the 1976 bicentennial celebration of the Declaration of Independence.

False! I-76 just happened to fall in the right place numerically to pretend to have historical significance.

While the name implies that these highways cross state lines, many interstates do not. Rather, it is the system of interstates that connects states.

The initial cost estimate for the interstate system was \$25 billion over 12 years; it ended up costing \$114 billion, taking 35 years to complete. As of 2004, the system contains approximately 47,000 miles of roads, all at least four lanes wide.

Three states claim the first interstate: Missouri, Kansas and Pennsylvania. Missouri was the first state to award a contract with the new funding. Kansas

has the first paving that was initiated after the 1956 Act and the first project completed. Pennsylvania claims that the Pennsylvania turnpike, which was finished in 1940 and then later incorporated into the interstate system, is really the first part of the interstates. Nebraska was the first state to complete its interstate system statewide.

The only state without any interstate routes is Alaska.

There are five state capitals that are not served by the interstate system, including: Juneau, Alaska; Dover, Delaware; Jefferson City, Missouri; Carson City, Nevada; and Pierre, South Dakota.

Interstates 50 and 60 do not exist, mainly because they would have most likely passed through the same states that already have US-50 and US-60. National standards discourage interstates and U.S. highways with the same number to exist in the same state.

Strict adherence to the directional nature of the system results in some amusing oddities. For a 10-mile stretch east of Wytheville, Virginia, the driver can be traveling on both North I-81 and South I-77 at the same time (and vice versa).

There are 21 "secret" interstate routes. These routes are officially part of the Eisenhower Interstate System essentially on paper, as no shields or other signage of their existence is posted. In many cases they are unsigned as to not confuse or overburden motorists with an additional number on an already signed route. For example, this occurs in Maryland with the segment of I-595 as it is already known as US-50 and US-301.



2006 – The Year of the Interstate

Present

The 50th anniversary of the interstate system is an opportunity to raise the nation's consciousness about how different our lives would be without the interstates, and harness that new awareness to plan for future decades of personal freedom and economic benefit.

The interstate highway system was designed to serve the greatest number of motorists possible with comfort and ease of driving. It was also designed to save travelers money by providing a safer system and a more economical surface on which to drive.

The new highways dramatically changed people's lives. They improved public safety, shortened traveling time, reduced vehicle operating costs, promoted economic development and increased personal mobility.

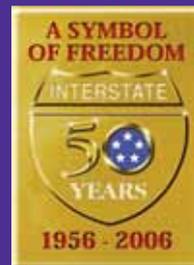
Benefits and Challenges

America's interstate system is now becoming a victim of its own amazing

success. In 1956 Congress never envisioned its incredible results—more people are traveling to more places than ever before.

Since interstate construction began in 1956, total vehicle miles of travel nationally have increased by 350 percent, the number of vehicles has increased by 250 percent and U.S. population has increased 75 percent—from 170 million people to nearly 300 million. The nation's population is expected to grow by over 50 million people by the year 2025—a 20 percent increase—and all vehicle travel is expected to increase over 40 percent.

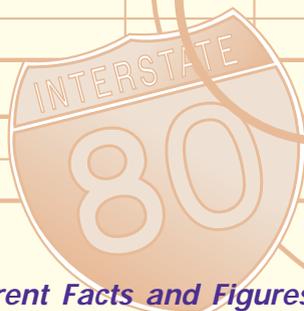
Many challenges lie ahead. Traffic congestion is getting worse on the interstate system as new travel outpaces capacity expansions. Travel on the interstate system increased by 43 percent from 1991 to 2003, while additional lane-mileage on the system increased by five percent. Thus vehicle travel grew at a rate eight times higher than additional capacity was added over the last decade.



**Interstate Highway System
50th Anniversary Reenactment Route**
June 18 - 29, 2006

Host Cities:

1. San Francisco
2. Reno
3. Elko
4. Salt Lake City
5. Rawlins
6. Cheyenne
7. North Platte
8. Omaha
9. Des Moines
10. Davenport
11. Chicago
12. South Bend
13. Cleveland
14. Pittsburg
15. Gettysburg
16. Frederick
17. Washington, DC



Current Facts and Figures Interstates by the Numbers...

The longest interstate is I-90, which runs from Boston to Seattle, a distance of 3,081 miles. At 75 mph it would take you 41 hours to cover that distance non-stop. The second longest is I-80, which covers the 2,907 miles between New York City and San Francisco.

The shortest interstate is I-878 in New York City, which is all of seven-tenths of a mile long. That's 3,696 feet.

The highest interstate numbered route is I-990 north of Buffalo, New York. The lowest number is I-4 across Florida.

The oldest interstate segments are a portion of Grand Central Parkway in Queens, New York, opened in 1936, which was later incorporated into the interstate system as I-278; and the Pennsylvania Turnpike between Irwin southwest of Pittsburgh and Carlisle west of Harrisburg opened in October 1940, and is now I-76 and I-70.

The most expensive route was I-95, costing \$8 billion, it also goes through the largest number of states, 16.

Interstates carry nearly 60,000 people per route-mile per day, 26 times the amount of all other roads, and 22 times the amount of rail passenger services. Over the past 40 years, that's the equivalent of a trip to the moon for every person in California, New York, Texas and New Jersey combined.

Travel on the interstate system by combination trucks increased by nearly 70 percent between 1991 and 2003.

