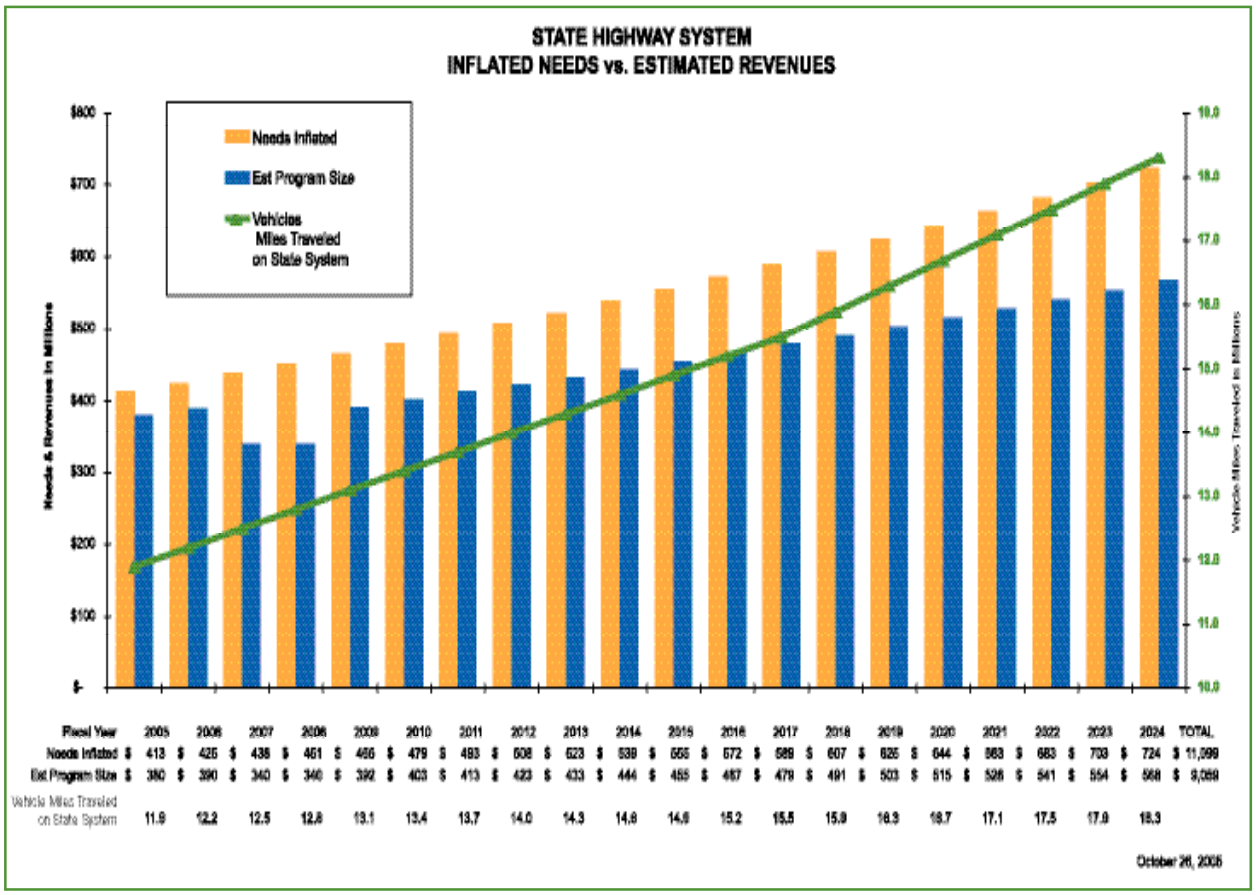
2005 State Highway Needs Assessment

Dave Heineman
Governor

John Craig
Director

Table of Contents

Executive Summary



The "2005 State Highway System Needs Assessment" report identifies current needs at $8.3 billion. These needs projected out over the next 20 years, with an inflation factor of 3% per year, will cost an estimated $11.1 billion. At the same time, considering conservative increases in State and Federal revenues, total funds available will be approximately $9.1 billion. Based on the preceding assumptions, currently identified State Highway System needs could not be achieved as the revenues necessary to accomplish these needs would fall short by $2.0 billion. Also shown on the chart, traffic volumes are projected to continue to increase. Sufficient revenues do not exist today to meet current needs. Consequently, any diversion of highway funds would further compound the issue of unfunded needs.

Introduction

In 1988 by virtue of State Statute 39-1365.02, the Nebraska State Legislature first assigned the Nebraska Department of Roads the task of reporting on the needs of the State Highway System. Since that time, Nebraska has made steady progress towards addressing the dynamic needs of the State Highway System. Due to the availability of new technology and the incorporation of new design standards, the Department in 2002 reviewed and updated their process for compiling the needs of the State Highway System.

The needs of the State Highway System are divided into eight categories.

- Interstate
- Expressway
- Rural Geometrics
- Resurfacing
- Urban
- Missouri River Projects
- Railroad Crossings
- Miscellaneous

Following is a brief description on how the needs assessment is compiled.

Interstate & Expressway

The Department's Interstate/Expressway Task Force develops the long-range plan for the Interstate and Expressway Systems. The task force members include the Deputy Director-Engineering, Deputy Director-Operations, Materials & Research Engineer, Construction Engineer, Roadway Design Engineer, District Engineers, Traffic Engineer, Project Scheduling & Program Management Engineer, and Bridge Engineer, along with their respective staffs. This task force meets several times a year and conducts an annual field inspection of the interstate. The information compiled from these meetings and the field inspection is used to develop and direct the plan for meeting the Interstate and Expressway needs. The costs associated with the 20-year Interstate Plan includes all the I-80 six-lane expansion work from Omaha to

Minden, the rehabilitation and replacement of bridges, pavements, interchanges, rest areas, lighting, and miscellaneous work such as guard rail updating and replacement of plowable pavement markers.

With the guidance of the Interstate/Expressway Task Force, the Project Scheduling & Program Management Engineer compiles the needs for the Expressway System.

Rural Geometrics

Staff from the Materials & Research Division compiles the rural geometric needs. Geometric needs include deficiencies such as pavement width, shoulder width, number of lanes, and vertical curves. All contract and as-built plans are reviewed to ensure that the Department's database contains the most current geometric information. The Department continues to use GPS technology and AASHTO design standards in the needs reporting process. Seventeen construction strategies are used to calculate the costs for the geometric needs. These costs are updated annually. The bridge needs of the state are also part of the geometric needs. The Bridge Division has developed and maintains a Bridge Management System, which is used to identify the structurally deficient and functionally obsolete bridge needs. Costs are calculated for these bridges, along with the costs for bridge maintenance needs and culverts.

Resurfacing

Staff from the Materials & Research Division also compiles the resurfacing needs. The entire State Highway System is rated each year in order to evaluate its overall condition. Factors such as the extent of pavement cracking, severity of pavement cracking, and ride quality are used to complete this evaluation. With the information supplied by these annual ratings, formulas have been developed to predict the most cost-effective year for resurfacing a road. Costs for resurfacing strategies, which are based on the average daily heavy truck traffic, are assigned and calculated for each highway segment. Highway segments will be assigned a second resurfacing cost when the initial resurfacing falls within the first five to eight years of the needs analysis period. If a highway segment has a geometric need attached to it, the first resurfacing need will be included as a part of the geometric costs.

Urban

The District Engineers annually review and update the urban needs. Urban needs are associated with minor widening, major widening, or reconstruction of state highways through urban areas. The urban bridge needs are extracted from the Bridge Management System and are included in this category.

Missouri River Projects

Staff from the Bridge Division and the Planning & Project Development Division annually reviews the information for the Missouri River Projects and submit any updates to the Materials & Research Division. Only Nebraska's costs are reflected in this report.

Railroad Crossings

The railroad crossing needs are annually reviewed and updated by staff from the Rail & Public Transportation Division. These needs include the grade separation needs for the State Highway System and rail crossing/hazard elimination needs for both on and off the State Highway System.

Miscellaneous

Information in the miscellaneous category is provided by the Controller Division and extracted from the Department's program project management system by staff from the Materials & Research Division. Needs included in this category are highway planning and research, enhancement, landscaping, traffic signals, lighting, and preventive maintenance.

There are 42.54 miles of gravel surfaced state highways on the State Highway System. In March of 2005 the State Highway Commission advised the Department of Roads that these were not serving a state highway function and advised the Department to pursue relinquishment of these segments of the State Highway System to the counties in which they are located. If the counties agree to the relinquishment, the roadways would be reconstructed to current county road arterial standards and surfaced with gravel. The counties will also receive a stipend for future maintenance based upon historical maintenance costs of the roadway. In the event a county declines the offer of relinquishment, then safety issues on the roadway will be addressed, the segment of roadway removed from the District needs and maintained in their current condition in perpetuity.

Even with increased Federal funds provided by the TEA-21 legislation, the State's variable tax increases have not kept pace with the original 1988 plan. With the funds available, the Nebraska State Highway Commission and the Department of Roads have prioritized the State Highway and Interstate Systems as the State's top priorities. They have reviewed several funding scenarios and have reached the conclusion that we cannot afford to ignore our investment in these two systems at the expense of completing the Expressway System. As a

result of their review of different funding scenarios, the Nebraska State Highway Commission and the Department of Roads have determined the most effective strategy for meeting the needs of the entire State Highway System is to distribute State and Federal funds in the following manner:

Distribution of State and Federal Funds

50% → State Highway System
(excluding interstate and expressway)

25% → Interstate System

25% → Expressway System

In fiscal year 2005, as in past years, the Department strove to reach its goal of letting 100% of the projects published in the one-year program. This past year, the Department was 98% efficient, letting 107 of the 109 projects in the one-year program.

Before reviewing the accomplishments of the past year, it is important to note that each year's report assumes the completion of the current fiscal year's program. Even if all projects in the one-year construction program are not let to contract in that fiscal year, the fact that they are programmed is a commitment that they will be completed and, therefore, they are removed from the needs list.

Resurfacing needs are not constant from one year to the next. There are many different factors that affect the number of miles needing resurfacing, some of which are: previous year's resurfacing; extreme environmental conditions; traffic volumes and loads; and yearly maintenance. Approximately 8,946 miles of resurfacing needs will accrue over the next 20 years, including 458 backlog miles, which have reached or passed the optimum time for resurfacing. Backlog miles accrue as a result of not being able to resurface roads at the optimum time.

In an attempt to help reduce the number of miles entering the backlog, the Pavement Extension Program (PEP) was initiated in fiscal year 1995. PEP is a cost-effective strategy with the intent of extending the useful life of many of Nebraska's highways, while providing a much smoother ride. We believe that the PEP Program will extend the life of many roads eight to ten years. We have incorporated a Preventive Maintenance Program, which will also help us to reduce the number of miles entering the backlog. The Preventive Maintenance Program is a strategy focusing on pavement preservation in the sense of reducing the deterioration rate of the pavement thereby extending its life. With this program, appropriate maintenance applications will be applied earlier in the pavement's life, which will maintain a higher pavement rating for a longer period of time.

