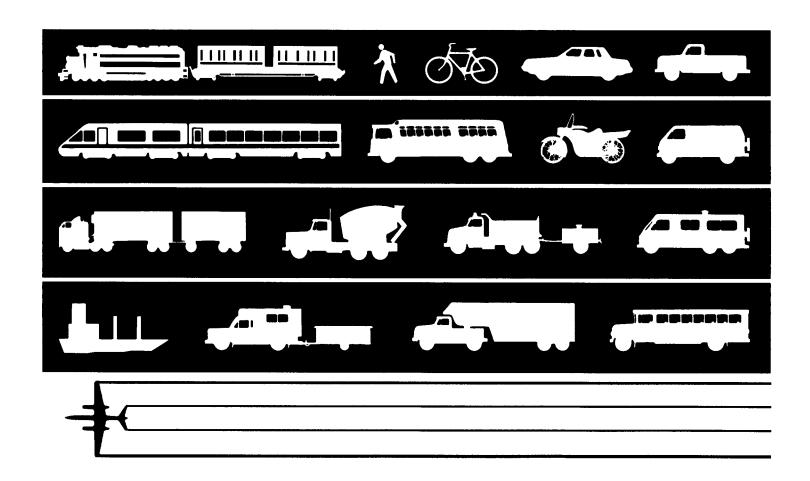
# Nebraska's Statewide Long-Range Transportation Plan

# Future Transportation in Nebraska 1995 - 2015

# **EXECUTIVE SUMMARY**



"Building a better system for Nebraska's future"

# STATE OF NEBRASKA

DEPARTMENT OF ROADS

Allan L. Abbott, Director-State Engineer 1500 Nebraska Hwy 2 PO BOX 94759 Lincoln NE 68509-4759 Phone (402) 471-4567 FAX (402) 479-4325





E. Benjamin Nelson Governor

Dear Nebraskans

I am establishing this document as the official Nebraska Statewide Long-Range Transportation Plan. This is the first such plan which addresses all types of transportation which are available to our citizens. This plan took over a year to create and many agencies, organizations, and individuals contributed to its development.

Historically, transportation has been essential in the settling and developing of our state. A state as vast as ours relies heavily on a transportation network which is capable of sustaining our rural element as well as supporting our urban areas.

This plan provides the direction for taking our transportation programs into the 21st Century. To achieve the goals identified in this plan, those same entities which helped create the plan must now cooperate in a continuing effort to achieve success. Such a commitment will be necessary if those transportation services necessary to sustain the 'Good Life' are to be realized.

I am, therefore, requesting state agencies to make that Commitment and I am encouraging organizations and individuals to do likewise.

Sincerely,

E. Benjamin Melson

Governor

# NEBRASKA STATEWIDE LONG-RANGE TRANSPORTATION PLAN

# **EXECUTIVE SUMMARY**

**Prepared For The** 

# **STATE OF NEBRASKA**

**August, 1995** 

Prepared by
Nebraska Department of Roads
Transportation Planning Division
ISTEA Planning Unit.

# **MISSION STATEMENT**

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



Nebraska's statewide Long-Range Transportation Plan has been developed in the spirit of this mission statement. It was developed in cooperation with public and private organizations and individuals to improve and enhance this coordinated statewide transportation system.

#### Introduction

The Nebraska Department of Roads, in coordination with other state, local, and tribal agencies and transportation-oriented organizations, has developed a Statewide Long-Range Transportation Plan to facilitate an efficient, affordable safe, environmentally sound, and coordinated statewide transportation system for the movement of people, goods, and services within and across the state of Nebraska.

Unlike most states, Nebraska's transportation responsibility is segmented among several state agencies, organizations, commissions, local government, and councils. Therefore, several of these agencies and organizations have assisted in and contributed to the development of this plan. They include the Nebraska Motor Carriers Association, Department of Agriculture, State Patrol, Game and Parks Commission, Public Service Commission, Rural Development Commission, Department of Social Services, Department of Economic Development, Department of Aeronautics, Metropolitan Planning Organizations, Indian Tribal Governments, and other Public interest groups. The organizational structures of agencies and organizations responsible for transportation in Nebraska are detailed in Section VI of the Long-Range Plan.

# Why Have a Plan?

The citizens of Nebraska have at their service an impressive variety of quality roadway systems, transit systems, airports, railways, and waterways. Yet, those who depend upon these extensive transportation systems are aware that transportation problems remain which must be

solved. As the state grows, the demands on the transportation system increase. The future of the state and its economy depend on meeting these demands as they apply to streets and highways as well as to each of the other modes of transportation. The availability of transportation services and facilities affects the ability of communities as well as individuals to perform their duties. Many who rely on one or more forms of the transportation system need the system to fulfill their needs. The need to make decisions that will affect the economic, environmental, and the social well-being of the state has led in part to the development of this plan. Transportation needs are not static, but rather evolve as policies, politics, and practices change. This plan must evolve to address these changes. The plan did take into account federal and state laws and regulations, the existing transportation system, financial limitations, and personnel resources, as well as the public interests and goals. The plan addresses all modes of surface and non-surface transportation such as highways, streets and roads, railroads, bicycle and pedestrian facilities, airports, pipelines, and barge facilities. The plan also addresses the issues and goals generated from a Public Participation workshop. The plan provides direction for a broad "Framework for Action" by which the state's transportation system will be shaped. By planning within the scope of the framework, we can best identify how each mode of the transportation system complements the other as part of an integrated network.

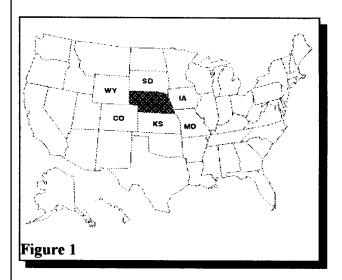
Several long-range transportation plans have been developed in recent years. These plans are, by reference, incorporated into and have become part of this plan. These respective plans are listed as follows:

- A. State Highway Plan and Highway Needs Report - 1988 Needs Report
  - 1994 State Highway Plan and Needs Report
- B. Nebraska Intercity Bus Study/Plan Development - Final Report
- C. Local Public Transportation Services Plan (Pending)
- D. Nebraska Rail Plan 1986 Update
- E. Nebraska Rail Program Needs
- F. State Rail Plan (Pending)
- G. Metropolitan Area Planning Agency Year 2020 Interim Long-Range Transportation Plan
- H. Transportation Plan 2020 for the Sioux City Metropolitan Area (NE, IA, SD)
- I. 1994 Lincoln City/Lancaster County Comprehensive Plan
- J. Iowa Tribe of Kansas and Nebraska Transportation Plan - 1986
- K. Iowa Tribe of Kansas and Nebraska Transportation Improvement Plan - 1994
- L. Sac and Fox Nations of Missouri Transportation Improvement Plan
- M. Nebraska State Airport System Plan
- N. Nebraska Long-Range Bicycle/ Pedestrian Plan (Under Development)
- O. A Network of Discovery, a Comprehensive Trails Plan for the State

- of Nebraska
- P. An Energy Action Plan for Nebraska 1992
- Q. An Energy Action Plan The First Year A Progress Report
- R. Nebraska's Management of Energy Shortages - A Contingency Plan - 1989
- S. Nebraska's Historic Preservation Plan May 1995

## **Area Affected By The Plan**

Land development and transportation are closely related. Nebraska, which is geographically located in the Midwest, is bordered by the states of Iowa, Missouri, Kansas, Colorado, Wyoming, and South



Dakota. The state's geographically central location offers many advantages. While access to major markets is essential, a central location provides relatively equal access to all. Figure 1 above, illustrates the geographical location of Nebraska in relation to the United States. The state is divided into 93 counties and has three

metropolitan areas (Lincoln, Omaha, and South Sioux City). The counties vary widely in population. According to the U. S. Census Bureau, the state's resident population in 1960 stood at 1,411,330 persons and by 1990 reached 1,578,385, amounting to an overall net increase of 12 percent.

## **Transportation Past and Present**

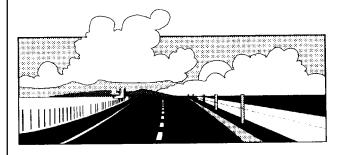
Transportation has been and will continue to be a powerful force for Nebraska's economic growth. Historically, transportation largely determined the settlement of the state. The Nebraska territory has served as a conduit for the transportation of people and goods across the country, with the Platte River Valley providing the principal surface transportation corridor through the heartland of our country. The major settler routes of the 1840's, the Oregon, Mormon, and California trails all traversed the Platte River Valley and communities began to develop to supply the travelers.

During the 1850's and 60's, the overland stage established stations every fifty miles along its routes, many of which later became established towns. The first transcontinental railroad passed through the Platte Valley and gave vitality to many already established communities such as Omaha, Fremont, Columbus, and Grand Island. Others which began as Union Pacific stations are Lexington, Gibbon, Ogallala, and Kimball. The next transportation benchmark was the designation and construction of the first transcontinental highway, the "Lincoln Highway." It also passed through the Platte Valley as does its successor, Interstate Highway 80.