The fatality rate for interstate highways is nearly 60 percent lower than that of the rest of the roadway system.

The last stoplight on the interstate system was removed in the 1980s. It was on I-90 in Wallace, Idaho, and when it was removed, the local townspeople gave it a proper burial in the local cemetery, complete with a 21-gun salute.

There are approximately 47,000 miles of roadway on the interstate highway system and approximately 14,750 interchanges.

Over 55,000 bridges had to be built as part of the Interstate Highway System.

There are a total of 58 one- or two-number interstates in the continental U.S. Of those 58, 27 run primarily east-west. The other 31 go primarily north-south. There are three interstates in Hawaii (H-1, H-2 and H-3).

East-west interstate route numbers end in an even number. North-south routes end in an odd number. The basis for this numbering system goes back to the 1920s.

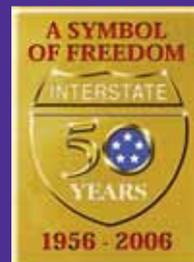
If the first digit of a three-digit interstate route number is odd, it is a spur into a city. If it is even, it goes through or around a city.

Future

How will our interstate highway system look on its 100th anniversary in 2056? Will America be a nation in perpetual gridlock, whose outdated transportation infrastructure system is a hindrance to its economy and quality of life? Or will Americans continue to forge ahead, as they did during the 20th century, to improve a system that is unparalleled in the world?

For the latter to occur, increased research is essential to develop new and innovative materials and methods for constructing roads. New funding solutions and a long-term transportation investment will be required to meet increased infrastructure needs of the future.

Though highway spending has increased steadily since 1956, it has not kept up with inflation. Considering the current national budget deficit, transportation funding may continue to fall short of what is needed to maintain the system. This dilemma will need to be addressed head-on by key decision-makers in order to plan for future decades of personal freedom and economic benefit.



Nebraska's Interstate System Development – Past, Present, Future

Past

Building Nebraska's Interstate System

The interstate in Nebraska was intended to be the backbone of the state highway system, carrying the bulk of the cross-country traffic safely and quickly. Within Nebraska, it would stretch for approximately 450 miles, from Omaha in the east to the Wyoming state line, west of Kimball. In Nebraska, it took 17 years, from 1957 until 1974, to complete the interstate.

Route Selection and Conflict... Which Side of the Platte River?

The 1947 federal route designations presented a general corridor for the interstate across Nebraska. The Nebraska Department of Roads, the State Highway Commission and the Governor were responsible for developing and selecting the actual route within the general corridor outlined by the federal government.

Once the Nebraska interstate highway system planning began, struggles ensued. Nebraska communities lobbied to be included on the interstate route. Many groups formed to lobby for their preferred interstate location.

One of the biggest routing controversies had to do with the location of the interstate on either the north or south bank of the Platte River in central Nebraska. Even before the 1954 Federal Aid Highway Act was passed, controversy ensued over the interstate alignment between the Hastings-Grand Island area and North Platte. In 1956 the Roads Department announced tentative plans that the interstate route between Hastings-Grand Island and North Platte would follow the north bank of the

Platte River. The north route was shorter and would require fewer bridges and county road crossings than the southern route. In response to the announcement, 42 towns south of the Platte River formed the South Platte United Chambers of Commerce (SPUCC) lobbying group. They proposed their own interstate route in August of 1956, located south of the Platte River. After a series of public hearings, on March of 1959 the Roads Department announced their approval of the north bank route.

After construction on the section east of North Platte began, controversy arose over the location of the interstate west of the community. It was tentatively decided that the entire route would be located south of the South Platte River, spurring local controversy. Again, lobbying organizations developed, including the Greater Nebraska, Inc. (GNI), and hearings were held.

In December of 1961, the Roads Department announced its backing of a route south of the South Platte River, with lower cost estimates than the north route. Additional controversy arose when the Nebraska Highway Advisory Commission voted in favor of a northern route west of North Platte and Governor Morrison also recommended this route.

In February of 1962, the Federal Bureau of Public Roads, the agency responsible for allocating 90 percent of federal funds for highway development and construction, ruled that they would not support the north interstate route, as it would cost \$60 million more than the south route. After the Bureau's ruling, the state engineer announced that the interstate would follow the south route originally recommended by the Roads Department, and approved by the Federal Bureau of Roads in 1957.

Financing I-80 in Nebraska... Much Discussion

In order to finance their 10 percent responsibility for the interstate highway system, the Nebraska Legislature passed a 1957 law raising state motor fuel taxes from six to seven cents. At the time it was believed that this increase would be sufficient for the state and counties to meet their financial obligations and accelerate construction.

Controversy was not limited to the routing of the interstate highway. As early as the 1940s there was controversy regarding the possibility of a toll highway system in Nebraska. A turnpike authority was formed to conduct a feasibility study, but general support for toll road construction began to wane in 1957 when interstate construction began in earnest.