As the accruing 20-year needs of the State Highway System are addressed, we see traffic patterns and philosophies change, and costs continue to increase. Needs are dynamic and continue to change. Since 1994, the rural heavy commercial annual vehicle miles traveled on the rural highway system has increased by 33% to 1,738,000,000 vehicle miles. This increase in heavy truck traffic has a twofold effect on Nebraska's highway needs. It accelerates the wear on existing pavements and may necessitate a functional upgrading of existing facilities.

Needs Assessment Criteria

Rural Sections

The needs assessment criteria are grouped into six categories: Interstate, Expressway, and the four 20-year future traffic groups which consist of the following Average Daily Traffic (ADT) groups: 3,000 & greater; 1,700 - 2,999; 400 - 1,699; and under 400. The criteria are applied to the statewide system to determine the geometric needs.

Future ADT

3,000 & greater

- 12' Surfaced Lane Width
- 10' Shoulder Width
- Paved Shoulder -
  8' of the 10' shoulder will be paved
- Stopping sight distance -
  no crest vertical curves below 55 mph
- Lanes - Four lanes warranted at a
  future traffic of 6,000 ADT or greater

1,700 - 2,999

- 12' Surfaced Lane Width
- 8' Shoulder Width
- Paved Shoulder - if on Priority Commercial System,
  10' shoulder required, of which 8' will be surfaced
- Stopping sight distance -
  no crest vertical curves below 55 mph

400 - 1,699

- 12' Surfaced Lane Width
- 6' Shoulder Width
- Paved Shoulder - if on Priority Commercial System,
  10' shoulder required, of which 8' will be surfaced
- Stopping sight distance -
  no crest vertical curves below 45 mph

Under 400

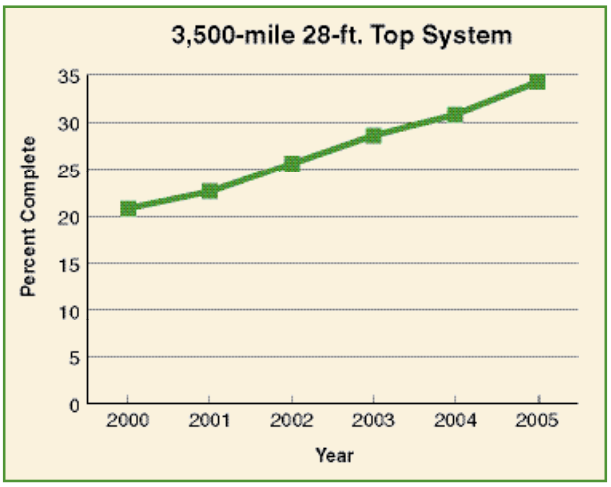
- 12' Surfaced Lane Width
- 4' Shoulder Width
- Stopping sight distance -
  no crest vertical curves below 40 mph

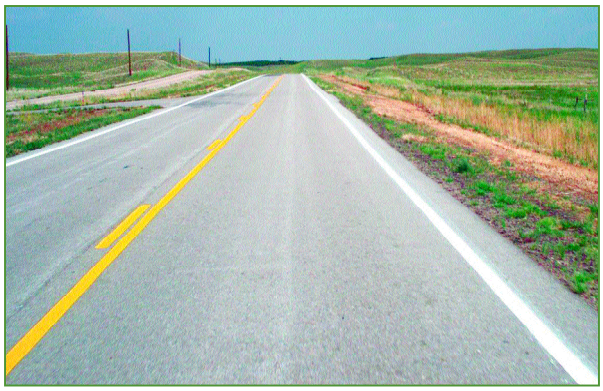
Note: The District Engineers annually review and update the urban and municipal needs. These needs are associated with minor widening, major widening, or reconstruction of state highways through urban and municipal areas.

28' Surfaced Top System

Due to erosion problems, Sandhills area highways not on the Priority Commercial or Expressway Systems will have a 28' pavement width, striped at 24', and shoulders appropriate for design year traffic.

In 1998, the 28' Top System was expanded to include some highways not in the Sandhills. It was determined that most highways in the 850 - 3000 future ADT group, not on the Priority Commercial or Expressway Systems, should have 2' paved shoulders. The added surfacing is intended to reduce the number of accidents resulting from loss of control of vehicles that stray off the pavement edge.





Structures

Future ADT	Roadway Width
3,000 & greater	44' wide [1]
1,700 - 2,999	40' wide [2]
400 - 1,699	36' wide [2]
Under 400	32' wide [2]

Bridges may be used in place if within 4 feet of the above widths and structurally sound. Such bridges are identified using the current Bridge Management System.

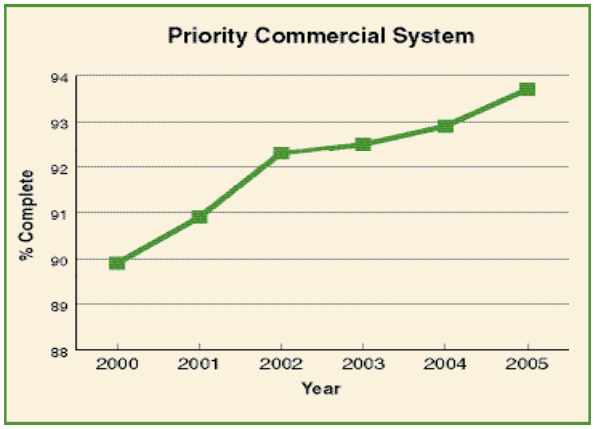
[1] 39' wide if on 4-lane divided highway.
[2] 44' wide if on Priority Commercial System.

Priority Commercial and Expressway Systems

Priority Commercial System

The Priority Commercial System, initiated in 1988, provides a continuous network of routes, that are designed to carry higher traffic volumes, especially larger volumes of commercial vehicles.

This system, which includes the rural expressway system, was established at 3,303 miles. As with all state systems, there may be variances in exact mileage from year-to-year, as highway alignments change and as municipal boundaries are altered. Currently, 3,193 miles are being reported for the Priority Commercial System. It directly serves all of the first class (5,001 to 100,000 population) and larger cities, directly serves 80 of the 115 second class cities (800 to 5,000 population), and comes within 10 miles of 18 second class cities.



The non-expressway portion of the system is being constructed with two 12-foot driving lanes and 10-foot shoulders, 8 feet of which are to be paved. Any route not on the Priority Commercial System which has a design year traffic volume (the volume at year construction begins, plus 20 years) of 3,000 ADT or greater, will also be developed with 8-foot paved shoulders. Bridges are to be widened to shoulder width.

Approximately 94 percent of the Priority Commercial System is constructed to its assigned standards, totaling 2,992 miles for 2005, compared to 2,972 one year ago and 1,822 miles in 1988. The Priority Commercial System does not include sections of highway within corporate limits.

Expressway System

As part of the 1988 Needs Study, Department of Roads' engineers reviewed Nebraska socioeconomic data. This data included population and demographic trends, general economic activity as reflected in sales tax revenue, agricultural production, employment data, and other information relative to economic trends. The initial review precipitated the development of an expanded Expressway System of approximately 600 miles.

Factors included in the development of the system were: (1) to connect urban centers of 15,000 population or greater to the Interstate System, (2) to add those routes which have an average daily traffic of 500 or more heavy commercial vehicles, and (3) to add additional segments for continuity.

The Expressway System is being constructed as multi-lane divided highways. Interchanges may be built where an expressway intersects with high-volume highways or local roads and streets. Access other than at public roads will be limited. Whether the system will directly serve developed areas or whether bypass routes will be constructed, will be decided on a case-by-case basis.

Expressway Segments

The table below reflects future bypasses and changes in alignment. If a section of expressway results in a bypass or change in alignment, that mileage will fall under the "Remaining" column until the fiscal year in which the project is scheduled to be let, then the mileage will be included in the "Let to Contract" column. The figures include short segments through towns, and all segments are rounded to the nearest mile.

The total expressway length remains at 600 miles. The total of the three columns is 609 miles. When the Lincoln South Beltway is open to traffic, the remaining length will be zero and the open to traffic length will remain at 50 miles. The existing portion of Highway N-2 replaced by the South Beltway will be relinquished to the City of Lincoln and Lancaster County.

A map showing the Nebraska Interstate and Priority Commercial Systems is included in Appendix A. A list showing the status of each expressway section is included in Appendix C.

Highway Number	Location	Open to Traffic by Jan. 1. 2006	Let to Contract thru FY-2006	Remaining Length
2	Lincoln to Nebraska City	50	0	10
275, 77, 30, 6, L28B, L28D	Norfolk to Omaha	38	20	48
26	Morrill to Minatare	24	0	0
34, 281	Hastings to Grand Island	27	0	0
81, 34, 30	Kansas line to Norfolk	109	5	42
77	Beatrice to US 30	65	0	20
71	Kimball to Scottsbluff	42	7	5
75, 34	Nebraska City to Omaha	15	0	30
370	I-80 to US 75	12	0	0
30	Columbus to Fremont	23	0	24
	Total Miles	**405**	**25**	**179**

Future Expressways

We have entered the 21st century and our state's economy continues to depend on an efficient and effective Surface Transportation System. The Intermodal Surface Transportation Efficiency Act (ISTEA), passed by Congress in 1991, called for the development of high priority corridors on a National Highway System as a means of developing integrated regions, promoting economic development, and improving the efficiency and safety of commerce and travel.

The Department remains committed to the completion of the state's original 600-mile Expressway System as defined in 1988. However, as we move to the future, the Department realizes the demands placed on our transportation system will change. Consequently, the Department has adopted a long-range planning philosophy to help us identify potential expressways that extend beyond the original Expressway System. Viable candidates will be considered but will not compete with the original Expressway System for funding.

Once a candidate is identified as a potential expressway, it will be placed in the planned expressway category. Although not a part of the original Expressway System, planned expressways will have had all of the appropriate studies completed and accepted by the Department.

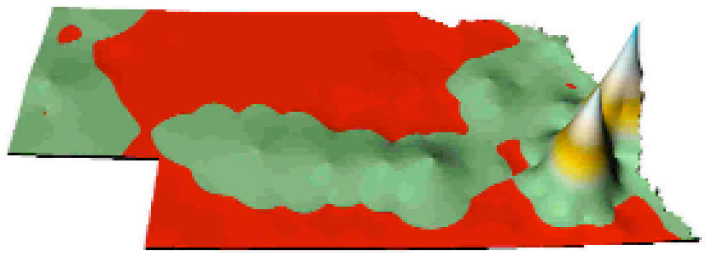
Current planned expressways are:

- Norfolk to South Sioux City
- Scottsbluff north to the Black Hills in South Dakota
- Nebraska City to Auburn

Planned expressways will not be considered for traditional funding until they meet needs assessment traffic criteria and after the original Expressway System is completed. Innovative non-traditional funds such as special Federal funds earmarked by Congress, local funds, private funds or any combination thereof may be used to fund and build planned expressways. See Appendix D for a map showing the original and planned Expressway System.