Today, much of Nebraska's economy depends on the transportation industries. The industries employ many of our citizens and through the movement of commodities, they support manufacturers and agriculture.

The transportation system in Nebraska has developed in both the public and private sectors, separately and in combination. Highways and waterways have been largely in the public domain, while airways and railroads have been privately owned, but under public regulatory measures.

### **Highway Systems**



The state is served by an extensive network of highways. The 9,944 miles of the highway system under the Department of Road's responsibility include the interstate highways, U. S. highways, and state highways. About 78,412 miles of the rural county road system are under the jurisdiction of the Counties and Townships. The Municipalities maintain 7,526 miles of the road system, bringing the total mileage number to approximately 95,882 miles of road in Nebraska. There are 15,776 bridges on the state's road system. Of the 15,776 bridge structures, 12,442 on the road system are owned and maintained by the cities or counties, and the remaining 3,334 are owned and maintained by the state.

The interstate highway is a major part of the

state's, as well as the National Highway System. There are about 437 miles of rural and about 45 miles of urban interstate highway in Nebraska. This stretch of interstate highway is part of the 45,500 miles of the Dwight D. Eisenhower National System of Interstate and Defense Access highways serving all state capitals and most urban population centers over 50,000.

#### **Use of the System**

The state highway system serves the major corridors of traffic movement. The system carries 62 percent of all the vehicle miles of travel in the state, while the vast mileage of the

county roads carries 15 percent of travel. Urban streets carry the remaining 23 percent. About 81 percent of the heavy trucks that travel in and through Nebraska travel on the highway system. Not only does the state highway system have the highest traffic density, it also serves the longest trips.

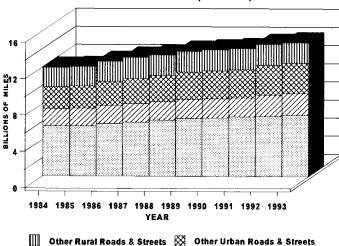
Virtually all the traffic traversing the state east to west and north to south traveled on the state highway system. The interstate is 0.5 percent of the total Nebraska road system and carries 19 percent of all motor vehicle travel. Table 1 and chart 1 reveal the trend of the vehicle miles traveled in Nebraska.

# VEHICLE MILES TRAVELED IN NEBRASKA BY ROAD SYSTEM (BILLIONS OF MILES) Table 1

	STATE HIGHWAYS			OTHER ROADS & STREETS			STATEWIDE		
YEAR	RURAL	URBAN	TOTAL	RURAL	URBAN	TOTAL	RURAL	URBAN	TOTAL
1984	5.474	1.918	7.392	2.150	2.392	4.542	7.624	4.310	11.934
1985	5.529	1.937	7.466	2.172	2.416	4.588	7.701	4.353	12.054
1986	5.759	2.031	7.790	2.199	2.641	4.840	7.958	4.672	12.630
1987	5.925	2.087	8.012	2.354	2.725	5.079	8.279	4.812	13.091
1988	6.175	2.034	8.210	2.284	2.877	5.161	8.460	4.911	13.371
1989	6.391	2.078	8.469	2.322	2.990	5.312	8.713	5.068	13.781
1990	6.439	2.121	8.560	2.339	3.058	5.397	8.778	5.179	13.957
1991	6.574	2.100	8.674	2.359	3.062	5.421	8.933	5.162	14.095
1992	6.634	2.329	8.963	2.301	3.317	5.618	8.935	5.646	14.581
1993	6.775	2.386	9.161	2.284	3.332	5.616	9.059	5.718	14.777

Source: Nebraska Department of Roads Transportation Planning Division

# VEHICLE MILES TRAVELED IN NEBRASKA BY ROAD SYSTEM (CHART 1)



#### Safety on our Highway Systems

**Urban State Highway** 

One way to measure the efficiency of traffic service on our highway system is by analyzing the traffic accident data. Traveling by motor vehicle in Nebraska is safer today than it was in the past. The number of miles driven on Nebraska roadways continues to increase steadily, thus increasing the opportunity for traffic accidents to occur.

**Rural State Highway** 

In 1993, nearly 15 billion vehicle miles were traveled in Nebraska. This represents an increase of about seven percent over the past four years. As traffic volumes increase on our highway system, accidents have also increased slightly, but not nearly as much as the percent increase in traffic volume. Those roads which make up the state system are among the safest roads in Nebraska.

Although the State Highway System makes up only about eleven percent of the road mileage in Nebraska, it carries nearly 62 percent of the traffic while incurring only 37 percent of the traffic accidents.

### **Public Transportation**



Complementing the highway system is a broad array of Public Transportation facilities and services across the state which provide an alternative to driving, and mobility for those without an automobile. In the most densely populated areas of the state, a combination of city buses, taxis, handi buses, and tour buses have met and are continuing to meet the mobility needs of the people. In rural and small urban areas, local bus systems or other transit services are in place primarily to meet many of the needs of those not having access to an automobile.

There are 57 bus systems for rural and small urban areas that service the general public throughout the state. The Department of Roads administers the Nebraska Public Transportation Assistance Program, which provides state assistance for operational expenses of public transit systems, and also of related federal programs. The public transportation data in charts and tables, shown on the next page, reveals the number of vehicles, vehicle miles, and passenger boardings for rural, small urban, and urbanized transportation systems receiving operating assistance through the Nebraska Department of Roads.

The number of vehicles operating in the rural and small urban transit systems and the number of miles driven have gradually increased from 1984 to 1994, while ridership has slightly declined. However, in the urbanized areas all

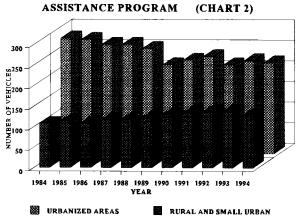
three categories, number of vehicles, number of | the same time period. miles driven and ridership show declines over

NEBRASKA PUBLIC TRANSPORTATION ASSISTANCE PROGRAM\* Table 2

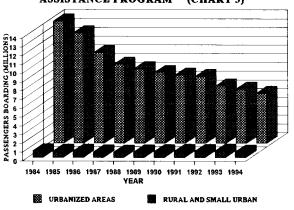
	RURAL AND SMALL URBAN			URBANIZED AREAS**			
FISCAL YEAR	NUMBER OF VEHICLES	VEHICLE MILES	PASSENGER BOARDING	NUMBER OF VEHICLES	VEHICLE MILES	PASSENGER BOARDING	
1984	107	1,671,962	752,611	280	7,544,937	13,941,035	
1985	113	1,696,036	701,188	277	6,935,837	12,613,579	
1986	109	1,699,462	715,255	265	6,552,679	10,357,035	
1987	117	1,690,523	640,399	265	6,578,642	9,027,458	
1988	118	1,658,867	612,302	255	6,282,471	8,524,404	
1989	122	1,733,346	627,689	216	6,312,320	8,092,198	
1990	129	1,810,586	664,631	227	6,037,878	7,787,256	
1991	133	1,900,039	717,062	236	6,048,087	7,639,578	
1992	136	1,996,866	724,406	216	5,836,761	6,532,437	
1993	138	2,455,408	766,914	226	5,799,023	6,168,077	
1994	129	1,840,777	652,287	221	5,675,169	5,696,505	

<sup>\*</sup> Includes only government-funded city and rural buses and vans

# **NEBRASKA PUBLIC TRANSPORTATION**



## **NEBRASKA PUBLIC TRANSPORTATION** ASSISTANCE PROGRAM (CHART 3)



<sup>\*\*</sup> Urbanized areas consists of Omaha and Lincoln only

<sup>&</sup>quot;Buildings a better system for Nebraska's future"

### **Airport System**



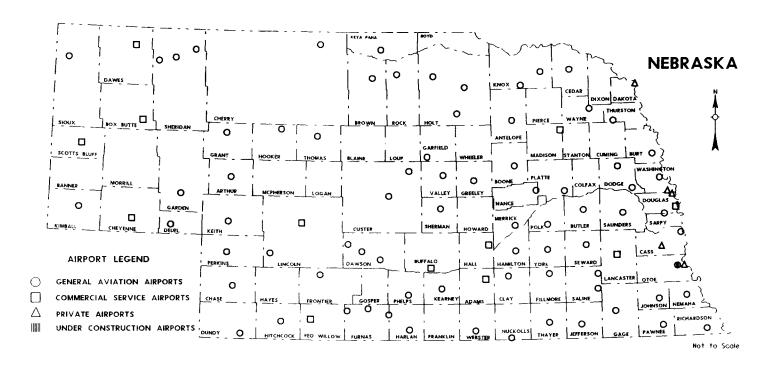
Transit and highway networks provide important links to Nebraska airports. A total of 92 existing airports were considered to be the most important facilities that constitute the state's airport system. Figure 2 graphically depicts the locations of these public-use airports. Of the 92 airports, 88 are publicly owned and operated by either the state, a county, municipality, or authority type governing body while four airports are privately

owned and operated by individuals or incorporated entities. There are numerous private-use airports and some heliports located throughout the state which are not included in the 1992 State Airport System Plan study, since these airport facilities are not open for public use. Presently only 64 of the airports are eligible for federal funding.