A bitter fight over the allocation of interstate construction funds between Omaha and most of the rest of Nebraska erupted in late 1959. The Roads Department planned to build first in Omaha and then move west to lower

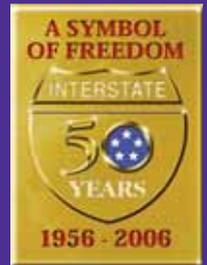
construction costs across the state. After a Lincoln group announced that Omaha was getting all the interstate funds, a group of panhandle representatives formed an organization called Greater Nebraska, Inc. (GNI). They argued that state funds should not be used for a route through Omaha that would serve primarily local traffic. GNI felt that any routes in downtown Omaha should be constructed after the main trunk-line was completed. After a series of public hearings, a funding ratio of 23 percent urban construction and 77 percent rural construction was adopted. In 1970, state officials readjusted the ratio in favor of urban construction with public support.

Construction of I-80 in Nebraska

In Nebraska, interstate construction was planned for four phases over an anticipated 15-year timeline. The first construction phase, between Omaha and Lincoln, was chosen as a priority because it was the most heavily traveled traffic corridor along the proposed interstate.



Construction crews work on a paving train to complete construction of Interstate 80 in central Nebraska.



Concrete finishing machine completes exit ramp near Gretna.

Work on this section began in 1957 and was opened for traffic in 1962.

The first interstate project in Nebraska was the 6.4 miles near Gretna in Sarpy County, southwest of Omaha. In November of 1959 it became the first segment of Nebraska's interstate to be completed and open to traffic.

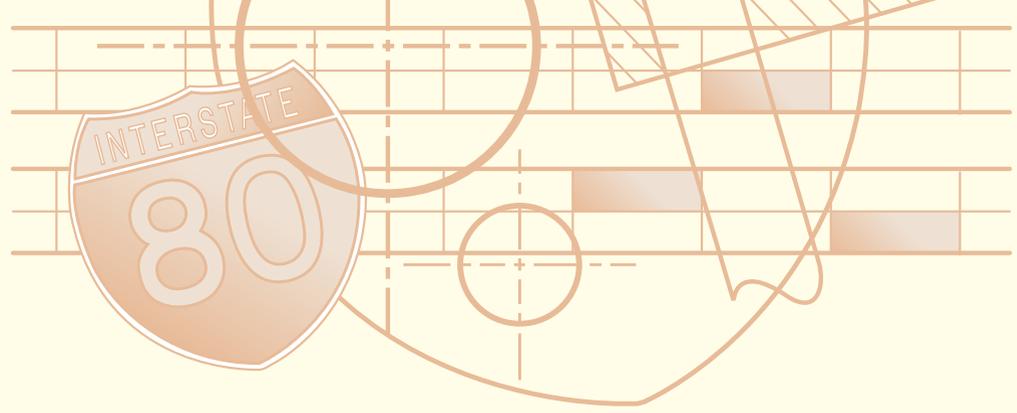
A project near Kimball was actually completed earlier, in 1955, financed with federal funds on a 50/50 matching basis. This was the first construction on the alignment of the future interstate in Nebraska and involved the relocation of US-30 between Kimball and the Cheyenne County line. However, this section was designated as US-30 until the early 1970s when the additional westbound lanes were constructed and the original lanes were partially reconstructed to interstate design

standards. Upon completion of this work in December 1973, the highway was officially designated as Interstate 80.

The second construction phase was the 195-mile section between Grand Island and North Platte. Contracts for this section were awarded between 1960 and 1964. The project was completed in 1966.

The third construction phase was the section between Lincoln and Grand Island. Although this area carried heavy traffic loads, there were paved alternate routes in the area, US-33, US-34 and US-6. Work on this section was completed in 1966.

The last phase was the portion between North Platte and the Big Springs junction near the Colorado state line. Construction on this section began in 1967.



Nebraska First State to Complete I-80

In 1974, Nebraska became the first state to complete its 455-mile portion of the I-80 Interstate at a cost of \$435 million, an average of \$950,000 per mile. This was accomplished by building the most difficult parts first (in the Omaha area).

On October 19, 1974, a crowd gathered at the spot six miles west of Sidney to mark the opening of the final mainline segment of I-80 in Nebraska. A "Golden Link," an embedded brass-top section of channel-iron, was placed across all four lanes of traffic at rest areas west of Sidney.

Continued Improvements

During the 1980s and 1990s, roadside improvements and rest area modifications continued, along with bridge repair, ramp revisions, pavement markings, and joint and crack repairs. Protective sealants were added to the majority of Nebraska's I-80. Other improvements included noise barriers

constructed in Douglas County during the 1990s and milled rumble strip shields, a shoulder safety measure, added in several counties during the late 1990s and 2000.

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.

Nebraska's Rest Areas

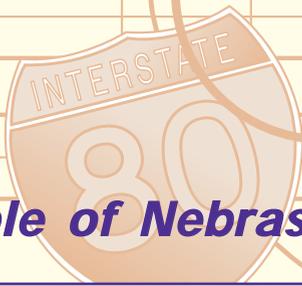
Nebraska took a leading role in providing rest areas on the Interstate. It was the only state to install full concrete pavement on the Interstate rest areas—other states used asphalt.

During the 1970s, modifications were made to the standard Nebraska rest stops. Tables were added to open picnic areas. Tourist information booths were provided once the Nebraska tour guide program was started. Concrete sculpture pieces were added and maintenance storage areas were expanded. The Nebraska I-80 Bicentennial Sculpture Project, begun in 1973 and completed in 1976, created outdoor sculptures commemorating America's Bicentennial, located at rest areas interspersed along the interstate.