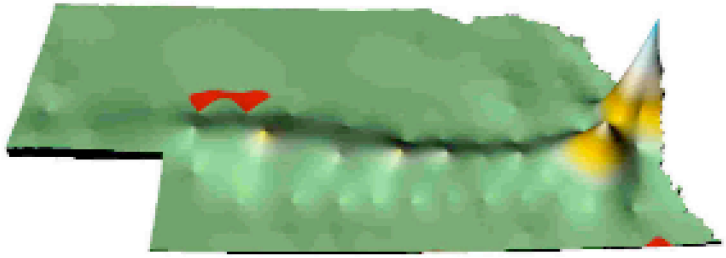
Historical and Projected Changes in Population and Highway Travel

Historical Changes in Population
1984-2004

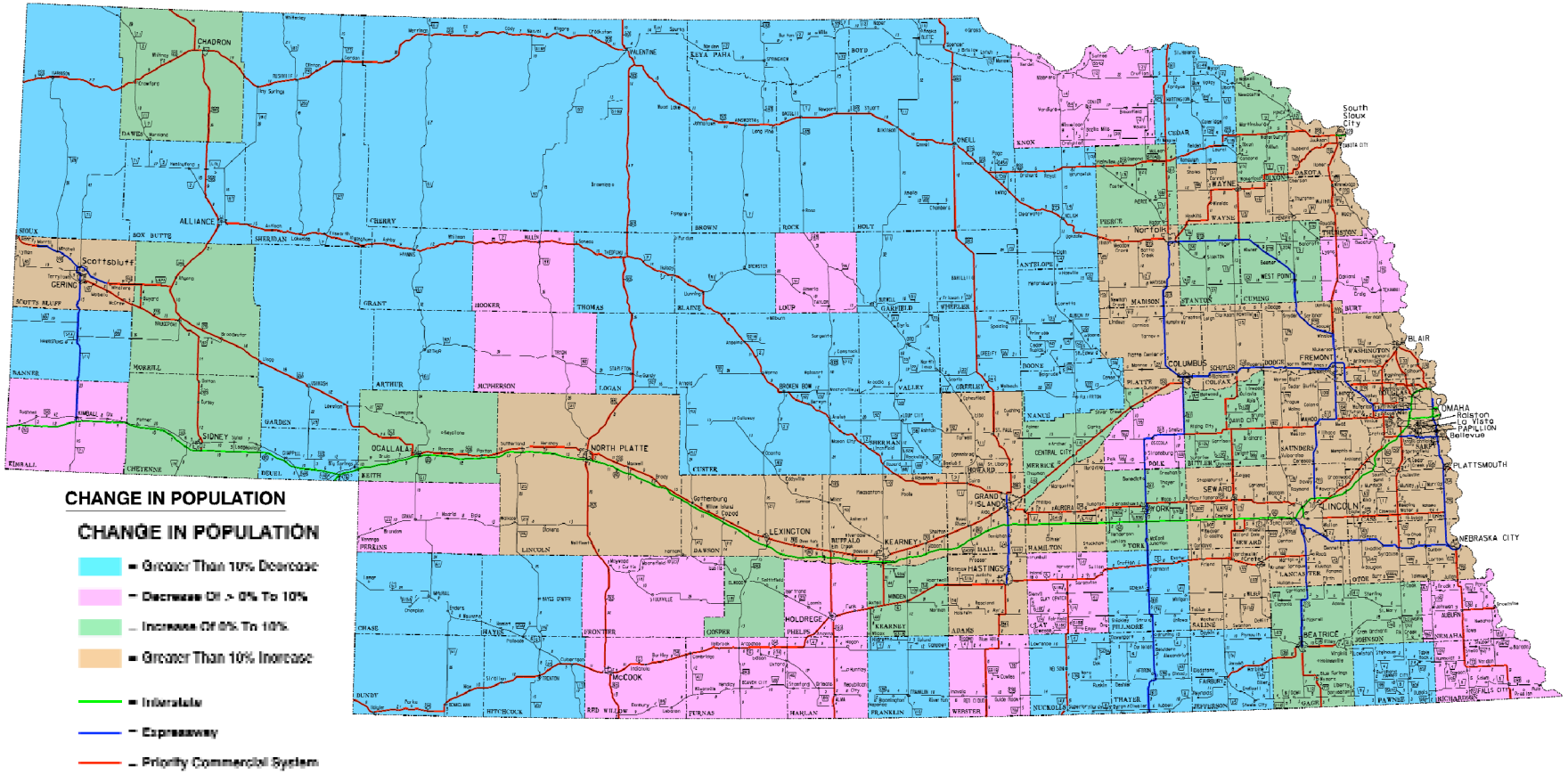


Projected Changes in Population
2004-2024

Historical Changes in Highway Travel
1984-2004
(Expressed in Millions of Annual Vehicle Miles)



Forecast Changes in Highway Travel
2004-2024
(Expressed in Millions of Annual Vehicle Miles)



Changing Population

As the population of Nebraska grows, the Department of Roads has been carefully monitoring those areas of the State that are growing the fastest. Given the important roles that transportation plays in promoting and assisting economic development, the Department wishes to ensure that these areas are adequately served now and in the future. Above is a map that shows the projected change in population from 2000 to 2020 for the counties throughout the State. Also shown are the State highways, with the Interstate, Expressway, and Priority Commercial Systems in green, blue, and red respectively.

Progress Toward Accomplishing Highway Needs

We continue to make progress toward meeting the needs of the State Highway System. The following is a summary of the estimated costs (in 2005 dollars), identified with each category of needs.

Interstate

The Interstate/Expressway Task Force evaluates the cost of various rehabilitation strategies and how long they will last. This year's evaluation indicates Nebraska Interstate pavements are providing a suitable foundation for resurfacing, delaying the time when these pavements need replacement.

With the scheduled completion of the FY-2006 highway program, the 20-year projected Interstate needs are $1,496,531,000 compared to $1,525,820,000 one year ago. The Interstate highway needs are based on a 20-year plan of reconstruction or resurfacing, as established by pavement and bridge management data. The Interstate needs also include the periodic repair and improvement of rest areas and truck scales.

The current Interstate plan is to construct six lanes from Omaha to Minden. These six lane needs are determined by projecting when the traffic density will reach level-of-service (LOS) D, as defined in the current version of the Highway Capacity Manual. Traffic density is measured in cars per mile, per lane during the peak hour. Traffic density is basically a measure of congestion. At (LOS) D, the average spacing between vehicles at peak hour is 125 feet, or approximately six car lengths, compared to 175 feet, or nine car lengths at (LOS) C. At (LOS) D, the safe traveling speed is 40 mph, which gives the driver a two second interval between vehicles.

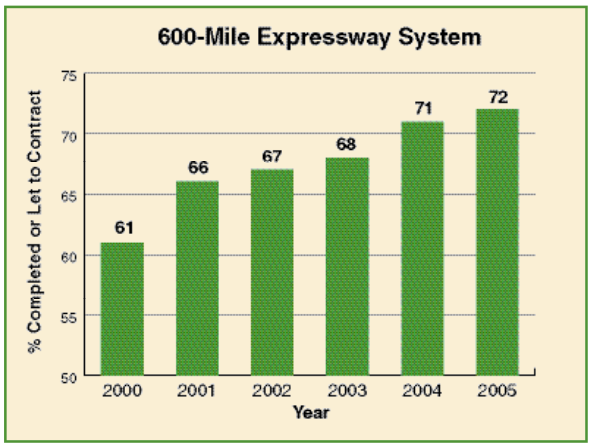
We are continuing to study and enhance our existing Interstate System. The following areas are currently being reviewed and may significantly increase future Interstate needs:

- Possible geometric improvements
- Longer interchange ramps
- Joint faulting (roughness), which is much more noticeable at higher speeds
- Truck parking deficiencies

These needs will be addressed as existing projects are reviewed or new projects are developed.

Expressway (Rural & Urban)

With the scheduled completion of the FY-2006 program, 179 miles remain to complete the Expressway System, compared to 185 miles one year ago and 547 miles in 1988. Therefore, 68% of the Expressway System has been completed, with an additional 4% under contract thru FY-2006. The total cost for completing and enhancing the Expressway System is $768,891,000.



Rural Geometric

With the scheduled completion of the FY-2006 program, the geometric needs for rural highways not included on the Interstate or Expressway System are $2,326,774,000.

The geometric needs for rural and municipal highways include $473,949,000 for bridge needs. Bridge needs include the cost to rehabilitate or replace bridges, approach slabs and guard rail; culvert needs; bridge needs on the completed Expressway System, and bridge maintenance needs.

With the completion of the FY-2006 program, the number of miles needing geometric improvements are 3,183 compared to 3,217 one year ago and 4,941 in 1988.

Resurfacing

The projected 20-year resurfacing needs for this assessment are listed at $2,705,022,000. These resurfacing needs will never be completely eliminated simply because of the annual deterioration of our pavements. The Department continues to explore new technology and materials, which may lead to improved pavement performance and extend pavement life. Both the Pavement Extension Program (PEP) and Preventive Maintenance Program are expected to prolong pavement life and improve the ride quality for our highway system users.

Urban (population > 5,000)

With the scheduled completion of the FY-2006 program, urban needs total $129,249,000. The total urban needs include $32,617,000 for the improvement of structurally and functionally deficient bridges, compared to $33,000,000 one year ago.

Missouri River Crossings

Structurally deficient or functionally obsolete Missouri River bridges under State jurisdiction are listed in our 20-year needs assessment. Nebraska's share of the current total cost for these bridges is $106,366,000 as compared to last year's cost of $104,869,000. Updated cost estimates are responsible for this year's increase in the Missouri River bridges costs.

Railroad Crossings

The needs in this category are comprised of grade separation needs and rail crossing/ hazard elimination needs, which total $234,800,000 for 20 years, compared to $251,800,000 last year. This 20-year total includes $170,000,000 for 34 grade separations and $64,800,000 for on- and off-system signals.

As train and vehicle volumes fluctuate, exposure factors and grade separation needs change. Currently, there are 75 locations where grade separations may be needed in the State of Nebraska. Of the 75 locations, 34 are on the State Highway System. These 34 locations would cost $170,000,000 to upgrade.

The remaining 41 grade separations are off the State Highway System. These locations would cost $205,000,000 to upgrade. These costs are not included in the needs assessment. Each of the identified crossings will be reviewed to determine the appropriate corrective strategy. These off-system needs are provided only to amplify the gravity of the problem.

The Long-Range Transportation Plan established a goal of upgrading existing signals or adding new signals at 240 rail/highway crossings throughout the state, both on and off the State Highway System. Currently, there are 162 crossings in need of upgrading. These signals are funded from the same source. Therefore, the costs for the on-system and off-system signals are grouped together for a total cost of $64,800,00.