#### **Aviation Activity**

Records of aviation activity in Nebraska include numbers of airports, enplaned passengers, aircraft operations etc. There are 11 airports that are located in the Metropolitan areas and other communities in the state that provide scheduled commercial passenger air services. Of the 11 airports, five of them enplane over 10,000 passengers annually and are classified as primary commercial service airports.

**Figure 2 - Existing Airport System** 



They include the following:

- Central Nebraska Regional Airport (Grand Island)
- Eppley Airfield (Omaha)
- North Platte Regional Airport
- Lincoln Municipal Airport
- William B. Heilig Field (Scottsbluff)

Two of the 11 airports, Kearney Municipal and Karl Stefan Memorial (Norfolk), enplane at least 2,500 passengers, but less than 10,000 and are classified as non-primary commercial service airports.

The remaining four airports, listed below, provide scheduled passenger services but because they enplane less than 2,500 passengers annually are classified by the FAA as General

Aviation Airports.

- Alliance Municipal Airport
- Chadron Municipal Airport
- Hastings Municipal Airport
- McCook Municipal Airport

A five year enplanement history of these 11 airports is shown in Table 3.

The 78 existing general aviation airports are classified as following:

49 are classified as Basic Utility/Landing Strip

21 are classified as General Utility8 are classified as Transport/BusinessJet

# HISTORICAL COMMERCIAL SERVICE ENPLANEMENTS AT NEBRASKA AIRPORTS (Table 3)

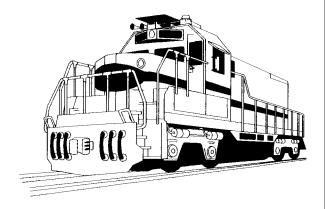
Public-Use Airports	1986	1988	1990	1992	1994	2015
Alliance Municipal	862	760	664	n/a	n/a	n/a
Grand Island	15,235	17,622	16,950	19,000	20,850	65,000
Chadron Municipal	750	670	740	n/a	n/a	n/a
Eppley Airfield (Omaha)	1,135,002	1,125,708	1,073,925	1,085,000	1,231,508	1,916,000
Hastings Municipal	802	932	1,541	n/a	n/a	n/a
Stefan Memorial (Norfolk)	1,456	900	600	n/a	3,903	n/a
Kearney Municipal	2,045	2,668	3,240	3,000	3,382	9,000
North Platte Regional	10,364	14,630	13,190	18,000	13,536	43,000
Lincoln Municipal	239,208	250,076	234,347	225,000	240,904	547,000
McCook Municipal	1,280	1,173	1,180	n/a	n/a	n/a
Sidney Municipal	515	540	640	n/a	n/a	n/a
Heilig Field (Scottsbluff)	16,228	21,832	15,785	19,000	19,953	41,000
Total	1,423,750	1,437,511	1,362,802	1,369,000	1,534,036	2,621,000

Source: Nebraska Department of Aeronautics (1986, 1988, and 1990)

Federal Aviation Administration (1992, 1994, and 2015)

n/a - Represent airports with commercial service enplanement less than 2,500 as classified by the FAA

# **Railroad System**



The highway and transit networks provide

Corporation, known as Amtrak. Amtrak provides daily service in both directions in Nebraska. Amtrak stations in Nebraska are located in Omaha, Lincoln, Hastings, Holdrege, and McCook. Table 4 shows the number of rail passengers boarding and/or deboarding at these Stations from 1988 to 1993.

#### **Freight System**

Nebraska is served by three major railroads:

- Burlington Northern (BN)
- Chicago and Northwestern (C&NW)

#### NUMBER OF RAIL PASSENGERS BOARDING AND /OR DEBOARDING AT AMTRAK STATIONS IN NEBRASKA, 1988 - 1993\*

Number of passengers Table 4

				8		
STATION	1988	1989	1990	1991	1992	1993
Omaha	25,650	30,006	35,727	36,216	33,894	36,616
Lincoln	12,834	13,255	13,816	14,038	12,938	14,080
Hastings	6,154	6,189	5,260	5,659	5,620	5,696
Holdrege**	2,724	2,862	2,917	2,929	2,398	2,602
McCook**	4,106	4,094	3,745	3,814	3,627	4,244
Total	51,468	56,406	62,465	62,656	58,477	63,238

Source: Amtrak, Government Affairs Department

important links to the state's rail system. Rail has two components: passenger and freight. Although each is uniquely different in its operating characteristics, they share a common purpose to transport people and goods in and through the state.

#### Passenger Rail System

Passenger rail service in Nebraska is provided by the National Railroad Passenger • Union Pacific (UP)

The eastern and southeastern sections of Nebraska have a more extensive network of railroads than the rest of the state. In addition to those listed previously, the following carriers operate in Nebraska:

- Mid-States Port Authority
- Nebraska Public Power District
- Western Railroad Properties, Inc.

<sup>\*</sup>Federal Fiscal Years

<sup>\*\*</sup>Tickets cannot be purchased at this location. Tickets must be purchased on the train or from Amtrak travel agency.

- Sidney and Lowe Railroad
- Omaha, Lincoln and Beatrice Railroad
- Chicago, Central and Pacific Railroad
- Atchison, Topeka and Santa Fe Railroad
- Fremont and Elkhorn Valley Railroad (Passenger excursion train)
- Nebkota Railway, Inc.
- Nebraska Central Railroad Company

#### **Freight - Intermodal Facilities**

The movement of freight that involves two or more modes of transportation is referred to as intermodal freight. This has been one of the fastest growing areas in rail transportation in recent years.

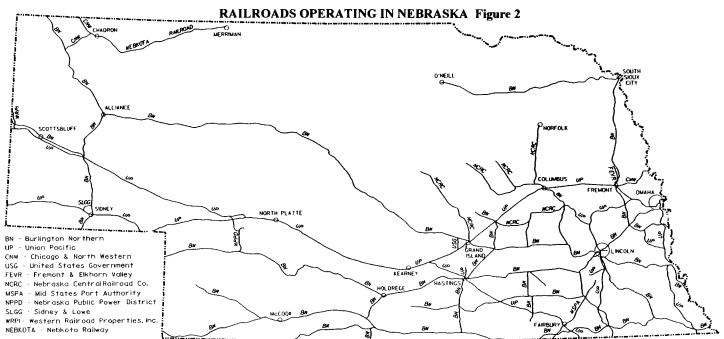
Piggy-back TOFC (trailers-on-flat cars) and COFC (containers-on-flat cars) have shown remarkable growth. In relation to total carloadings, the TOFC/COFC traffic comprised about eight percent of the total in 1979 and slightly more than 16 percent in 1988.

The Burlington Northern's intermodal hub in Nebraska is located in Omaha. The Chicago and Northwestern's intermodal hub in Nebraska is located in Fremont. The Union Pacific major intermodal hub in Nebraska is located in Omaha.

#### **History of Rail Abandonment**

The Staggers Rail Act of 1980 was a step towards deregulation of the railroad industry, giving the industry a greater freedom to set prices, contract with customers, and sell or abandon unprofitable lines and operation.

As of December 31, 1995, 1,768 miles of railroad lines have been abandoned since 1970. Another 192 miles of the lines are potentially subject to abandonment. Figure 2, and tables 5 and 6 show the railroads operating in Nebraska, the Nebraska miles of railroad trackage owned, and the freight operating statistics.



Source: Nebraska Department of Roads - Transportation Planning Division Railroads operating less than 10 miles are not shown

MILES OF RAILROAD TRACKAGE OWNED IN NEBRASKA AS OF DECEMBER 31,1994 Table 5

NAMES OF OWNER	MAINLINE MILES	BRANCHLINE MILES	TOTAL MILES
Burlington Northern	1,501	785	2,286
Union Pacific	839	172	1,011
Chicago & Northwestern	26	160	186
Mid States Port Authority	0	51	51
Nebraska Public Power District	0	28	28
Nebraska Central	0	248	248
Nebkota	0	73	73
Western RR Properties, Inc.	14	0	14
Sidney & Lowe	0	14	14
Omaha, Lincoln, & Beatrice	0	5	5
Chicago Central & Pacific	0	3	3
Atchison, Topeka, & Santa fe	0	1	1
Fremont & Elkhorn Valley *	0	30	30
Total	2,380	1,570	3,950

<sup>\*</sup>Passenger/Excursion Train

Source: 1993 Annual Reports and Department of Roads data.

RAILROAD FREIGHT OPERATING STATISTICS IN NEBRASKA CLASS I RAILROADS, 1993 Table 6

	RAILROAD					
FREIGHT INDICATOR	ATSF	BN	CNW	UP	Total	
Train Miles (thousands)	7.9	10,120.6	256.3	13,907.8	24,292.6	
Locomotive Unit Miles (thousands)	28.5	30,244	715.9	41,201.1	72,189.5	
Total Car Miles (millions)	0	957.4	11.3	1,204.5	2,173.2	
Gross Ton-Miles (millions)	5	81,479.9	1,217	n/a	82,701.9	
Train Hours (thousands)	0	388	9.7	n/a	397.7	
Ton of Revenue Freight (thousands)	1,234.8	121,590.4	19,005.4	139,443	281,273.6	
Net Ton-Miles of Freight (millions)	62.3	42,806.7	703.7	53,806.5	97,379.2	

Source: 1993 R-1 Report for each railroad.