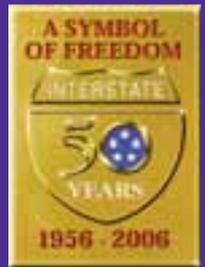
Along the I-80 corridor there are 25 rest areas with picnic shelters, lush lawns, sturdy shrubs, trees and open spaces for children to play. The rest areas have computer kiosks which provide weather and travel information.



Interstate Safety Rest Area Building.



Role of Nebraskans



Governor J. James Exon dedicated the Golden Link and historical marker, October 19, 1974, six miles west of Sidney.

Nebraskans Contributed to State's Interstate System

Dozens of dedicated highway engineers and other hard-working Nebraska citizens spent countless hours planning and building the state's interstate highway system. Governors, State Engineers, and a multitude of other highway engineers, state highway commissioners, contractors, materials suppliers, and labor and highway users all cooperated to bring about its successful completion.

Some key individuals

Governors

- Victor E. Anderson, 1955-59
(Governor when I-80 was begun)
- Ralph G. Brooks, 1959-60
- Dwight W. Burney, 1960-61
- Frank B. Morrison, 1961-67
- Norbert T. Tiemann, 1967-71
- John J. "Jim" Exon, 1971-79
(Governor when I-80 was completed)

State Engineers

- Lorenz N. Ress, 1953-59
(State Engineer when I-80 was begun)
- Robert L. Cochran, 1959
- John W. Hossack, 1960-68
- Marvin L. Nuernberger, 1968-71
- Thomas D. Doyle, 1971-77
(State Engineer when I-80 was completed)

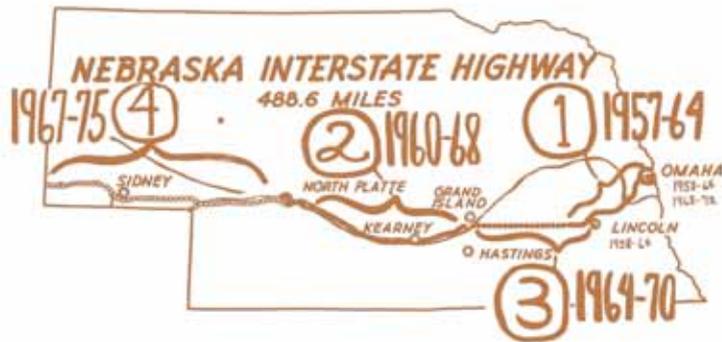
Engineers

Kenneth J. Gottula – Assistant Design Engineer, Interstate Design Section, 1957; promoted to Roadway Design Division Engineer in 1968; served as Construction Engineer from 1974 to 1986. He worked on the Nebraska Interstate 80 project from start to finish.

Steven R. Gilbert – State Airport Engineer from 1949 to 1957 and Director of the Department of Aeronautics. In 1957, he was appointed Assistant Design Division Engineer in charge of Interstate design.



EXISTING STATE HIGHWAY DEPT PRIORITIES



Waldo H. "John" Mengel – Design Engineer from 1952 to 1958; Right-of-Way Engineer from 1959 to 1968. He was in charge of all phases of design—primary, secondary and interstate; served in a supervisory capacity during construction of Nebraska Interstate 80.

H. Shaw Little – Field Project Engineer; helped make the first I-80 cost estimate, completed in August 1957. He returned to the field and was in charge of several other I-80 projects before he retired.

Al Dearnont – Design Engineer, Interstate Design Section, 1957 and years following; was also a surveyor; worked later years in Right-of-Way Division.

Gerald "Jerry" Grauer – Project Engineer, 1954 to 1964; worked on Minden to Kearney project, from about 1959 to 1963; also worked on preliminary surveys for North Platte area. Served in Transportation Planning, Project Development and later as Chief Engineer in Roadway Design.

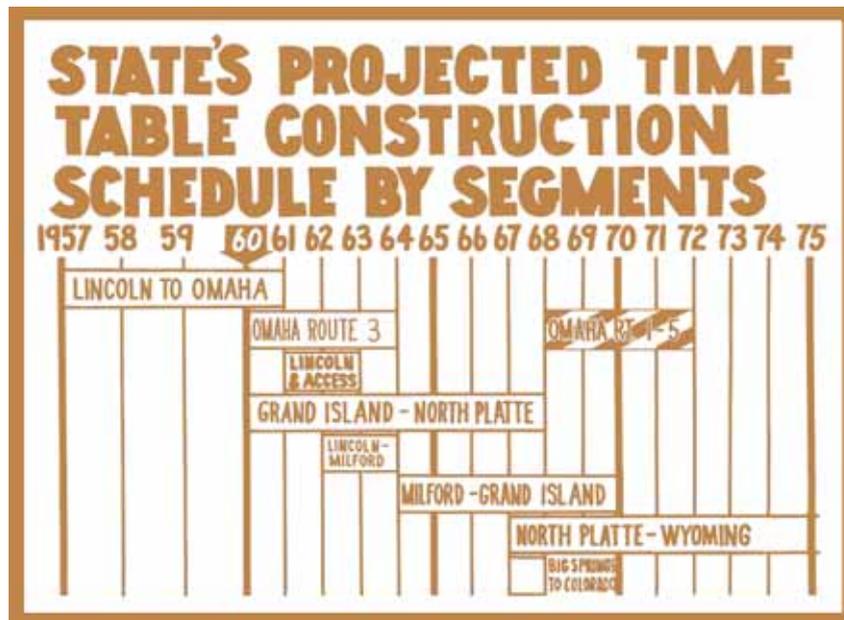
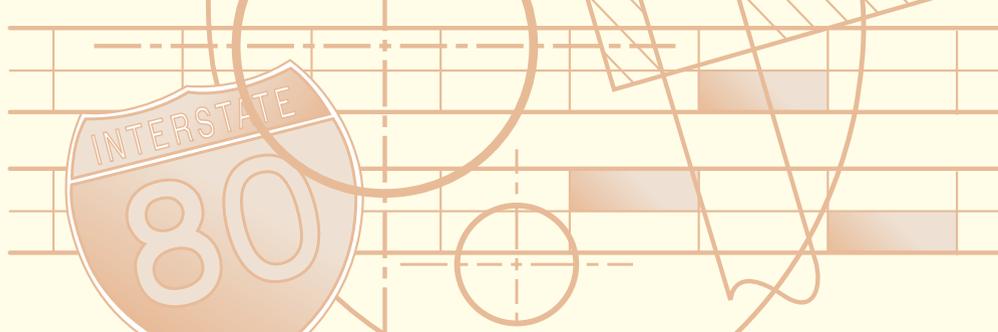
Geoffrey R. King – Project Manager at Lincoln in 1957 and years following; primarily involved in work on I-80 from Hwy. 77 west to I-180.