Miscellaneous

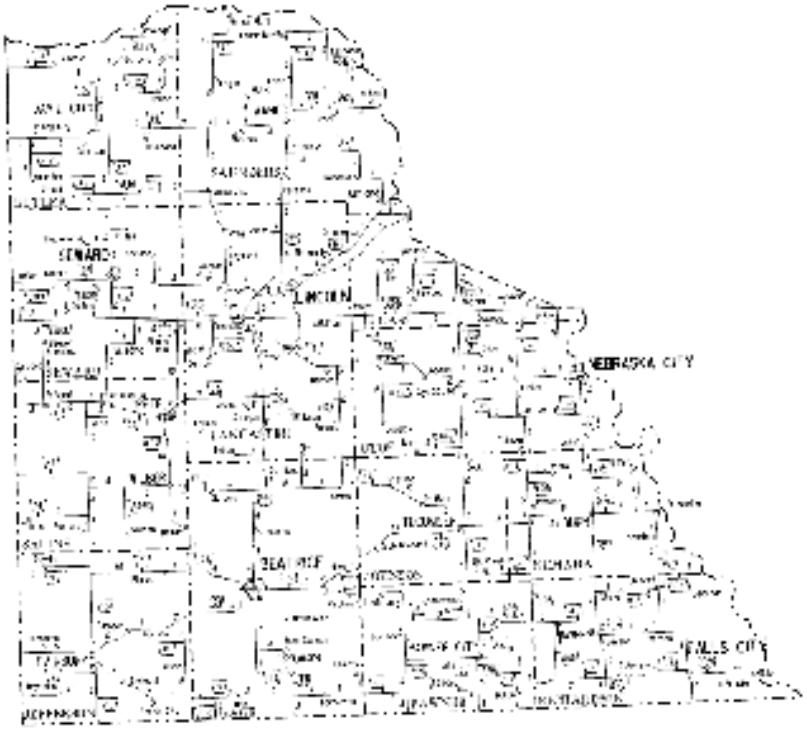
The Preventive Maintenance Program, which includes work such as armor coats, thin overlays, and concrete repair, is included in this category. Additional items in the miscellaneous category are lighting, traffic signals, landscaping, planning and research, and enhancement projects. The cost for the Preventive Maintenance Program is based on an annual $12,000,000 budget projected over 20 years. Lighting, traffic signals, and enhancement needs are based on the average costs for the previous five years, and expanded for 20 years.

The planning and research and enhancement projects are based on Federal allocations for each item and not on actual needs. These Federal allocations result from complex calculations that are influenced by State contributions. In 2005, the amount in the miscellaneous category is $516,297,000 as compared to $534,153,000 for last year.

District Summaries

The following eight pages briefly describe the eight Field Districts throughout the state. Included in each summary is the following:

- A map of the District.
- Physical characteristics of the District.
- Historic and current pavement condition and smoothness graphs. The pavement sections that are under construction or in the one-year program were given the rating of "very good." These graphs reflect the condition of the entire District's pavements including the Interstate and Expressway Systems.
- FY-2005 accomplishments.
- FY-2006 program.
- 20-year needs.
  - District Rural Geometrics do not include costs for right-of-way, bridge, and municipal work.
  - District Urban does not include bridge work.
- Number of bridges does not include bridge-size culverts.



DISTRICT 1

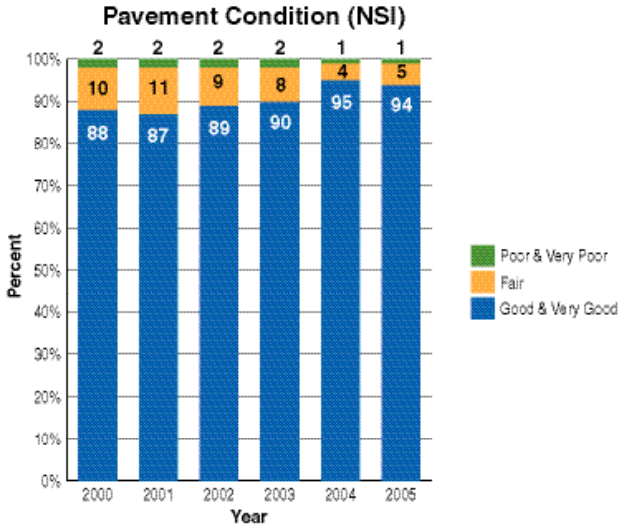
VITAL STATISTICS

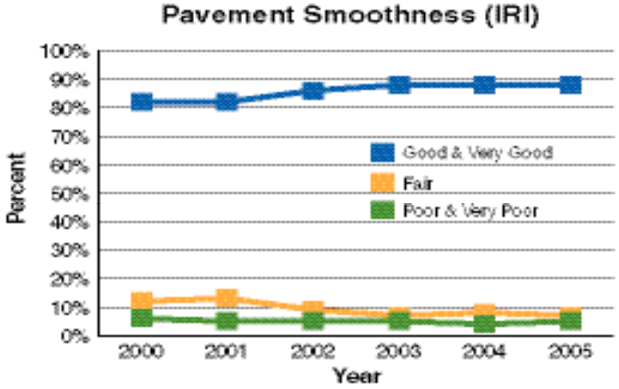
Area: 7,464 sq. mi.
Population: 392,798
Number of bridges: 508

Highway miles by system
Interstate: 65
Expressway: 144
All other highways: 1,366

Highway miles by surface type
Asphalt: 1,197
Concrete: 359
Gravel: 19

Average daily traffic by system
Interstate: 32,129
Expressway: 9,126
All other highways: 2,241





FY-2005 ACCOMPLISHMENTS

(CONTRACTED PROJECTS ONLY)

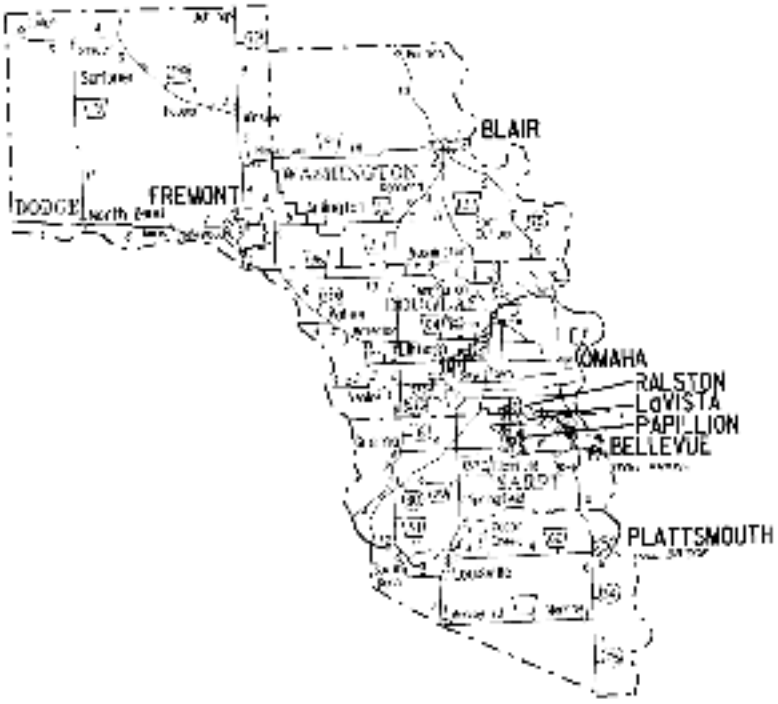
- 19 miles of reconstruction
- 86 miles of resurfacing
- 43 miles of contract maintenance
- Work on 10 bridges

FY-2006 PROGRAM

Interstate: $28,316,000
Expressway: $17,536,000
All other highways: $27,053,000

20-YEAR NEEDS

Interstate: $478,730,000
Expressway: $249,398,000
Rural Geometrics: $325,466,000
Resurfacing: $412,046,000
Urban: $11,470,000
Railroad Crossings: $25,000,000



DISTRICT 2

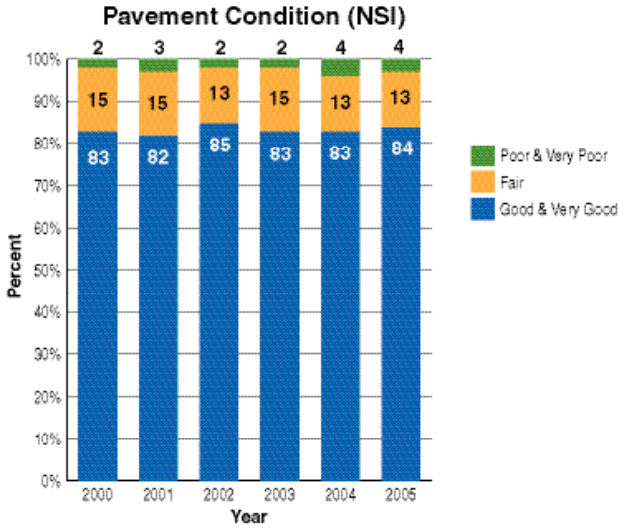
VITAL STATISTICS

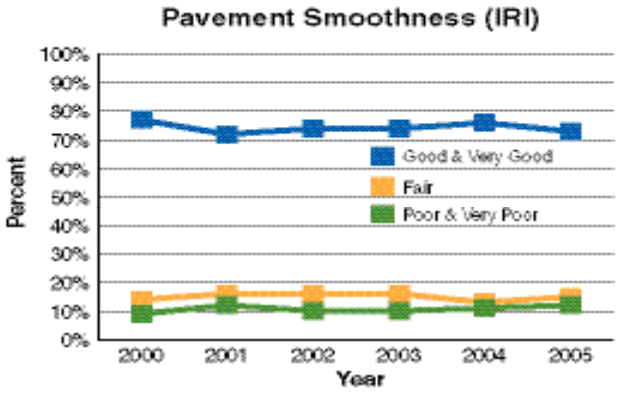
Area: 1,793 sq. mi.
Population: 653,287
Number of bridges: 364

Highway miles by system
Interstate: 46
Expressway: 128
All other highways: 330

Highway miles by surface type
Asphalt: 254
Concrete: 250

Average daily traffic by system
Interstate: 68,774
Expressway: 15,516
All other highways: 9,632





FY-2005 ACCOMPLISHMENTS

(CONTRACTED PROJECTS ONLY)