# **Barge Facilities / System**

The Missouri River on Nebraska's eastern border provides a water link to the Gulf of Mexico via the Mississippi River. Currently, Nebraska has 19 barge terminals on the Missouri River at seven locations between Blair and Brownville which are available for service by barge owners and towing companies.

The amount of barge shipping is affected by the control of the level of river flow. Between 1985 and 1989, approximately three million tons of goods were moved. Only four of the 19 barge facilities in Nebraska do not have rail connections. Shown below are the Nebraska Rail-Barge Transfer Facilities and the Missouri River Terminals.

Nebraska Rail-Barge Transfer Facilities and Missouri River Terminals

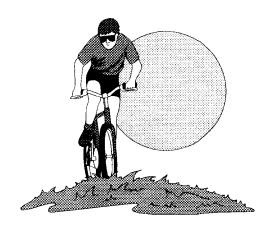
r		barge Transfer Facilities and		T Terminais
RIVER MILES	RAILROAD	OWNER	LOCATION	COMMODITIES
535.2	BN	Kentopp Elevator	Brownville	Grain
535.5	BN	Continental Grain Co.	Brownville	Grain
561.8	BN	DeBryce Grain, Inc.	Nebraska City	Grain
562.4	BN, UP	ACMS Steinhart Terminal	Nebraska City	Grain & Fertilizer
562.5	BN, UP	Bartlett and Company	Nebraska City	Grain
562.6	BN	Brock Grain, Inc.	Nebraska City	Grain
562.7	BN, UP	ACMS Steinhart Tank Terminal	Nebraska City	Fertilizer & Molasses
584.5	None	Rock Bluff Elevator	Nehawka	Grain
596	BN	Arcadian Corporation	Bellevue	Fertilizer Solution
612.2	BN	Cargill Liquid Products	Omaha	Molasses
615.3	BN, C&NW, UP	ACMS Port of Omaha Terminal	Omaha	Grain, Fertilizer & misc.
615.4	UP	Cargill Liquid Products	Omaha	Molasses
623.8	BN, C&NW, UP	ACMS Heartland Cement Co.	Omaha	Fertilizer & Salt
624.3	UP	Missouri Portland Cement Co.	Omaha	Cement
624.5	None	Pentzien, Inc.	Omaha	A Dredging Co.
624.7	UP	Penny's Concrete, Inc.	Omaha	Grain & Cement
641	None	Fort Calhoun Stone Company	Fort Calhoun	Limestone
647.7	C&NW	Agricultural Minerals Corp.	Blair	Anhydrous Ammonia
648.2	None	Consolidated Blenders, Inc.	Blair	Alfalfa pellets & beans
Source: Neb	racka Ranga Tarmin	al Directory 1000 Nobreeka Donor	44 - CD 3.	

Source: Nebraska Barge Terminal Directory - 1990 Nebraska Department of Roads

## **Pipeline Transport**

There are five major gas transmission lines and 20 gas and oil product lines serving the state of Nebraska. These facilities are concentrated in the more populous areas and provide an extensive network in the eastern portion of Nebraska.

### **Trail Facility / Systems**



Prior to the 1980's, most hiking and biking trails were limited to parks, both municipal and state. During the past 15 years, a number of abandoned railroad corridors have been converted to trails. Several factors have contributed to the trail expansion. The U. S. Railroad Revitalization and Regulatory Reform Act, passed by the federal government, allows abandoned railroad rights-of-way to be kept intact, or "railbanked", enabling public recreational trail use. The National Trails System Act, also passed by the federal government, provides preference to parties desiring to preserve railroad rights-of-way as trails. These laws have given the general public an incentive for forming trail groups and obtaining finances. Natural Resources Districts, national, state, and regional trails organizations, and the Federal Transportation Enhancement Program have been major funding sources.

Lincoln has led the state in the development of local trails with its growing urban network. Trail development in Omaha is accelerating as well.

Trail development is spreading to other parts of the state, ranging from Dannebrog to Nebraska's twin cities of Scottsbluff and Gering. In December of 1993, the state of Nebraska announced acquisition of the former Chicago and Northwestern "Cowboy Line" from Norfolk to Chadron as a trail corridor with the continuation of rail service on its western end. This resulting Cowboy Trail will become the nation's longest rail-trail system. This recent activity is aimed at developing an interconnecting trails system rather than fragmented trail segments.

# A Changing Nebraska

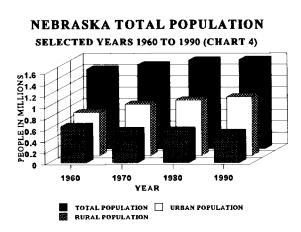
There are several factors that can influence the future mobility needs and desires, many of which will result from changes in population, travel patterns, and changes in the distribution of goods in and across the state of Nebraska.

# **Population Growth**



As population increases, the demand for jobs, homes, goods, and services increases. These, in turn, create a need for more transportation and

transportation facilities which must be located on available land. The data presented here reveals the growth pattern, distribution, and characteristics of Nebraska's population. In a span of 30 years, the state has seen its population increased by about 167,055 persons. The 93 counties of the state vary widely in population. In the 1980 census, 83 of the 93 counties lost population due to the outmigration from the rural counties to the urban counties. During the 1970's and 1980's, the state became increasingly urban. Chart 4 illustrates the changes in Nebraska's total population from 1960 to 1990. The 1990 census data continues to indicate that many of the state's counties are still losing population while the larger urban counties are gaining. The largest of the gains



occurred in Sarpy County, which experienced a 228 percent increase in population since 1960. The Bureau of Business Research at the University of Nebraska-Lincoln is projecting the state's total population to grow more rapidly in the foreseeable future than it has in the past. The population is projected to increase by 3.5 percent over the decade from 1990 to 2000. By the following decade, the state's population is projected to increase by 3.9 percent, resulting in a 7.6 percent gain from 1990 to 2010. The

rapid increase in population will require an enormous amount of goods and services, which must be moved by transportation systems and facilities. The diversity of our society demands that choices in transportation be provided so that opportunities for living and working are somewhat equally accessible to all.

Transportation planning is being done now to meet this foreseeable future demand.

### **Travel Patterns**

Various forms of transportation have had their effect on the development of the state. In terms of travel within the state, highways serve by far the most.

**Highways** - As population grows and the economic activity expands, travel demands in Nebraska will intensify. In 1960, Nebraska's population stood at 1,411,330 persons and by 1990 reached 1,578,385, for a 12 percent increase. By comparison, the total number of motor vehicles registered has increased by 89 percent. Overall, automobile registrations have increased approximately 64 percent, while truck registrations increased 164 percent, and buses have increased by 196 percent. Although the number of automobile registrations increased substantially during this 30-year span, their share of all vehicles registered has dropped from 76 percent in 1960 to 64 percent in 1990, while the truck registration share has increased from 24 to 34 percent of the vehicle total. Total vehicle travel in the state is calculated to have increased by 115 percent between 1960 and 1990, and reached a record high of about 15 billion miles traveled on Nebraska's roads in 1993. It is estimated that by the year 2015, if the pattern continues, the vehicle miles traveled in Nebraska will exceed 20 billion vehicle miles, approximately a 35 percent increase. It so happens that at present, Nebraska has sufficient

miles on its highway system to serve the transportation needs of its citizens very well and generally the highway system is in good physical condition. The major efforts of the Department of Roads over the next several years will be directed toward maintaining the 10,000 miles of state highways and upgrading those roads and bridges that are still substandard.

Public Transportation - The rural population is aging at a faster rate than the urban population. The 1990 Census reveals that 25 percent of the rural population was over the age of 55. The impact of the aging population will result in an increase in the demand for public transportation in the rural and small urban areas. Many elderly, disabled, and low income individuals not having access to an automobile need public transportation to transport them to nutrition centers, grocery stores, banks, medical centers and libraries. The number of vehicles for the rural and small urban transit system has increased from 1984 to 1993, except for slight decreases in 1986 and 1992. The public transit system ridership, which increased from 1984 to 1986, shows a decrease in 1987 and 1988 and an increase in 1989 through 1993. In large urban areas such as Lincoln and Omaha, the use of transit systems has decreased since 1984. The abundance of inexpensive gasoline coupled with the changing lifestyle has contributed to the decline in the use of public transportation. The vehicle miles and ridership have fluctuated from a high of 7,544,937 and 13,941,035 in 1984 to a low of 5,799,023 and 5,696,505 in 1993.

As the life span of the average Nebraskan continues to grow, demands on public transit for elderly, disabled, and low income individuals in both rural and urban areas will increase. In the foreseeable future, based on the current trend in the number of riderships, the rural

transit demand is expected to increase.