Gerold C. "Jerry" Strobel – Bridge Engineer during the beginning of the I-80 construction, from 1953 to 1959; was responsible for the overall supervision of bridge design on the interstate; head of Roadway Design in 1959 to 1960; became Deputy State Engineer in 1961. Later served as Deputy Director-Engineering and Director-State Engineer.

Arthur H. "Art" Dederman – Bridge Engineer from 1959 to 1968; Construction Engineer from 1968 to 1974; Maintenance Engineer from 1974 to 1988.

John C. Porter – Bridge Engineer from 1968 to 1972.

Orville L. Lund – Engineer in Materials & Tests during the 1950s and 1960s; later became Chief Materials & Tests Engineer; supervised testing and materials specifications for Interstate 80.



Otto Griess – Engineer in Materials & Tests Engineer during I-80 construction.

Oliver W. Johnson – Project Engineer and later Assistant Construction Engineer during the 1950s; later became Deputy State Engineer from 1968 to 1972.

Walter E. “Walt” Witt – Engineer/Surveyor; in charge of surveying on Interstate 80 and later involved in design work; eventually became Right-of-Way Engineer and also served as Maintenance Engineer.

Virgil Wagner – Project Manager on I-80 from Kearney west.

Bob Stutzman – Project Manager on I-80 from Brady west.

Other Officials

Jerome Warner – Of rural Waverly, State Senator from 1963 to 1997, was named to chair a special legislative

study committee, authorized by the Legislature in 1965 to conduct a sweeping study of the needs of every public road in Nebraska—state highways, county roads and city streets. He served on the committee for the second two years, 1967-68 and 1968-69. The resulting landmark highway legislation enacted in 1969 ultimately allowed Nebraska to be the first state in the union to complete its mainline interstate, primarily by authorizing a \$20 million bond issue for 1969 for the specific purpose of accelerating interstate construction. Those bonds were paid off in 1989 and the remainder of Nebraska’s original construction and reconstruction is pay-as-you-go.

Merle Kingsbury – Former State Highway Commission member, served from 1953 to 1987; oversaw many of the public hearings held to settle controversies dealing with location of I-80 in Nebraska.

Recollections of Officials and Engineers

Meeting the Challenge

Ken Gottula, former Nebraska Department of Roads Engineer, a 46-year veteran who worked on the Nebraska Interstate 80 project from start to finish, recalled the early days: "Construction began south of Gretna in 1957. The Federal government said Nebraska's interstate had to pass by Omaha, Lincoln, North Platte and Big Springs, near the Colorado border. It left the exact location up to the state—and led to some pretty heated debate."

Merle Kingsbury of Lincoln, a former State Highway Commission member who oversaw many of the meetings, noted, "Those were real contentious days. The public had a lot of input and concern about how it would affect their towns. I think we held several hundred location hearings."

Gottula acknowledged there was some initial opposition to the project, but was happy about the outcome. "We had our naysayers who said they didn't need it. But once they started building, we couldn't build it fast

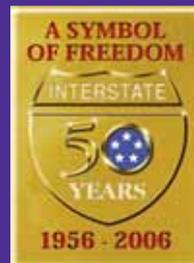
enough. They wanted it overnight, and once we opened it, they loved every inch."

Looking back at the construction of the interstate in Nebraska, Gottula noted, "It was a great undertaking, a lot of money, a lot of miles. And right now you wonder how could this country have survived if you didn't have the system."

Gerald Strobel, former State Engineer at the Nebraska Department of Roads, discussed strains placed on the department during the early 1960s, when the allocation of federal funds varied greatly from year to year. "There were super problems that we thought were insurmountable. In 1960, we had a large apportionment of interstate funds, probably about \$30 million. I think we had two years of this higher figure. Thereafter, we tapered off to \$15 or \$16 million a year of federal funds... So, we had a very accelerated period when we really had to push our consultants and our own people. We moved some of our jobs from hearings to construction in about 10 or 11 months. It now takes five or six years."