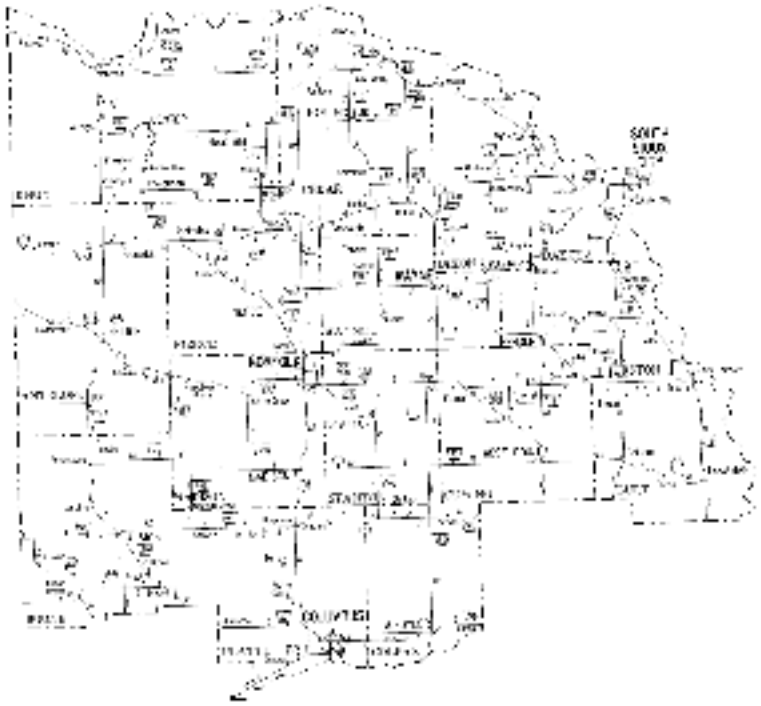
- 19 miles of reconstruction
- 1 mile of resurfacing
- 12 miles of contract maintenance
- Work on 28 bridges

FY-2006 PROGRAM

Interstate: $28,058,000
Expressway: $71,202,000
All other highways: $22,140,000

20-YEAR NEEDS

Interstate: $192,412,000
Expressway: $285,945,000
Rural Geometrics: $189,682,000
Resurfacing: $155,944,000
Urban: $32,764,000
Railroad Crossings: $5,000,000



DISTRICT 3

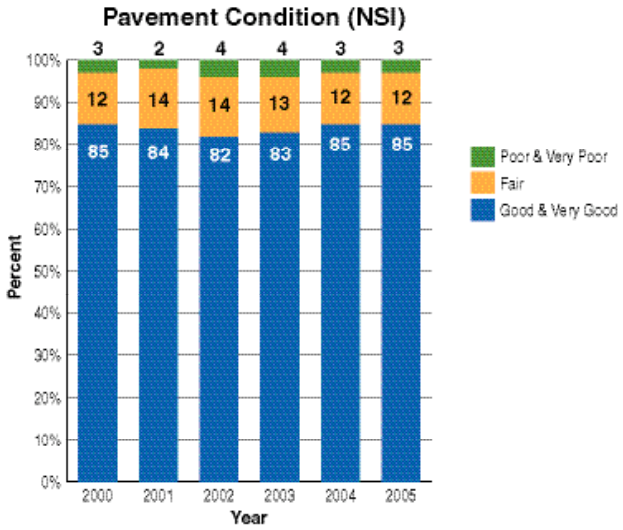
VITAL STATISTICS

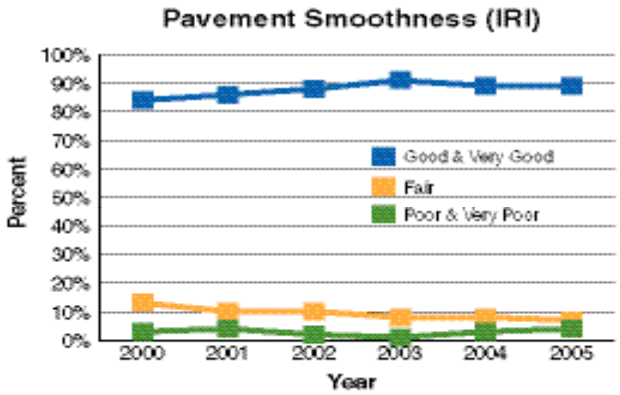
Area: 8,801 sq. mi.
Population: 185,949
Number of bridges: 350

Highway miles by system
Interstate: 3
Expressway: 120
All other highways: 1,403

Highway miles by surface type
Asphalt: 1,254
Concrete: 272

Average daily traffic by system
Interstate: 17,550
Expressway: 7,366
All other highways: 1,823





FY-2005 ACCOMPLISHMENTS

(CONTRACTED PROJECTS ONLY)

- 1 mile of reconstruction
- 97 miles of resurfacing
- 0 miles of contract maintenance
- Work on 14 bridges

FY-2006 PROGRAM

Expressway: $81,000
All other highways: $32,217,000

20-YEAR NEEDS

Interstate: $2,225,000
Expressway: $120,588,000
Rural Geometrics: $340,980,000
Resurfacing: $433,937,000
Urban: $3,542,000

DISTRICT 4

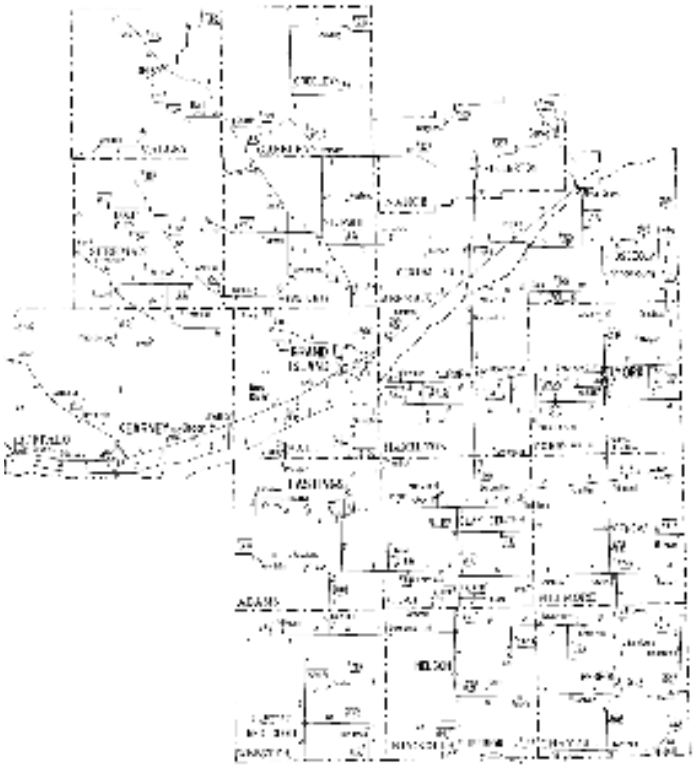
VITAL STATISTICS

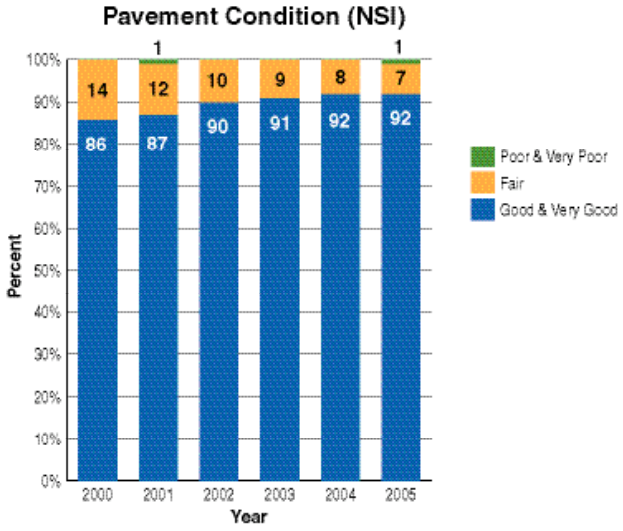
Area: 9,751 sq. mi.
Population: 214,918
Number of bridges: 375

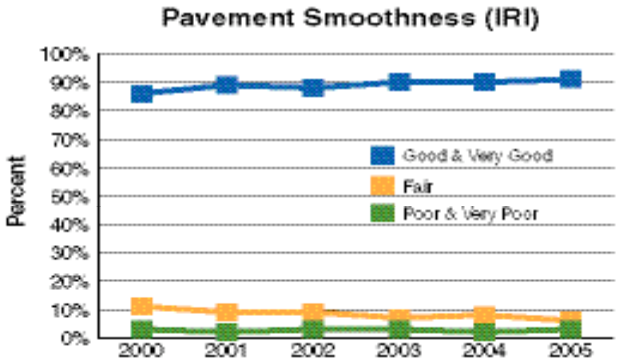
Highway miles by system
Interstate: 110
Expressway: 138
All other highways: 1,468

Highway miles by surface type
Asphalt: 1,360
Concrete: 352
Gravel: 4

Average daily traffic by system
Interstate: 20,927
Expressway: 6,332
All other highways: 1,730







FY-2005 ACCOMPLISHMENTS

(CONTRACTED PROJECTS ONLY)

- 9 miles of reconstruction
- 33 miles of resurfacing
- 44 miles of contract maintenance
- Work on 13 bridges

FY-2006 PROGRAM

Interstate: $6,041,000
Expressway: $9,981,000
All other highways: $27,554,000

20-YEAR NEEDS

Interstate: $622,653,000
Expressway: $85,341,000
Rural Geometrics: $334,961,000
Resurfacing: $421,229,000
Urban: $23,238,000
Railroad Crossings: $50,000,000

DISTRICT 5

VITAL STATISTICS

Area: 14,202 sq. mi.
Population: 90,410
Number of bridges: 177

Highway miles by system
Interstate: 102
Expressway: 71
All other highways: 1,080

Highway miles by surface type
Asphalt: 1,194
Concrete: 59

Average daily traffic by system
Interstate: 8,072
Expressway: 4,343
All other highways: 1,266

FY-2005 ACCOMPLISHMENTS

(CONTRACTED PROJECTS ONLY)

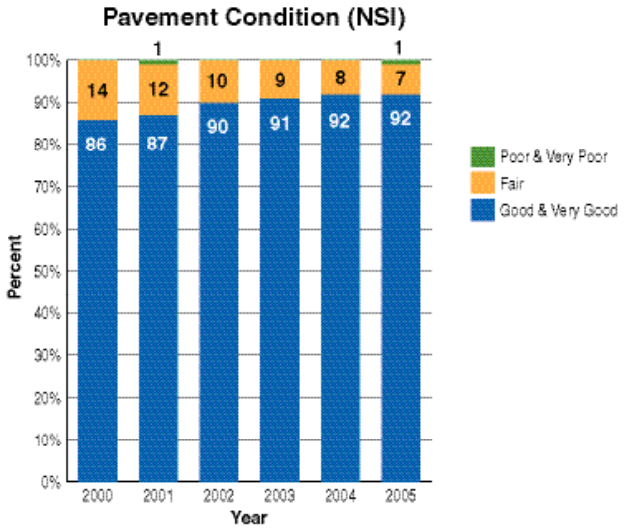
- 21 miles of reconstruction
- 53 miles of resurfacing
- 70 miles of contract maintenance
- Work on 9 bridges