Airports - The 1992 State Airport System Plan and supplemental FAA data in the (Historical Commercial Service Enplanements at Nebraska Airports table 3) on page 9, indicates that the overall air carrier enplanements have increased slightly since 1986. At the seven busiest airports, new low-fare airlines have contributed to an increase in the total commercial service enplanements from 1,419,538 million in 1986 to 1,534,036 million in 1994, an 8 percent increase. Lincoln Municipal Airport experienced a 3 percent increase and Omaha a 15 percent increase from 1990 to 1994. Both the Omaha and Lincoln Airports during the year 1991 through 1994 have experienced and are expected to continue to experience growth.

The Federal Aviation Administration is forecasting 3.5 to 4 percent annual enplanement growths through the year 2015. However, the nine smaller commercial airports in Nebraska will probably not experience such increases. In some cases, continuation of commercial passenger service will depend on the continuation of Federal Essential Air Service subsidies.

### **Distribution of Goods**

The movement of goods is also an important part of the transportation picture. The total ton-miles of freight moved through the state of Nebraska by rail, truck, and barge is expected to increase by the year 2015. Although by the year 2015 railroads will carry more than they did in 1993, trucks are expected to capture a large share of the total freight market.

The billions of miles of transport of both people and goods, by motor vehicle, airplane, train, and barge all make up the base upon which the

state's future travel will grow and he shaped

These trends, as well as any possible shifts which may result from changes in government policy or other factors, will have to be considered when planning the future transportation facilities. The estimates given here are derived from an extension of present and foreseeable trends. Unforeseeable changes in governmental policies and technology could alter the transportation picture.

# The New Federal Requirements

The federal Intermodal Surface Transportation Efficiency Act (ISTEA), which became law in December of 1991, is designed "to develop a National Intermodal Transportation System that is economically efficient, environmentally sound, provides the foundation for the nation to compete in the global economy, and moves people and goods in an energy-efficient manner." The act (ISTEA) requires each state to develop a statewide long-range Intermodal Transportation Plan. It requires the development and implementation by the states of seven management systems. The purpose of the management systems is to more effectively manage existing transportation facilities. Following is a list of the management systems:

- 1. Pavement Management
  - a) National Highway System (NHS)
  - b) Non-NHS Federal-Aid Highways
- 2. Safety Management
- 3. Bridge Management
- 4. Public Transportation Management

- 5. Congestion Management
- 6. Intermodal Management
- 7. Traffic Monitoring

The ISTEA planning requirements also call for a strong public involvement.

As a result of the act's requirements, the Nebraska Department of Roads conducted a public participation workshop and a series of other statewide public involvement conferences in an effort to elicit responses to the Statewide Long-Range Transportation Plan from the broadest possible range of transportation customers. The statewide long-range transportation planning process began with the public participation process.

## **Public Participation In This Plan**



Participation in the development of this plan involved meetings and workshops, having specific agendas and purpose, and by mailings soliciting comments.

Presentations regarding the plan were made at several meetings, including the following:

- Rural Development Commission
- Nebraska Association of County Officials
- Native American Transportation Coordination Conference

• Eight Annual Department of Roads Information Meetings

Meetings were held with several Indian Tribes at their respective Tribal headquarters.

A PLAN COMMITTEE meeting was held to brief the attendees on the status of the plan and obtain comments, suggestions and concerns. Representatives of eight state agencies, the three Metropolitan Planning Organizations (MPO's), the five Indian Tribes, the Federal Highway Administration, the Federal Transit Administration, the Bureau of Indian Affairs, and the National Forest Service were invited. The meeting was very productive.

The major public participation activity was a Long-Range Transportation Plan Workshop

held on August 29,1994. Approximately one hundred and ten representatives of public and private agencies, organizations, and businesses, as well as individuals having an interest in transportation, attended the workshop. The purpose was to bring together a broad range of people to identify and address future transportation issues that should be considered during the next 20 years. The group initially identified 159 issues for discussion.

A facilitated consolidation exercise condensed the issues down to 14, which were considered by majority vote as the most important. A 15th issue was added from meetings and other communications with the Tribal officials and representatives of the Bureau of Indian Affairs.

These issues and goals are listed as follows:

### **ISSUES AND GOALS**

Following is a discussion of each of the 14 issues resulting from the August 29, 1994 Public Participation Workshop plus a 15th issue added during the development of the plan, accompanied with one or more goals for each one:

# ISSUE 1

# EFFICIENT MOVEMENT OF COMMERCIAL VEHICLES OPERATIONS - BOTH INTERSTATE AND INTRASTATE.

Discussion of this issue revolved around two basic concerns, time- consuming and disruptive government requirements, and the movement of hazardous materials.

**GOAL:** To eliminate government required duplication of motor carrier record keeping and filing.

**Responsible entities:** Department of Roads, Department of Motor Vehicles, Public Service Commission, Department of Revenue and State Patrol.

The motor carrier industry is concerned about

the duplication of record keeping within Nebraska state government and also between states. In Nebraska, five different agencies have authority for motor carrier operations. A 1993 "Commercial Vehicle Operations Institutional Issues Study" identified the numerous forms required to be filed in order to obtain total compliance to operate legally in this state. A task force representing the transportation industry is pursuing simplification of filing

requirements.

**GOAL:** Utilize electronic technology for more efficient movement of motor carriers.

**Responsible entities:** State Patrol, Department of Roads, Nebraska Motor Carries' Association.

Expanded use of weigh-in-motion to eliminate many stops at scales stations was also discussed. However, scales personnel perform duties other than checking weights. They perform inspections and check driver and vehicle documents.

New technology is being tested to allow electronic monitoring of vehicle and driver information while the vehicle is in motion. **GOAL:** Study the issue of the movement of hazardous material and develop policies for the public protection.

**Responsible entities:** State Patrol, Department of Roads, Fire Marshall, Civil Defense and Policy Research Office.

The transport of hazardous materials was a major concern. Although the participants referred to "hazardous waste". It appeared that hazardous material in general was their concern. The whole issue of hazardous material routing, monitoring and accident response involves agencies at both the state and local level. One suggestion was to require permitting and routing of hazardous material and payment for clean up of spills.

### ISSUE 2 SAFETY IMPROVEMENTS ON NEBRASKA ROADS.

Discussion of this issue included concern regarding driver behavior and the safety of transportation infrastructure.

**GOAL:** Reduce accidents at railroad grade crossings through installation of warning devices, grade separations or closures.

**Responsible entities:** Department of Roads, and the Highway-Rail Crossing Safety Committee.

The danger at railroad grade crossings was a concern. As of April, 1994, there were 4,116 at grade railroad crossings in Nebraska, of which 658 had train activated protection. During 1993, 75 grade railroad crossing accidents resulted in 44 injuries and 9 fatalities. Increases in both train and motor vehicle traffic is increasing the exposure to conflicts. The Nebraska Highway-Rail Crossing Safety

Committee, created by 1995 Legislation will be studying this issue and making recommendations.

**GOAL:** Eliminate all geometric deficiencies on the state highway system.

**Responsible entity:** Department of Roads.

Improvement of roadways was also encouraged. The Department of Roads' 1988 Needs Study identified 4,941 miles of deficient highways with geometric needs. Significant progress has been made in removing these deficiencies. With the completion of the FY1995 program, the number of deficient miles is 3,497.

**GOAL:** Upgrade the priority commercial system to the 1988 needs study criteria.

**Responsible entity:** Department of Roads.

In addition to these geometric needs, goals exist for the priority commercial system. The priority commercial system initiated in 1988 provides a continuous network of routes which are designed to carry higher traffic volumes. This system is being developed with two 12 foot driving lanes and 10 foot shoulders, 8 feet of which are to be paved. Currently, approximately 830 miles do not meet this shoulder criteria

**GOAL:** Complete the expressway system identified in the Needs Study.

**Responsible entity:** Department of Roads.

The 600 mile expressway system has 409 miles remaining to be built. Consider improvement to four-lanes on rural state highways that have a design year traffic volume of 6000 or greater ADT.

**GOAL:** Provide lighting at those rural highway intersections where established criteria dictates.

**Responsible entities:** Department of Roads.

Concern has been expressed about the safety at some unlit rural highway intersections.

**GOAL:** Develop a Safety Management System which addresses these legal and judicial issues.

**Responsible entities:** Department of Motor Vehicles, Department of Roads, State Patrol and Attorney General.

Concern was also expressed about the enforcement/prosecution of traffic laws and inadequate driver education. Several people were frustrated that offenders were cited, but not fully prosecuted. They felt that mandatory penalties are needed for the operation of over capacity trucks, for driving while intoxicated, and other driving offenses. One suggestion was that civil penalties apply to overweight loads. The penalties would apply to shippers, receivers, owners or drivers.

**GOAL:** Develop an organized educational program for all users of transportation systems.

**Responsible entities:** Game and Parks Commission, Natural Resources Districts, Local trail owners and organizations of hikers and bikers

Concern was expressed about the education and re-education of transportation users. Not only vehicle drivers, but bikers, skaters, and other trail users were included.

It was noted that trail accidents are starting to occur and this trend will probably increase as usage increases.