The public gathers to celebrate the dedication of a portion of Nebraska's Interstate 80 upon its completion.

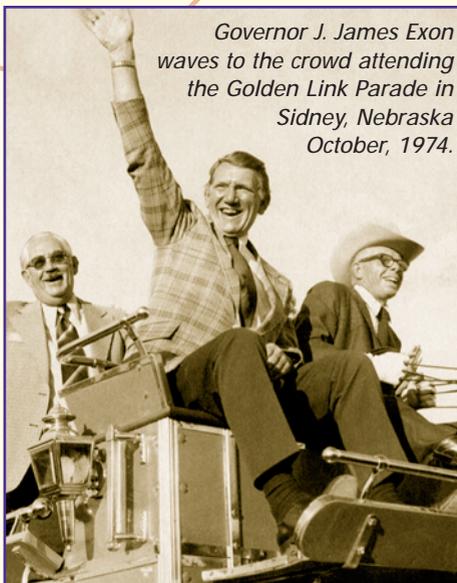


Celebrating Nebraska's Lifeblood

The day the interstate was completed, Ken Gottula, former engineer at the Nebraska Department of Roads, said he celebrated in true Nebraska fashion. "I remember that day well," he said. "I went to Lawrence, Kansas, and watched the Cornhuskers beat the hell out of KU."

Once the interstate was opened, the Department of Roads was shocked by the number of cars that took to the road. "A lot more vehicles took to the road than we ever, ever expected," Gottula said."

Al Wenstrand, former Director, Nebraska Department of Economic Development, noted that I-80's value for the state's economy was somewhat unexpected. "You knew that if you had easy transportation that things were going to grow. But I don't think anybody envisioned how important it was going to become to our transportation system. I-80 is the lifeblood of Nebraska's economy."



Governor J. James Exon waves to the crowd attending the Golden Link Parade in Sidney, Nebraska October, 1974.



Caterpillar pusher with blade, assists Caterpillar scrapper.



Steel mesh laid down and concrete poured, early 1960s.



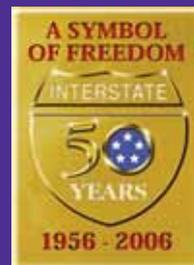
The Interstate in Nebraska

- Official work on I-80 began in 1957 south of Gretna.
- The dedication of Nebraska's I-80 on October 19, 1974, (six miles west of Sidney a 6" brass link was embedded in I-80) marked the first state in the nation to complete its mainline interstate system.
- The total length of I-80 in Nebraska is 455.27 miles.

Additional Interstate Route Lengths

I-180 (in Lincoln)	3.18 miles
I-480 (in Omaha)	4.15 miles
I-680 (in Omaha)	13.26 miles
I-76 (to Colorado)	2.48 miles
I-129 (in South Sioux City)	3.21 miles

- The estimated total cost of I-80 in Nebraska was \$435 million, for an average per mile cost of about \$950,000.
- Normally, federal interstate funding for construction is 90 percent federal funds and 10 percent state funds.
- There are 80 interchanges along I-80 in Nebraska
- There are 442 bridges on or over I-80 in Nebraska.
- There are 25 rest areas and one scenic overlook (near Chappell) on Nebraska's I-80. These rest areas are spaced 35-50 miles apart for convenience.
- There are 28 types of grasses and forbs (herbs other than grasses), 31 types of shrubs, 12 types of coniferous trees, and 39 types of deciduous trees planted on the right-of-way of I-80 in Nebraska.
- There are about 570 informational and directional signs on Nebraska's I-80.
- As completed, I-80 stretches from New Jersey to San Francisco—over 2,900 miles of safe, uninterrupted roadway.
- The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) provided for designating the nationwide 45,493 miles of interstate highway system the "Dwight D. Eisenhower National System of Interstate and Defense Highways."
- Numbering System: Main interstates are either one or two digits. Auxiliary routes are numbered with three digits; their last two digits are the same as the major route to which they are connected.
- Route Numbers: Routes with odd numbers run north-south; those with even numbers, east-west
- Mile Posts: Mile posts are numbered from "0" at the southern and western borders where the routes begin in each state.



Present

Benefits and Challenges

Once I-80 was complete and operational, the benefits of the Nebraska interstate system were visible. With reduced long-distance and commercial traffic in cities, benefits included:

- Increased business activity due to improved traffic conditions.
- Increased property values in areas traversed by the bypass.
- Fewer traffic accidents and delays on city streets.
- Reduced wear and tear on city streets due to less heavy truck movement.
- Reduced noise and fumes in business districts.
- Reduced fire and gas hazards in urban areas with reduced truck travel.
- Expedited through traffic.
- Simplified local traffic.
- Increased urban pedestrian safety and convenience.

The opening of the interstate had some negative economic effects for communities and businesses that were not on the interstate route. The interstate also had negative effects on some communities and small farms that had to be split up to make way for the new highway.

Overall, the benefits of the interstate far outweighed the negative aspects. An additional major benefit involved the interstate's role in the economic development of the interstate corridor in the metropolitan areas of Omaha and Lincoln.

It also helped revitalize those communities near the interstate and attracted businesses, including Walmart, Cabelas, hotel chains, restaurants, packing plants, distribution centers and trucking firms to these areas throughout the state.

Tourism has also benefited from the interstate system, with an expanded park system and increased tourism at those parks, particularly at Mahoney State Park and Platte River State Park, in eastern Nebraska.