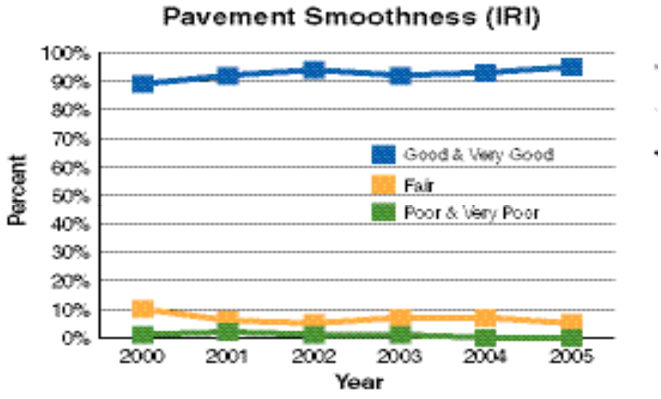
FY-2006 PROGRAM

Interstate: $1,710,000
All other highways: $16,260,000

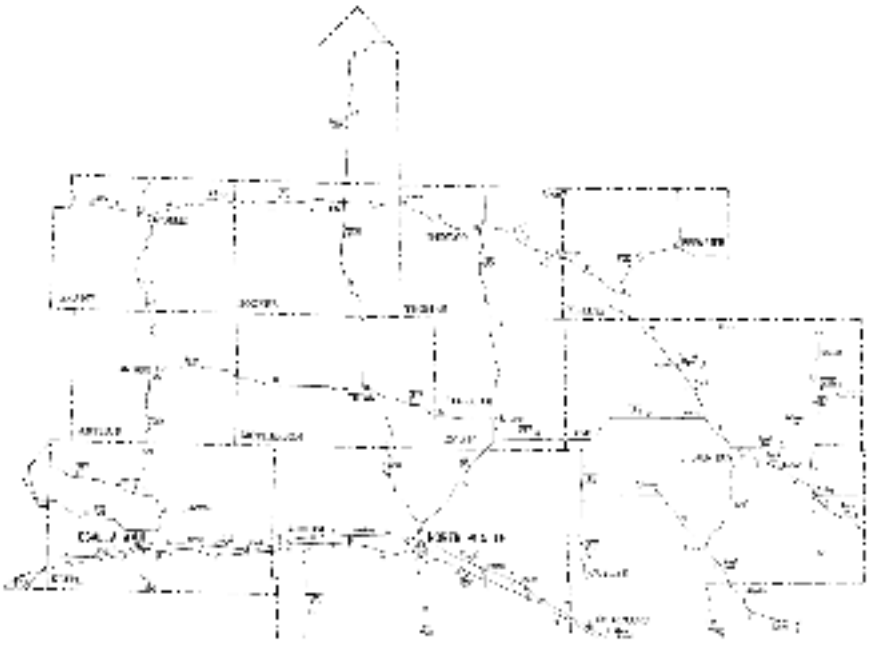
20-YEAR NEEDS

Interstate: $62,222,000
Expressway: $25,719,000
Rural Geometrics: $115,822,000
Resurfacing: $366,632,000
Urban: $10,634,000
Railroad Crossings: $45,000,000





DISTRICT 6



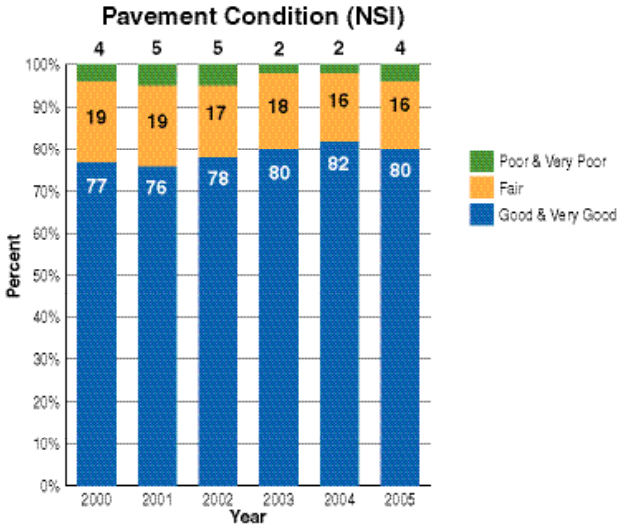
VITAL STATISTICS

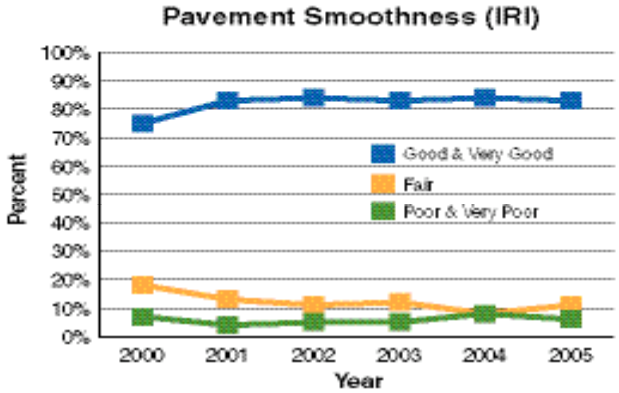
Area: 12,797 sq. mi.
Population: 84,258
Number of bridges: 190

Highway miles by system
Interstate: 155
All other highways: 1,157

Highway miles by surface type
Asphalt: 1,116
Concrete: 196

Average daily traffic by system
Interstate: 15,481
All other highways: 1,177





FY-2005 ACCOMPLISHMENTS

(CONTRACTED PROJECTS ONLY)

- 4 miles of reconstruction
- 75 miles of resurfacing
- 11 miles of contract maintenance
- Work on 11 bridges

FY-2006 PROGRAM

All other highways: $22,874,000

20-YEAR NEEDS

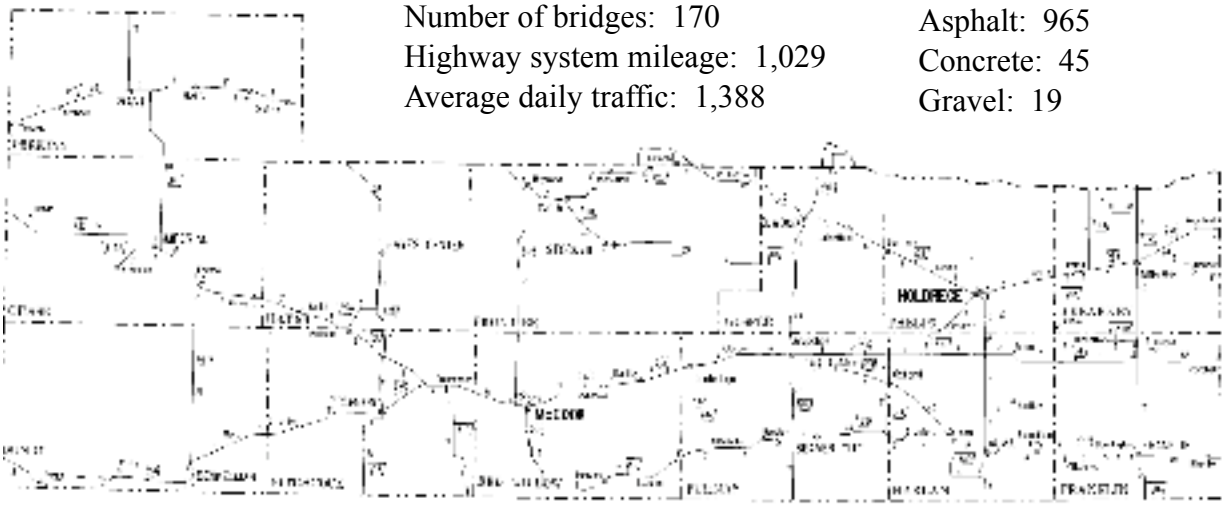
Interstate: $138,289,000
Rural Geometrics: $169,448,000
Resurfacing: $364,549,000
Urban: $12,889,000
Railroad Crossings: $40,000,000

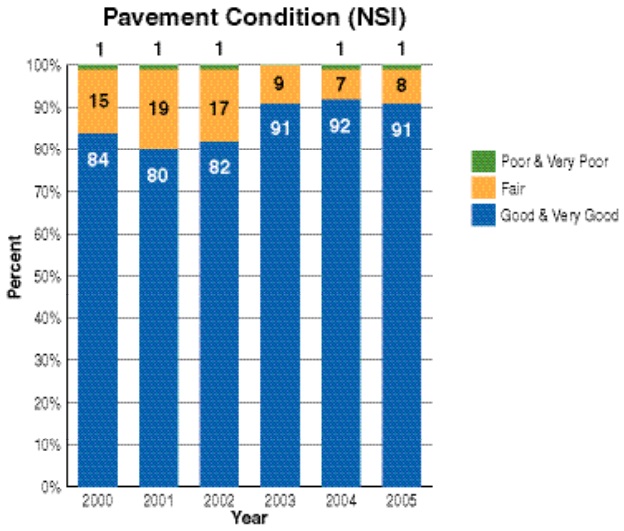
DISTRICT 7

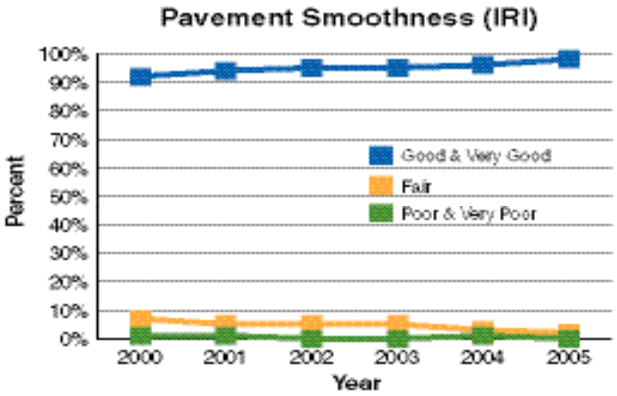
VITAL STATISTICS

Area: 9,254 sq. mi.
Population: 59,742
Number of bridges: 170
Highway system mileage: 1,029
Average daily traffic: 1,388

Highway miles by surface type
Asphalt: 965
Concrete: 45
Gravel: 19







FY-2005 ACCOMPLISHMENTS

(CONTRACTED PROJECTS ONLY)