# ISSUE 3 MEETING URBAN AND RURAL TRANSPORTATION NEEDS (INCLUDING SMALL TOWNS)

This issue is a composite of multiple concerns. The transportation needs of the elderly, disabled and low-income families and individuals was one concern. The concern was a lack of adequate transportation to allow these people to go where they need to. Inadequate allowance for pedestrians and bicyclists to cross expressways was mentioned.

**GOAL:** Assess the need for local public transportation and develop a program to meet that need.

Responsible entities: Department on Aging, Department of Social Services, Department of Roads, Public Transportation Coordination Committee, representative local governments and organizations representing the transportation disadvantaged.

Adequate public transportation for the elderly, disabled and low-income persons is a continuing problem. This transportation can be provided by a private source, such as a nursing home, or by a publicly funded source such as a county or town. Public transportation funding is inadequate to serve all these needs. Several efforts have been made at consolidating the private and public services, including school buses, but these efforts have not been successful.

ISTEA allows the use of federal highway funds for the purchase of public transportation vehicles.

The state is assisting in the provision of intercity bus service. This program is discussed under Issue 7 "Mass Transportation."

**GOAL:** Monitor freight and parcel services statewide.

**Responsible entity:** Public Service Commission

Historically, deregulation of transportation has resulted in the reduction, and sometimes the elimination of service to non-urban areas.

A concern is, that subsequent to the deregulation of the motor carrier industry, a substantial reduction in freight and parcel service to the non-urban areas will occur.

# ISSUE 4 APPLICATION OF INTELLIGENT VEHICLE HIGHWAY SYSTEMS (IVHS) TECHNOLOGY

IVHS, now referred to as Intelligent Transportation Systems (ITS), is a federally initiated program to utilize modern electronic and computer technology to more efficiently use transportation systems.

The objectives of the program are to (1) streamline traffic operations; (2) enable informed route selection; (3) enhance individual and system performance; (4) help avoid accidents; 5) improve mobility; (6) provide automated vehicle control and safety systems to prevent collisions and; (7) allow safer traffic flow.

Five functional areas have been designated (1) Advanced Traffic Management Systems (ATMS); (2) Advanced Traveler Information Systems (ATIS); (3) Advanced Vehicle Control Systems (AVCS); (4) Commercial Vehicle Operations (CVO) and; (5) Advanced Public Transportation Systems (APTS).

Omaha is involved in a cooperative ITS project with the Metropolitan Area Planning Agency, the Nebraska Department of Roads, the University of Nebraska and a consultant. ITS funds are

being utilized to develop a plan to reduce future traffic congestion. The latest devices to locate and manage incidents and control traffic are being investigated.

The Nebraska Motor Carriers' Association and appropriate Nebraska state agencies have joined a consortium of several midwestern states in a Multi-State One-Stop Electronic Purchase of Motor Carrier Credentials (Midwest States) project to demonstrate and lay the foundation for implementation and deployment of a system that will enable motor carriers to request, pay for, and receive registration, fuel tax, operating authority, and overdimensional credentials electronically from the base state or the necessary individual states.

The City of Lincoln has inquired about applying for ITS funds to develop a future city traffic plan.

**GOAL:** Develop incident management programs where needed.

**Responsible entities:** Department of Roads and Local Government Entities.

Traffic congestion usually results when some incident disrupts the flow of traffic. This incident may be an accident, a malfunction of a vehicle or of a traffic control device or some other emergency occurrence which requires the rerouting of traffic. Immediate location and identification of the incident is essential and an automatic rerouting of traffic is desirable. A method to electronically locate an incident and automatically reroute traffic would go a long way to alleviating congestion.

**GOAL:** Develop an effective and equitably funded process to allow a maximum of

uninterrupted flow of commercial vehicles.

**Responsible entities:** Department of Motor Vehicles, State Patrol, Public Service Commission, Department of Roads, Nebraska Motor Carriers' Association and other states.

The efficient movement of commercial vehicles both intrastate and interstate will require Nebraska to invest in the Intelligent Transportation System (ITS) technology. Truck traffic continues to increase and this is creating dangerous congestion at the scales facilities.

If enforcement efforts can be concentrated on those vehicles that are operating outside state statutes or federal regulations, this congestion will be relieved. Another factor is the economy of carrier operation resulting from uninterrupted travel.

#### **ISSUE 5**

# PROVIDE ADEQUATE, FAIR AND EQUITABLE RESOURCES FOR ALL TRANSPORTATION MODES

This issue generated more conversation and opposing viewpoints than any other issue. The Federal Intermodal Surface Transportation Efficiency Act of 1991 heightened the expectations of non-highway transportation interests. The Act created and funded an Enhancement Program for historic preservation of transportation facilities and for creation of trails and scenic byways. The Act also requires each state to have an Intermodal Management System, a Public Transportation Management System and a Transportation Plan which includes all surface transportation.

A category of federal funds called State Transportation Program (STP) was established to replace the Federal Aid Secondary Roads Program. Those funds, in addition to the traditional road and bridge projects, can be used for Public Transportation capital purchases and for Enhancement projects.

**GOAL:** Develop and implement funding guidelines within the restrictions of funding providers, in coordination with transportation interests and the legislature, for funding of transportation modes.

**Responsible entities:** Governor's Transportation Task Force, Department of Roads and other transportation entities.

Since the need for highway funds far exceeds that which is available, other than those funds earmarked for enhancement, no highway funds are readily available for non-highway purposes. Therefore, this plan assumes that proposed new programs must be accompanied by a financial statement which identifies a funding source.

Comments varied from "don't compromise one mode's financing for another", to "all users of a facility should contribute to upkeep", to "available funds should be shared".

Currently, state fuel taxes, vehicle registration fees and vehicle sales taxes are restricted to the upkeep of highways, roads, streets, and bridges, with the exception of an annual appropriation for transit operations. Federal-Aid Highway Funds are used for highway, road, street and bridge construction and for enhancement projects. Federal-Aid Transit funds are used for Transit programs. Omaha has used some Federal-Aid Highway Funds for transit. Local governments use local wheel taxes, property taxes and assessments for their road, street, and transit programs.

The Americans With Disabilities Act requires

public transportation providers to have facilities and vehicles which are accessible by the disabled. These adjustments add to the cost of providing service.

The Nebraska Railway Council administers the Light-Density Rail Line Assistance Act. This program provides funding, via a revolving loan fund, for rail-line acquisition, rehabilitation or improvement, operation, and rail facility construction projects.

Trails are funded by Natural Resources District funds, ISTEA Enhancement funds, local taxes and contributions.

A Recreation Road Program is funded by \$1.50 from each vehicle registration.

A railroad crossing separation program is funded in part by railroad train-mile tax, and railroads also contribute to grade crossing protection projects.

Thus far, the legislature has not chosen to provide state funds for rail or trail programs. Several years ago, the legislature failed by one vote to authorize purchase of the Chicago and North Western northern line, although they authorized the Railway Council to own and operate a railroad.

In 1994, the C&NW northern line was railbanked. The Rails to Trails Conservancy purchased the line and converted it into the Cowboy Trail.

Two years ago, the Game and Parks

Commission was authorized to accept the same C&NW rail line right-of-way as a trail's gift.

**GOAL:** Develop innovative, but acceptable methods to finance special road needs.

**Responsible entities:** Local Government, Department of Roads, and Department of Economic Development.

A situation which occurs quite often is a request for funds for unexpected special needs. Some requests are for roads to areas being newly developed (development roads) for industrial sites. The Rural Development Council provides this comment. "Nebraska and its 535 communities work very hard at economic development. A key element to Nebraska's economic development program is industrial recruitment and expansion. Success with recruitment and expansion creates transportation needs. These needs often surface outside of the normal planning and priority setting process.

There is a critical need for Nebraska to develop a process to accommodate and meet the unexpected transportation needs associated with industrial site development. "

#### **ISSUE 6**

#### MAINTAIN AND ENHANCE THE TRANSPORTATION INFRASTRUCTURE

This issue represents the need for the continued reliance on the highway, road and street network as the state's fundamental transportation system. Although several participants strongly objected to any more highway construction, most supported the need for a well maintained and adequate highway and farm to market roads network. However, there was also concern about the continued maintenance of trails. Preservation of railroads was also addressed.

**GOAL:** Resurface highways at optimum time to provide surface integrity and serviceability.

**Responsible entity:** Department of Roads.

Resurfacing of our highways to maintain surface integrity and rideability has always been a goal of the highway program.

**GOAL:** Complete construction of the priority commercial system including expressways identified in the needs study.

**Responsible entity:** Department of Roads.

In 1988, the state established a state highway Priority Commercial System of 3,303 miles, which system includes 609 miles of expressways. The non-expressway portion of this system is to be developed with two 12-foot driving lanes and 10-foot shoulders, eight feet of which will be paved. An evaluation of anticipated financing may require reassessment of expressway priorities, criteria and design standards.

**GOAL:** Maintain hiking and biking trails to a standard acceptable to both the users and the public.

**Responsible entities:** Game and Parks Commission, Natural Resources Districts, and other owners of trails, Department of Roads.