Role Interstate Plays in Everyday Life

The interstate system is responsible for dramatically improving our mobility, highway safety, quality of life and commerce. We have come to take for granted the benefits of the largest and most expensive project in the state's history.

Nebraska's Interstate System at a Glance

Name: The National System of Interstate and Defense Highways, commonly called the interstate. It was renamed in 1990 "The Dwight D. Eisenhower System of Interstate and Defense Highways" in honor of what would have been President Eisenhower's 100th birthday.

Length:	455 miles
Total cost:	\$425 million
Cost per mile:	\$950,000
First section opened:	1959
Last section opened:	1974
Years to complete:	17



Future

The planned widening of I-80, Omaha to Kearney, to six lanes will significantly benefit travel through the state and reduce congestion.

Accelerated Travel

In Nebraska, the volume of traffic has increased on the interstate system faster than on the non-interstate system. The lowest traffic volume, or average daily traffic (ADT) occurs east of Chappell on I-80 at 7,500 ADT. The highest ranges in Omaha, east of 42nd Street, at 168,300 ADT.

Forty nine percent of all truck travel in Nebraska takes place on the interstate system. A natural commercial truck corridor lies between Michigan and California along I-80. In Nebraska, 28% of all traffic on the interstate is heavy trucks.

Ways to Preserve and Enhance

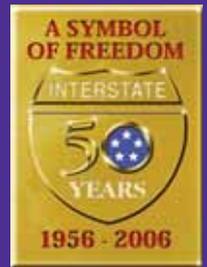
This increased use of our interstate system offers a major challenge to those tasked with maintaining a smooth, safe and efficient system for motorists. As funding allows, Nebraska will continue to conduct research to find new, improved methods and materials to preserve and enhance our state's transportation investment.

Vision

In the next 50 years, the interstate is expected to remain a positive force in our daily lives, continuing to improve our mobility, highway safety, quality of life and commerce. But it will be up to future generations of Nebraskans to make the commitment to increase research and funding to make this a reality.



Scenic stretch of I-80 between Lincoln and Omaha Nebraska.



This overhead message board, west of Big Springs on I-80, was one of many installed across the state to provide motorists with timely information.

Final Thoughts

"The old (1919) convoy had started me thinking about good, two-lane highways, but Germany had made me see the wisdom of broader ribbons across the land."

– President Dwight D. Eisenhower
on the interstate

"(When) the interstate was built in the 60s...why, everybody thought it was new... In the 70s we still thought of that as a new road. I know the public was quite surprised that suddenly in the 80s this thing is wearing out. Of course, our people knew it. They observe it every day. We knew where our problems were, but the traffic was higher than anticipated ... the truck numbers were many times higher than anticipated."

– Gerald Strobel, Former State Engineer,
Nebraska Department of Roads
(1985 interview)

"Highways had stayed much the same for quite a number of years until the coming of the interstate. That stretched the imagination of people, the idea of surfaced-shoulders. Until that time, nobody had ever seen a shoulder that was hard-surfaced. That was a big change..."

– Gerald Grauer, Former Engineer,
Nebraska Department of Roads
(1985 interview)

"I could probably talk about the interstate for a couple of days. As a professional engineer, it was a real privilege to be involved with a project of that magnitude!"

"It was a great undertaking, a lot of money, a lot of miles. And right now you wonder how could this country have survived if you didn't have the system."

– Kenneth J. Gottula, Former Engineer,
Nebraska Department of Roads
(1986 interview)



In Conclusion

I-80 encompasses only a fraction of America's present interstate highway system. In addition to I-80, several major interstate highway routes cross the nation. These include, among others:

- I-10 from Los Angeles, California, to Jacksonville, Florida.
- I-90 from Seattle, Washington, to Boston, Massachusetts.
- I-70 from Cove Fort, Utah, to Baltimore, Maryland.
- I-5 from San Diego, California, to Blaine, Washington (the only interstate to stretch from Mexico to Canada).
- I-15 from San Diego, California, to Sweetgrass, Montana.
- I-35 from Laredo, Texas, to Duluth, Minnesota.
- I-55 from New Orleans, Louisiana, to Chicago, Illinois.
- I-65 from Mobile, Alabama, to Gary, Indiana.
- I-75 from Miami, Florida to Sault St. Marie, Michigan.
- I-95 from Miami, Florida, to Houlton, Maine.
- H-3 Hawaii's own interstate system.