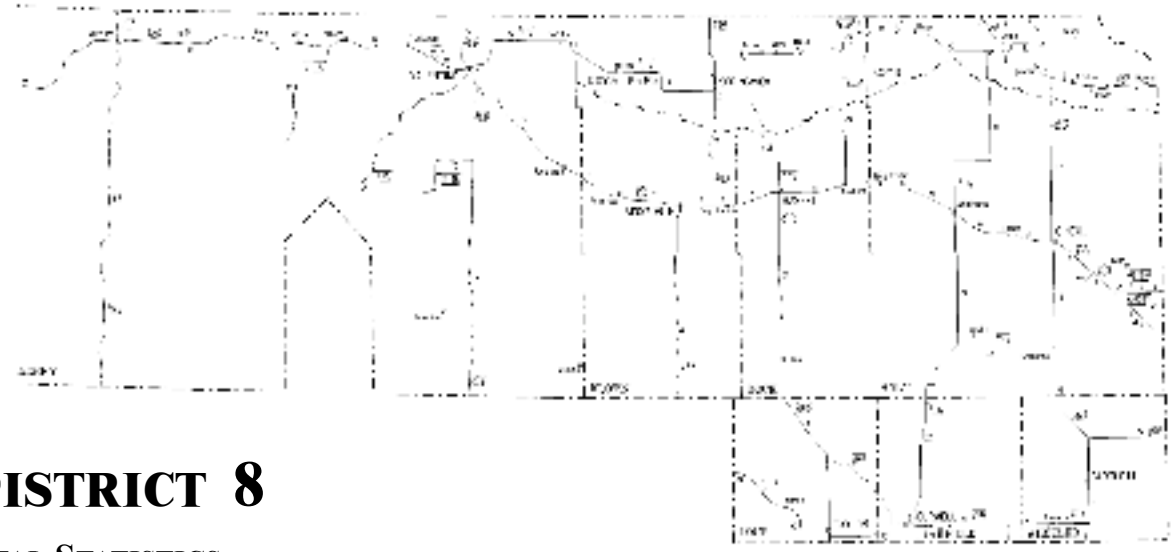
- 0 miles of reconstruction
- 20 miles of resurfacing
- 0 miles of contract maintenance
- Work on 0 bridges

FY-2006 PROGRAM

All highways: $27,896,000

20 YEAR NEEDS

Rural Geometrics: $129,880,000
Resurfacing: $258,635,000
Urban: $2,094,000
Railroad Crossings: $5,000,000



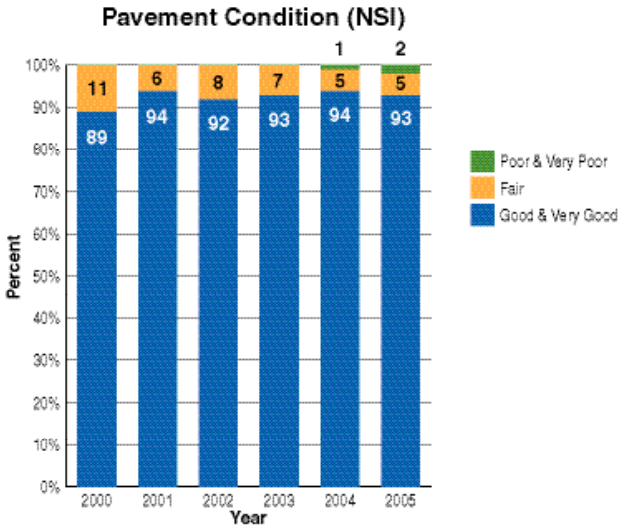
DISTRICT 8

VITAL STATISTICS

Area: 13,289 sq. mi.
Population: 29,901
Number of bridges: 68
Highway system mileage: 1,041
Average daily traffic: 848

Highway miles by surface type

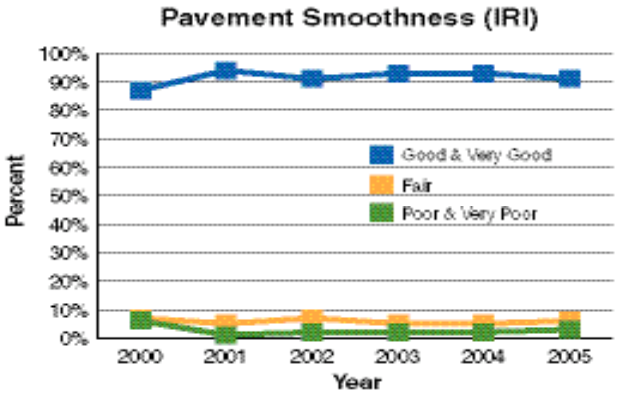
Asphalt: 1,035
Concrete: 6



FY-2005 ACCOMPLISHMENTS

(CONTRACTED PROJECTS ONLY)

- 10 miles of reconstruction
- 25 miles of resurfacing
- 0 miles of contract maintenance
- Work on 0 bridges



FY-2006 PROGRAM

All highways: $22,999,000

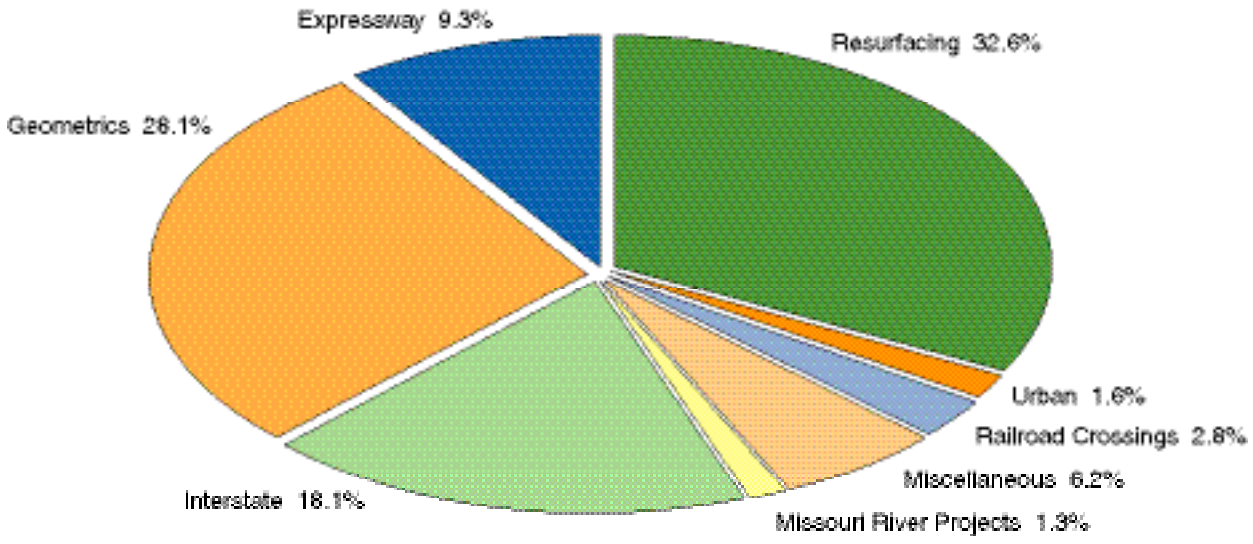
20-YEAR NEEDS

Rural Geometrics: $115,246,000
Resurfacing: $294,509,000
Municipal: $2,200,000

Summary of Needs

	2004	2005
Interstate	$1,525,820,000	$1,496,531,000
Expressway Rural and Urban	760,906,000	768,891,000
Rural Geometrics	2,115,102,000 *	2,326,774,000 *
Resurfacing	2,494,313,000	2,705,022,000
Urban	165,206,000	129,249,000
Gravel Elimination	27,395,000	– – –
Missouri River Projects	104,869,000	106,366,000
Railroad Crossings	251,800,000	234,800,000
Miscellaneous	534,153,000	516,297,000
Grand Total	**$7,979,564,000**	**$8,283,930,000**

* Includes additional costs for right-of-way, bridge, and municipal work.



State Maintenance and Other Needs

Although state maintenance and other needs are not included as a part of the total 20-year needs reporting nor are they required by state statue to be reported, it may be of interest to the reader to know the costs of these support programs and functions.

Routine maintenance (winter operations, traffic control, disaster operations, etc.) requirements over the 20-year period are $1,980,000,000.

Administration, services and support, and capital facilities costs total $606,000,000 for 20 years.

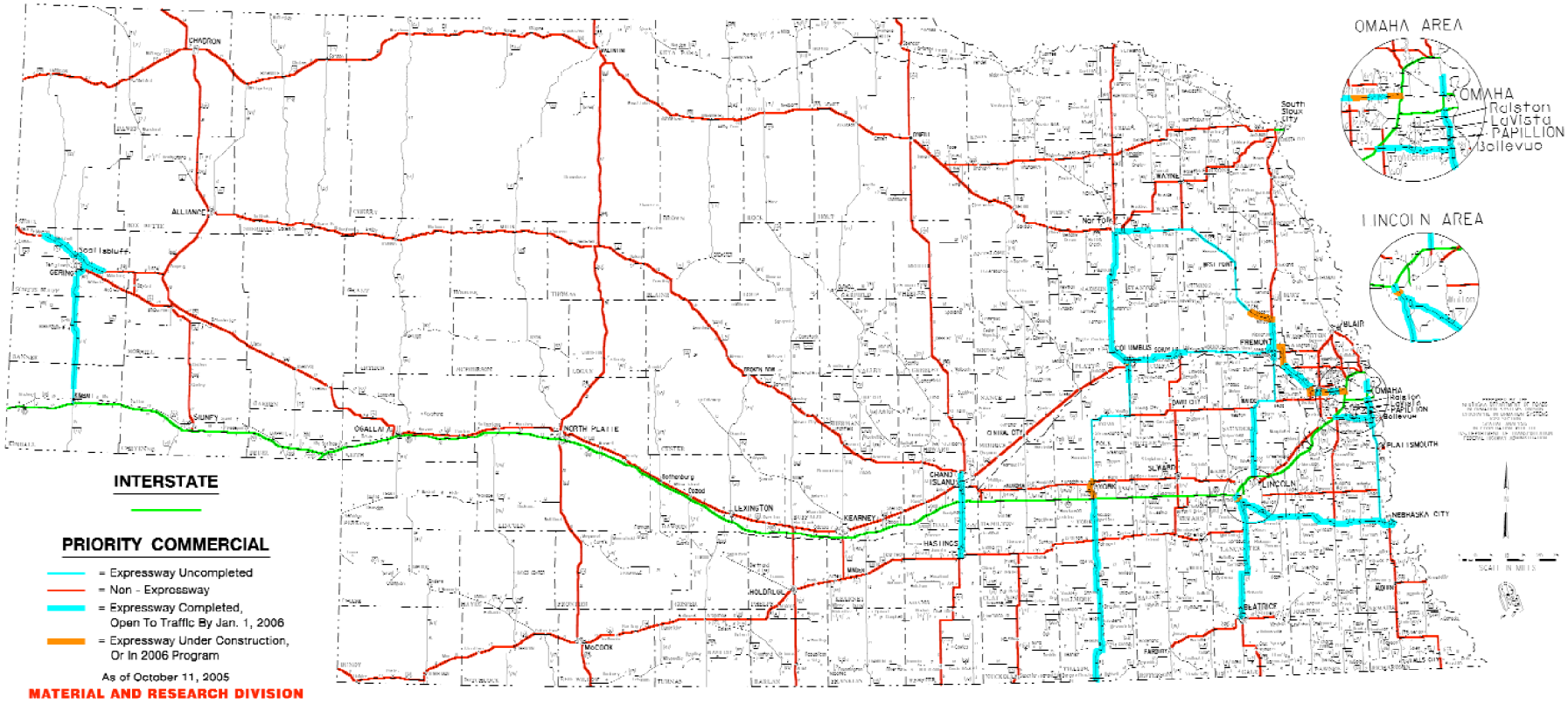
Three other areas are: construction overhead, public transportation assistance/rail planning, and the Carrier Enforcement Program (administered by the State Patrol, but funded by the Department of Roads). The cost of these functions total $491,000,000.