Hiking and biking trails are experiencing substantial growth since passage of the Rails-To-Trails Act and ISTEA Designated Enhancement Program. Most trails are within

or extend from large population centers. These trails are popular beyond early expectations. Users are able to enjoy the trail and return to their starting point within several hours. Eighty percent of the Federal Enhancement Funds have been dedicated to the development of these trails.

To maintain a trail can be quite expensive. Although initially skeptical, adjacent property owners are finding that trails are being maintained in a satisfactory manner.

**GOAL:** To develop a strategy for the preservation of rail service or rail corridors.

**Responsible entities:** Department of Roads and Department of Economic Development.

Many trails are being created as a result of a rail abandonment. Some rail lines being proposed for abandonment can possibly be continued under operation by a short-line operator. Continuation of branch line rail services is desirable to support agricultural and other shipping alternatives. The first priority is to retain the rail service. In those instances where it is not feasible to retain the rail service, preservation of the rail corridor should be reviews are being done, this is being included.

pursued.

GOAL: Assess the current status and future needs of the rural road and bridge network.

**Responsible entities:** Nebraska Association of County Officials, Department of Roads and the Department of Agriculture.

Agricultural commodities are being shipped by more and larger trucks. Demands on rural roads and bridges are beyond available fiscal year resources

**GOAL:** Transportation agencies to periodically review their respective transportation systems to assure that changing service demands are being addressed

**Responsible entities:** Departments of Roads and Aeronautics, Counties and Municipalities.

Several comments were made regarding the need for transportation agencies to periodically review their systems, the criteria used and the strategies for investing in those systems, to make sure they are reflective of changing needs. Although such

### ISSUE 7 MASS TRANSPORTATION

This issue involves bus and rail passenger service. Timely connections between passenger systems were encouraged. About 70 percent of Nebraska's counties have some type of local passenger service. These systems transport primarily the elderly and disabled, but they must also be available to anyone. These systems require reservations and may serve only one community or all communities in the county. Usually several days a month are scheduled for trips to a regional urban center. Only Fremont, Lincoln, Omaha, and South Sioux City have scheduled bus service.

The main intercity bus service is provided by Greyhound operating on the interstate. Other intercity bus service is provided by Black Hills Stage Lines which operates between Norfolk and Omaha, Denver Coach which operates between Chadron and Denver, K & S Express which

operates between Norfolk and Chadron, Eppley Express which operates between Kearney and Omaha and Dashabout Shuttle which operates between Denver and Omaha via McCook and Hastings. K & S, Black Hills and Dashabout are subsidized by state and federal funds. Also, the Blue Rivers Aging Agency, which operates local services in southeast Nebraska is subsidized to extend their service to Lincoln and Omaha.

**GOAL:** Implement, as feasible, the intercity bus plan.

**Responsible entity:** Department of Roads.

Traditionally Nebraska has relied on the private sector to provide intercity bus passenger service. Deregulation of the bus industry allowed the abandonment of service on unprofitable routes. Nebraska has developed an intercity bus plan for a subsidized system. That plan calls for adequate intermodal connections and the expansion and coordination of local systems to provide intercity service.

**GOAL:** Retain current AMTRAK service by government and support groups forming a promotion coalition.

**Responsible entities:** Department of Roads and Pro-Rail Nebraska.

There were suggestions to expand AMTRAK and develop a Lincoln-Omaha light rail system. The City of Omaha has studied the feasibility of a light rail system.

In Nebraska, local and state government involvement with rail passenger service has generally been limited to position statements supporting retention or expansion of service.

As the federal government continually questions

the level of financial support of AMTRAK service, additional local and state effort may be necessary to retain Nebraska rail passenger service. The 1995 Rail Plan Update includes a review and discussion of rail passenger service in Nebraska, including AMTRAK.

**GOAL:** Develop a program to encourage ride sharing by commuters.

**Responsible entities:** Nebraska Energy Office, Local Urban Governments, and Department of Roads.

Traffic congestion is often the result of commuter travel. During the fuel crises of the 1970's, the shortage of fuel and sharply rising prices provided enough incentive for some to form car pools. Some employers provided vans for pooling employees. Strategically located park-and-ride facilities encouraged car pooling.

**GOAL:** Urban transit systems continue to review routing and transfer connections.

**Responsible entities:** Urban Transit Systems.

In urban areas, many passengers must make one or more transfers before reaching their final destination. Sometimes no affordable transportation is provided for the next leg of the trip, or a substantial wait is required for the next connection.

# ISSUE 8 RESEARCH AND DEVELOPMENT

This is an interesting issue because it entails a variety of concepts. Participants urged quicker use of research findings and changing technologies. We're also encouraged to apply non-transportation solutions, such as teleconferencing, telecommuting, working at home and transporting services rather than people. The study of economic and environmental impacts of alternate modes of transportation was discussed.

**GOAL:** Expedite implementation of successful research and share findings.

**Responsible entities:** Department of Roads, Department of Economic Development, University of Nebraska and Rural Development Commission.

**GOAL:** Maximize the use of telecommunications to reduce or eliminate communications type travel, such as meetings,

training or observation.

**Responsible entities:** Public Service Commission and University of Nebraska.

Nebraska is a leader in telecommunications. Educators are skilled at using this technology to reach students at a number of locations. Recently, a doctor in Omaha directed a surgical procedure which took place in a Central Nebraska hospital.

# ISSUE 9 ENHANCE TOURISM AND RECREATION

With one of the nation's principal and historic transportation corridors traversing Nebraska, tourism has become the State's third largest industry. Workshop participants felt that more should be done to identify and provide access to tourist and recreation sites. More emphasis on scenic byways, historic sites and hiking and biking trails was encouraged.

**GOAL:** Promote suitable development of tourism, historical, and recreational facilities, including directional signing and historical markers.

**Responsible entities:** Department of Economic Development, Game and Parks Commission and Department of Roads.

The Department of Roads and the Department of Economic Development are developing a Tourist Oriented Directional Signing (TODS) Program. This program will allow signs, similar to the LOGO signs which identify food, gas and

lodging services available to the traveling public. The cost of the program will be funded by the tourism industry.

**GOAL:** Identify and develop, where feasible, scenic byways, and biking and hiking trails that include provisions for scenic attractions, heritage tourism development and historic preservation enhancement.

**Responsible entities:** Department of Roads, Department of Economic Development, Game and Parks Commission, Historical Society, and Local Governments.

The Department of Roads in coordination with the State Historical Society, the Department of Economic Development, and the Legislature has contracted with a consultant to study the feasibility of a scenic byways system, and if feasible, how to implement it.

The proposal will include scenic and historic corridors, their development, promotion, and enhancement.

The Corps of Engineers has conducted a "Back to the River" study for a scenic system from Omaha to the north. The Omaha and Winnebago Tribes are interested in developing an interpretative center on this system.

**GOAL:** Participate in Nebraska Statewide Tourism Plan and development, including emphasis on heritage tourism development and relation to travel and transportation issues. **Responsible entities:** Department of Economic Development, State Historical Society, Department of Roads.

The Nebraska Task Force on Historic Preservation (May 1995) has identified that the development and promotion of historic places should be a leading element of the State's travel and tourism strategy.

**GOAL:** Improve the process for coordinating land-use and transportation to recognize and enhance older and historic neighborhoods, town centers and downtowns, archeological sites, rural and cultural landscapes, and other historic places and their environs.

**Responsible entities:** Department of Roads, State Historical Society, Local Government entities, Nebraska Lied Main Street Program.

### ISSUE 10 BETTER COORDINATION OF INTERMODAL FORMS OF TRANSPORTATION

Participants felt that all modes of transportation should be considered as options. Comments included considering all modes when planning and developing systems. Corps of Engineer decisions should consider impacts on barge transportation.

**GOAL:** Instill the practice of intermodal coordination and consideration by all transportation interests when planning and developing intermodal system enhancements.

**Responsible entities:** All transportation entities.

Most transportation systems in Nebraska have traditionally been planned and developed in coordination with other modes. Department of Aeronautics must consider current and future road plans to prevent conflicts. Department of Roads, counties and towns must consider railroad activities, as well as pedestrians and bicyclists when designing transportation facilities.

The Department of Roads, in coordination with other modes, is developing an intermodal management system.

The purpose is to have a systematic process of identifying key linkages between one or more modes of transportation, and where the performance of one mode will effect another.

### ISSUE 11 ENERGY EFFICIENCY IN ALL MODES

Workshop participants discussed the conversion to alternate fuel usage and the use of more energy efficient vehicles.

**GOAL:** Promote programs to increase the availability and financing of alternate fuels and vehicles designed to use them.

Responsible entity: Nebraska Energy Office.

Alternate fuels create less air pollution, reduce reliance on imported fuel and provide a market for agriculture products. Alternate fuels such as compressed natural gas, electricity, ethanol, propane, methanol and oxygenated fuels can be used for transportation. A major drawback, however, is alternate fuels and fueling sites are not widely available.