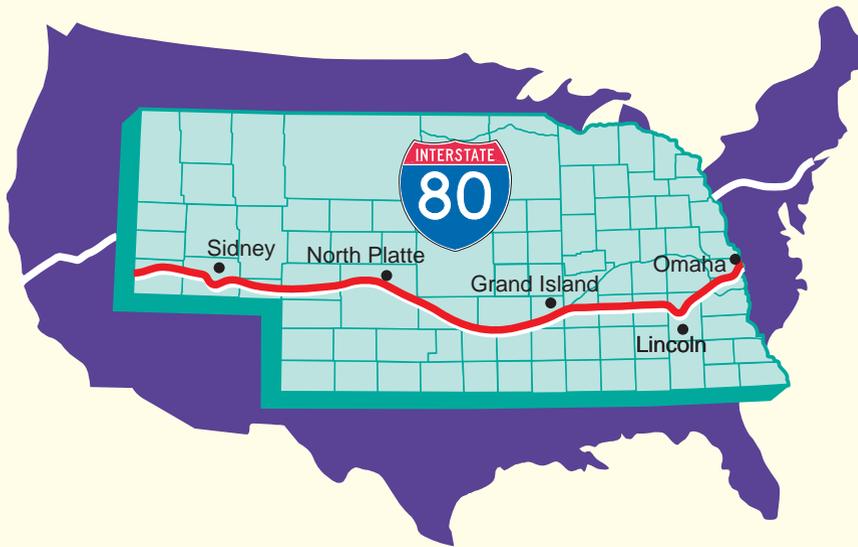
By 1990 the interstate system included a total of 45,530 miles, with a few small projects remaining in areas with special needs, such as Hawaii. In addition to adding more mileage to the interstate, the FHWA, along with states, is researching new surface materials and road types for future interstate construction. These changes will insure that the interstate grows with transportation demands and will be adequate in the years to come.

Interstate completion in Nebraska

Route	Mileage	Year last segment open to traffic
I-76	3.15	1969
I-80	455.27	1974
I-129	3.21	1977
I-180	3.47	1964
I-480	4.15	1970
I-680	13.43	1975
	<u>482.68</u>	

Nebraska Interstate Completion Dates

County	Completion and Open to Traffic Date
Douglas	December 15, 1972
Sarpy	November 8, 1961
Cass	August 11, 1961
Lancaster	December 11, 1962
Seward	October 15, 1966
York	December 3, 1966
Hamilton	December 3, 1966
Hall	December 10, 1965
Buffalo	November 27, 1963
Dawson	September 6, 1965
Lincoln	November 11, 1968
Keith	November 11, 1968
Deuel	November 4, 1971
Cheyenne	October 19, 1974
Kimball	December 7, 1973



Nebraska I-80 Facts

- 80 interchanges
- 442 bridges
- 570 informational and directional signs
- 25 rest areas spaced 35-50 miles apart
- 8 sculptures commissioned for the 1976 Bicentennial
- 455.27 miles is the Total length of I-80 in Nebraska

Official work on I-80 begins south of Gretna.
October 19, 1974: The I-80 dedication marks the first state in the nation to complete its mainline Interstate system.

More Facts

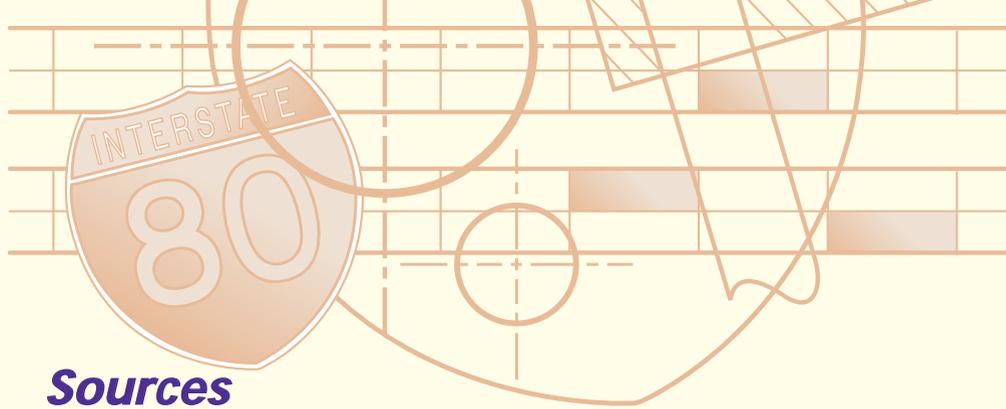
Estimated total cost was \$435 million, an average of \$950,000 per mile.

I-80 stretches from New Jersey to San Francisco over 2,900 miles of roadway.

Nebraska's Roads officials continue to study and enhance their existing Interstate System.

Over the Top

In Kearney, Nebraska, the Great Platte River Road Archway monument is built over top of Interstate 80. The 1,500-ton structure spans 308 feet across the interstate and houses a museum dedicated to frontier culture. It is a private commercial venture.



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Phone interview with Gerald "Jerry"
Grauer, Dec. 12, 2005.



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Communication Division
Nebraska Department of Roads
www.nebraskatransportation.org

2006



THE GOLDEN LINK

The Golden Link embedded in Interstate 80 just north of here commemorates completion of the final portion of Nebraska Interstate Highway 80 between the Missouri River and the Wyoming border. This 455.3 mile ribbon of steel and concrete is more than a smooth, wide roadway. It is a vital link between eastern and western Nebraska; a link that binds our state, culturally and economically, closer together. The Golden Link also commemorates Nebraska's accomplishment of being the first state in the nation to complete its mainline Interstate system. Nebraska's Interstate highway system is the most significant and largest single public works project ever undertaken in this state. Beginning 19 years ago, on March 8, 1955, with a small portion near Kimball, year by year, and mile by mile, it progressed steadily across the state. In developing fine roadside rest areas and a chain of lakes, our state has demonstrated that highways and the environment can be compatible. **This final link in Nebraska's Interstate Highway 80 was formally completed and dedicated on October 19, 1974.**

NEBRASKA DEPARTMENT OF ROADS
NEBRASKA STATE HISTORICAL SOCIETY



SPRAWLER

Celebrate the Interstate ...



A Moving Experience