All these support programs and functions add up to a total of $3,077,000,000 over a 20-year period.

APPENDIX A

NEBRASKA INTERSTATE AND PRIORITY COMMERCIAL SYSTEMS MAP

NEBRASKA INTERSTATE AND PRIORITY COMMERCIAL SYSTEMS



APPENDIX B

REQUESTED PROJECTS

The Department of Roads periodically receives requests for additions to the State Highway System and other special projects that do not meet the Needs criteria. The project costs are not included in the Needs Assessment's total cost and are not shown in any particular order.

Project Description	Cost
Decatur *(Toll Bridge)*	$ 25,000,000
South Plattsmouth Bridge & Bypass *(Plattsmouth Toll Bridge)*	41,000,000
Heartland Expressway	197,000,000
North Platte West Bypass	20,000,000
Lincoln East Beltway	157,000,000
West Ogallala Interchange	12,000,000
West Kearney Interchange & Bypass	15,000,000
East Kearney Interchange & Bypass	35,000,000
South Sioux City I-129 Interchange	6,000,000
Grand Island to Columbus	132,000,000
Norfolk to Dakota City	198,000,000
Blair Northeast Bypass	7,000,000
Blair Southeast Bypass	17,000,000
Fremont South Bypass	25,000,000
Louisville South Bypass	7,500,000
Total	**$894,500,000**

APPENDIX C

STATUS OF EXPRESSWAY ROUTES

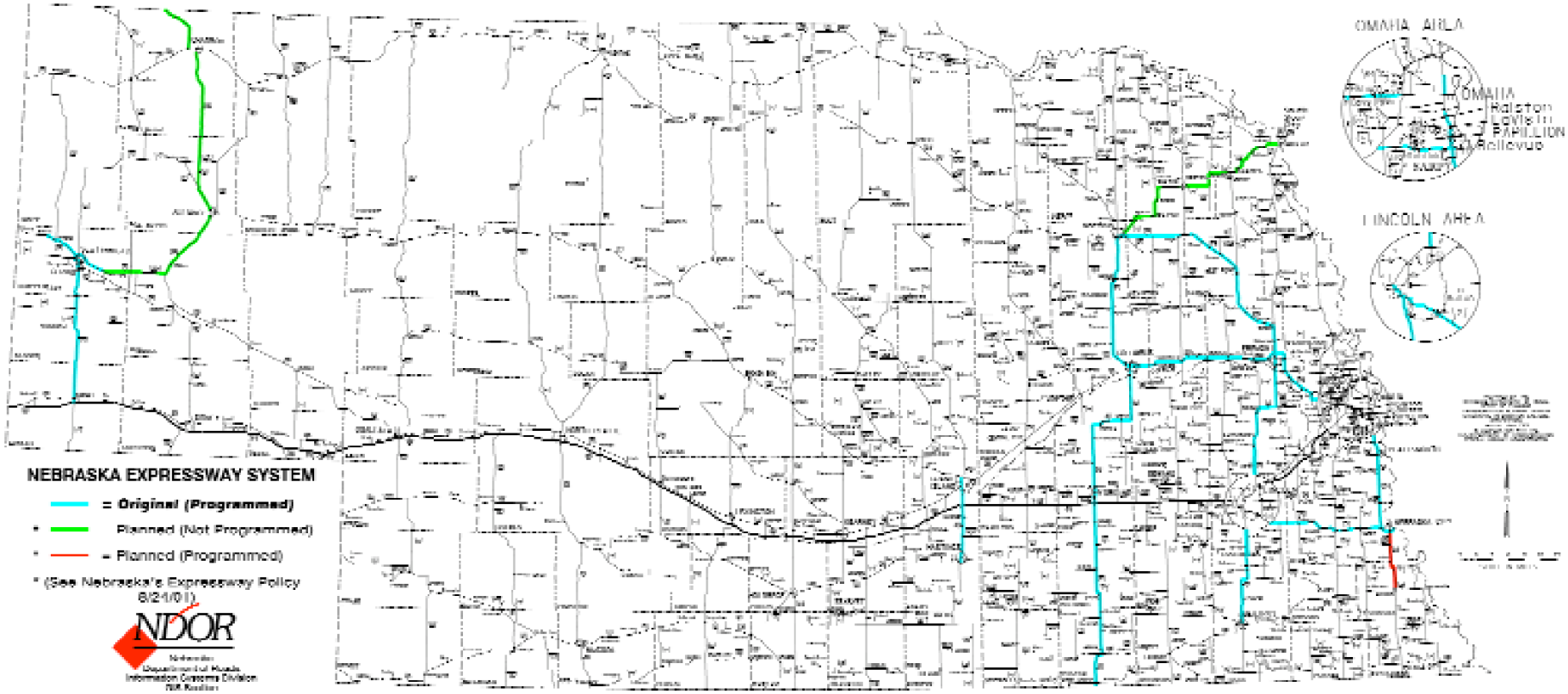
Hwy. No.	Location	Status
N-2	Lincoln to Nebraska City	Construction is complete. The Lincoln South Beltway is in the design phase.
US-275	Norfolk to Winslow	Location approval was given in early 1992, however, the Beemer and Wisner segments are being reevaluated due to changes in Policy and Standards. In Norfolk and Norfolk East are complete. Hooper East and West is under construction. The rest of the segments are in the design phase. An east side bypass of West Point was given Commission and Governor approval in early 2004.
US-77	Winslow to Fremont	Construction is complete.
US-275 US-6, L28B	Fremont to Omaha	Waterloo Northwest is open to traffic. 132nd - I-680 is under construction. 132nd St. to 174th St. is complete. 174th to Waterloo is under construction. Fremont East Bypass is under construction.
US-26	Morrill to Minatare	Construction is complete.
US-34, US-281	Hastings to Grand Island	Construction is complete.
US-81	Kansas Line to I-80	Construction is complete.
US-81	I-80 to Columbus	N-64 to Columbus portion completed. Corridor study of remaining segments complete. Location approval was given in May 1997. York North & South is under construction. Several segments are in the design phase.
US-81	Columbus to Norfolk	Construction is complete.
US-77	Beatrice to Lincoln	Construction is complete. Design is underway to convert the Lincoln West Beltway to Freeway Standards.

Hwy. No.	Location	Status
US-77	Lincoln to Wahoo	Construction is complete.
US-77	Wahoo to Fremont (US-30)	Wahoo to Fremont location study complete. Location approval given in March 1994. All segments are in the design phase.
N-71	Kimball to Scottsbluff	Harrisburg Spur North, Harrisburg Spur South and Kimball North are complete. Gering South is complete. The Scottsbluff/Gering Bypass is complete. I-80 to North of Kimball is in the design phase.
US-75	Nebraska City to Omaha	Corridor study of Nebraska City to Bellevue is complete, location approval was given in April 1999. The Kennedy Freeway segment is complete. Several segments are in the design phase.
N-370	I-80 to US-75	Construction is complete.
US-30	Columbus to Fremont	Fremont N.W. Bypass is completed. Location approval of Columbus to Schuyler was given in May 1998. Columbus East and Schuyler East and West are complete. The Corridor study of Schuyler to Fremont continues.

APPENDIX D

NEBRASKA EXPRESSWAY SYSTEM MAP

NEBRASKA EXPRESSWAY SYSTEM



APPENDIX E

NEBRASKA STATE HIGHWAY COMMISSION RESOLUTION

STATE OF NEBRASKA

STATE HIGHWAY COMMISSION
1500 Highway 2
PO Box 94759
Lincoln NE 68509-4759
Phone (402)479-4530
FAX (402)479-3888
www.dor.state.ne.us

At the March 26, 1999 meeting of the Nebraska Highway Commission, a revision to the August 1998 policy on adding projects to the Highway Improvement Program was approved.

This revision makes it clear that proposed improvements which are not required by the application of the Department of Roads' written standards, must be funded from sources otherwise unavailable to the Highway Improvement Program.

Please share this policy with those who may propose improvements to the state highway system.

You are encouraged to contact your Highway Commissioner or the Department of Roads if you have questions or requests covering this policy.

For the Commission

Ronald Books, Chair

Dated this 2nd day of April, 1999.

Nebraska State Highway Commission

Revised Policy Endorsement

Standard Needs Criteria for the State Highway Improvement Program

Necessary highway improvement projects are added to the State Needs Report and are then placed in the State Highway Improvement Program for a particular year on a District priority needs basis as funds are available.

Justification for Standard Needs Criteria is determined by the Nebraska Department of Roads by applying established standards and engineering considerations to each particular project need. Considerations such as an increase in traffic volumes or facility deterioration are principal examples of standard needs. Other examples are improvements to relieve congestion, safety improvements, reconstruction of surface pavements or bridges, shoulder or geometric design improvements.

Standard Needs are based upon traffic projections and the application of written highway standards adopted by the Department of Roads. Project design and construction shall take into consideration cost effective long-range planning. Examples are right-of-way or corridor protection or acquisition and additional design considerations.

Non-Standard Development Projects Proposed for the State Highway Improvement Program

Many proposed or desired highway projects do not fall within the established Standard Needs criteria. Such desired improvements fall into a separate category and procedure for being added to the State Needs Report and the Highway Improvement Program.

Examples of such projects are those with an immediate or future potential benefit or improvement for the state. Approval of the State Highway Commission is required in adding such projects to the State Needs Report. Sources of funding shall be determined prior to such approval.

Other such projects of immediate or future potential benefit or improvement may be proposed or desired on a regional or local basis. Regional or locally beneficial projects that do not meet Standard Needs shall be funded by regional or local entities or through specific non-standard funding sources. Approval of the State Highway Commission is required where it is necessary to add such projects to the State Highway Improvement Program. Sources of funding shall be determined prior to such approval.

Federal Highway Demonstration Projects

Federal demonstration projects provide additional funding to the state and shall be considered a separate category. Such proposed projects should be initiated with the Department of Roads and have the support of the State Highway Commission prior to submission to Congress.

Demonstration projects shall not be a part of the State Needs Report. State matching funds required for federal highway demonstration projects shall not be considered part of a District's State Highway Improvement Program allocation.

Adopted March 1999

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.

Vision Statement

The Nebraska Department of Roads is the premier state transportation agency in the United States. We maintain and improve this great agency, the roads it is responsible for, and serve its customers by focusing in three fundamentals: safety, quality and fiscal responsibility.