The need for improved energy efficiency becomes more important as fuel consumption for transportation continues to increase. For example, motor fuel consumption in Nebraska (gasoline, special fuel and gasohol) increased by 11 percent between 1984 and 1993. When converted to British Thermal Units (BTU), this amounted to 24 percent of all energy consumption statewide in 1992. The Nebraska Energy Office has been instrumental in promoting the use of alternate fuels for transportation. Technical information and low-cost financing programs are readily

available.

**GOAL:** Provide proper signage for the various types and availability of refueling sites for alternate fuels such as natural gas, propane ethanol and others.

**Responsible entities:** Department of Roads, Nebraska Energy Office and Local Governmental Entities

As the statewide infrastructure for alternate fuels continually develops, it will become increasingly important to provide adequate signage regarding the types and location of refueling sites.

**GOAL:** Improve fuel efficient driver practices through education.

**Responsibility entity:** Nebraska Energy Office.

A major factor in fuel consumption is operator practices. Proper vehicle selection, maintenance and driving techniques can improve overall efficiency, save energy and save operating dollars.

# ISSUE 12 BETTER COORDINATION BETWEEN LAND-USE AND TRANSPORTATION

This issue concerns the traffic problems created when development takes place which is not compatible with the traffic capacity of an adjacent transportation system. Greater control of land-use was suggested. Developers should be required to participate in traffic congestion mitigation. A related concern was the impact of bypasses on downtown business and mitigation of economic and/or social impact of transportation projects on the older center of communities,

historic districts or neighborhoods.

**GOAL:** Improve the process for the coordination of future land-use development when planning long-range transportation improvements.

**Responsible entities:** Department of Roads, Department of Economic Development and Local Government entities.

Currently, the one authority that the Department of Roads has regarding land-use development is under corridor protection laws. If the Department plans to construct a facility at some future time in some corridor, they can file for corridor protection, and then have the right to review and act on any proposed development.

On some highway locations, the Department controls the access to highways and developer must request that access. In these situations,

the developer must pay for any necessary highway alterations.

Land-use regulation is under the authority of local jurisdictions, not the state. However, state highway improvements can and do impact, or generate, adjacent development.

**GOAL:** Develop a process for effective cooperation between developers and transportation agencies.

**Responsible entities:** Department of Economic Development, Department of Roads and Local Government.

Development projects create unique demands for transportation support. There is a need for a better process for coordinating development projects with transportation systems.

### ISSUE 13 INTERAGENCY COORDINATION

Interagency coordination refers to federal, state, local and tribal governmental agencies. When discussing coordination, the participants often referred to sharing, not just working together and sharing ideas, but sharing costs, facilities and financial concepts. A greater understanding of the responsibilities and requirements of various agencies was mentioned.

**GOAL:** Resolve transportation issues through increased coordination between agencies.

**Responsible entities:** All transportation entities.

Substantial agency coordination has taken place for some time. Several multi-agency transportation advisory committees are active, and the Department of Roads and the State Patrol share facilities. The participants felt that better and less expensive service can result from more coordination and sharing.

The state has initiated a "Transportation Efficiency Project" to examine state policy and organization relating to transportation issues, in order to enhance economic development and customer service. Two task forces have been created to initiate the project. The Transportation Industry Task Force consists of representatives of the transportation industry

and the Transportation Interagency Efficiency Task Force consists of state agencies having a transportation role.

# ISSUE 14 RECOGNIZE AND PRESERVE HISTORIC, ENVIRONMENTAL, AND SCENIC RESOURCES

There was concern about the protection and enhancement of historical sites and the environment through construction and maintenance practices. It was also recognized that historic preservation and environmental conservation have important interrelationships with transportation planning/policy. Intelligent chemical usage and the design of liveable roadways was promoted.

**GOAL:** Minimize wetland encroachment during transportation facility design and construction.

**Responsible entities:** Department of Environmental Quality and all transportation system developers.

Environmental concerns related to transportation involve preservation of wetlands, trees and grasslands, air quality and restricted chemical usage. Federal law regulates the management of wetlands. The state, counties, municipalities, tribes, and trails developers are all covered by the same federal regulations. The Nebraska Department of Roads has designated organizational units to address wetlands preservation and for landscape development.

The Department strives to avoid wetlands when designing projects, but sometimes it is necessary to encroach on wetlands. Wetlands are being created in selected locations to off-set any losses.

**GOAL:** Minimize disruption to the surrounding environment by saving trees and other desirable flora consistent with good engineering judgement, with special consideration for healthy trees and plants.

**Responsible entities:** All transportation systems developers.

The Department of Roads has a landscaping policy which addresses the need for safe recovery areas for out-of-control vehicles, the conservation and enhancement of the natural environment and the use of living snow fences and other plantings for erosion control.

**GOAL:** Create environmentally friendly roadsides.

**Responsible entities:** Department of Roads, Counties, and Municipalities.

The Department in conjunction with the University of Nebraska and the Game and Parks Commission has developed an environmentally friendly roadside program. Native grasses and wildflowers which can exist in the transportation environs, plus a limited mowing practice provide a pleasant view. Habitat for birds and small animals is also the result.

**GOAL:** Optimize the preservation and mitigation of historic and archeological sites under Nebraska Highway Survey Legislation and the National Historic Preservation Act.

**Responsible entities:** Nebraska Historical

Society and Department of Roads.

**GOAL:** Maximize the use of the Transportation Enhancement Program for the preservation and enhancement of historic, cultural, and archeological properties and their environs.

**Responsible entities:** Nebraska Historical Society and Department of Roads.

Historic preservation has important interrelationships with transportation planning in areas of community development and planning, protection and enhancement of the environment, and transportation policy. The Nebraska Task Force on Historic Preservation (May 1995) identified recommendations for historic preservation, archeology, community development, tourism and land-use planning.

The Department of Roads for 34 years has

ISSUE 15 TRIBAL ISSUES contracted with the University of Nebraska and the State Historical Society to ensure the preservation of sites that are found as a result of construction. The current ISTEA Enhancement Program provides for a range of historic preservation activities. The Department has a contract for a historic bridge program and participates in the Nebraska Historical Marker Program.

**GOAL:** Support the Nebraska Lied Main Street Program.

Responsible entities: Department of Roads, Department of Economic Development, State Historical Society and UNL College of Architecture.

The newly created Nebraska Lied Main Street Program is aimed at revitalizing the older historic town centers of Nebraska Communities. Transportation enhancement funds participate in this program.

This issue was derived from meetings and other communications with tribal officials and representatives of the Bureau of Indian Affairs. The primary concerns are employment and transportation access.

Five Indian Reservations are located in Nebraska, The Iowa, the Omaha, the Sac and Fox, the Santee, and the Winnebago. A sixth tribe, the Ponca, is a recognized tribe, but at this time, has no defined reservation.

**GOAL:** Provide opportunity for the employment of tribal forces and the training of tribal personnel in the transportation industry.

**Responsible entities:** Department of Roads, Tribes, and Counties.

The Department of Roads is involved in several

employment ventures with the Omaha Tribe. Tribal crews perform right-of-way maintenance on highways traversing their reservation. The Department is considering involvement in a cooperative training program to familiarize tribal personnel with highway construction and maintenance. Other tribes have expressed interest in these programs.

**Goal:** Include coordination with Tribes and the Bureau of Indian Affairs when developing transportation plans and programs.

**Responsible entities:** Department of Roads and Local Governments.

Tribes have requested better access to variety of locations. Roads to some housing developments are in poor condition and are not signed. One request was to pave a road to provide better access to a state college. One tribe described existing and extensive planned housing development in the vicinity of state highways.

Concern was expressed for adequate pedestrian safety and the allowance for access roads to the developments. Most of these roads are under local jurisdiction. One tribe is interested in public transportation.

It has been suggested that our state, county and municipal planning and programming processes need to formalize a method of coordinating with tribes and the Bureau of Indian Affairs on road programs.

**GOAL:** Continue to consider tribal trails for Enhancement Funding.

**Responsible entities:** Department of Roads and Enhancement Committee.

Several suggestions for trails development with enhancement funds were made. Some of the trails were related to tourist attractions. At least one tribal trail has been approved.

#### **CONCLUSIONS**

Two conclusions are to be drawn from this plan.

- A The role performed by and the needs of the transportation system are considerable. The ever increasing demands for personal travel and goods movement will require substantial private and public support for transportation over the next twenty years.
- B The urgent need exists to coordinate the existing and future transportation system with all other transportation modes into a workable plan.

The foundation to a successful plan for a balanced transportation system is to define the problems to be solved, to determine the public responsibility, and to formulate an overall plan in which the combination of private and public investment can be made.

Much remains to be done in defining the role which the various entities should play in the development of the overall multi-modal transportation network.

The Nebraska Department of Roads wishes to thank all of you for your contribution in the development of the plan. The plan, which is 230 pages long, contains nine sections and an appendix. If you have questions, comments or are interested in obtaining a copy of the plan, or of this summary please feel free to do so. The visually impaired or handicapped may, upon request, obtain copies of the plan, or sections of it, either on cassette tape or in braille.

Requests and comments should be addressed to:

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