

SECTION 6

TRANSPORTATION



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INTRODUCTION

The availability of a convenient and efficient transportation system is essential to the continued economic and physical development of Frontier County. An adequate transportation system is required to transport goods and services to, and from the major travel routes and market centers outside of the County, as well as provide for the circulation needs within the County. Systems are defined as (1) road and street systems in the County and communities and (2) pedestrian routes (sidewalks) and (3) safety regulations (stop signs, speeds, etc.). The overall purpose of the circulation plan is to provide the necessary guidelines for the safe movement of people and vehicles throughout the planning area.

The primary sources of information utilized to develop the Circulation Plan were (1) county and community "One and Six Year Plan(s)," (2) State of Nebraska, Department of Roads "One and Five Year Plans," and (3) a field survey by the Consultant.

EXISTING COUNTY ROAD NETWORK

Illustration 6.1 depicts the circulation system in Frontier County. The transportation network in Frontier County is comprised of U.S. Highway 83 and State Highways 18 and 23 and several county roads. The highway network within Frontier County links the County and its communities with many cities throughout the State.

Street and Road Classification

Nebraska Highway Law identifies the functional classification of both rural and municipal roads. Chapter 39, Article 21.03 lists rural highway classification as:

1. Interstate: federally-designed national system of Interstate and defense highways;

2. Expressway: second in importance to Interstate. Consist of a group of highways following major traffic desires in Nebraska and ultimately should be developed to multiple divided highway standards;
3. Major Arterial: Consists of the balance of routes which serve major statewide interests for highway transportation in Nebraska. Characterized by high speed, relatively long distances, travel patterns;
4. Other Arterial: Consists of a group of highways of less importance as through-travel routes. Serve places of smaller population and smaller recreation areas not served by the higher systems;
5. Collector: Consists of a group of highways which pick up traffic from the local or land-service roads and transport community centers or to the arterial system. These are the main school bus routes, mail routes, and farm-to-market routes;
6. Local: Consists of all remaining rural roads, except maintenance roads, generally described as land-access roads providing service to adjacent land and dwellings; and
7. Bridges: Structures crossing a stream three hundred feet or more in width or channels of such a stream having a combined width of three hundred feet or more.

Traffic Volume

The Nebraska Department of Roads monitors traffic volume in Frontier County on state and federal highways. This tabulation process is performed to identify the appropriateness of the existing road classification and engineering standards. **Table 6.1** identifies the average daily traffic counts for state and federal transportation routes within the County.

Traffic counts were taken on Highways 83, 23 and 18, for 1993, 1995 and 1997. Traffic counts identified total vehicles and heavy commercial vehicles. Traffic counts increased from 1993 to 1997 at all points on Nebraska Highway 23 and 18. Highway 83 traffic counts increased at two of the three points between 1993 and 1997.

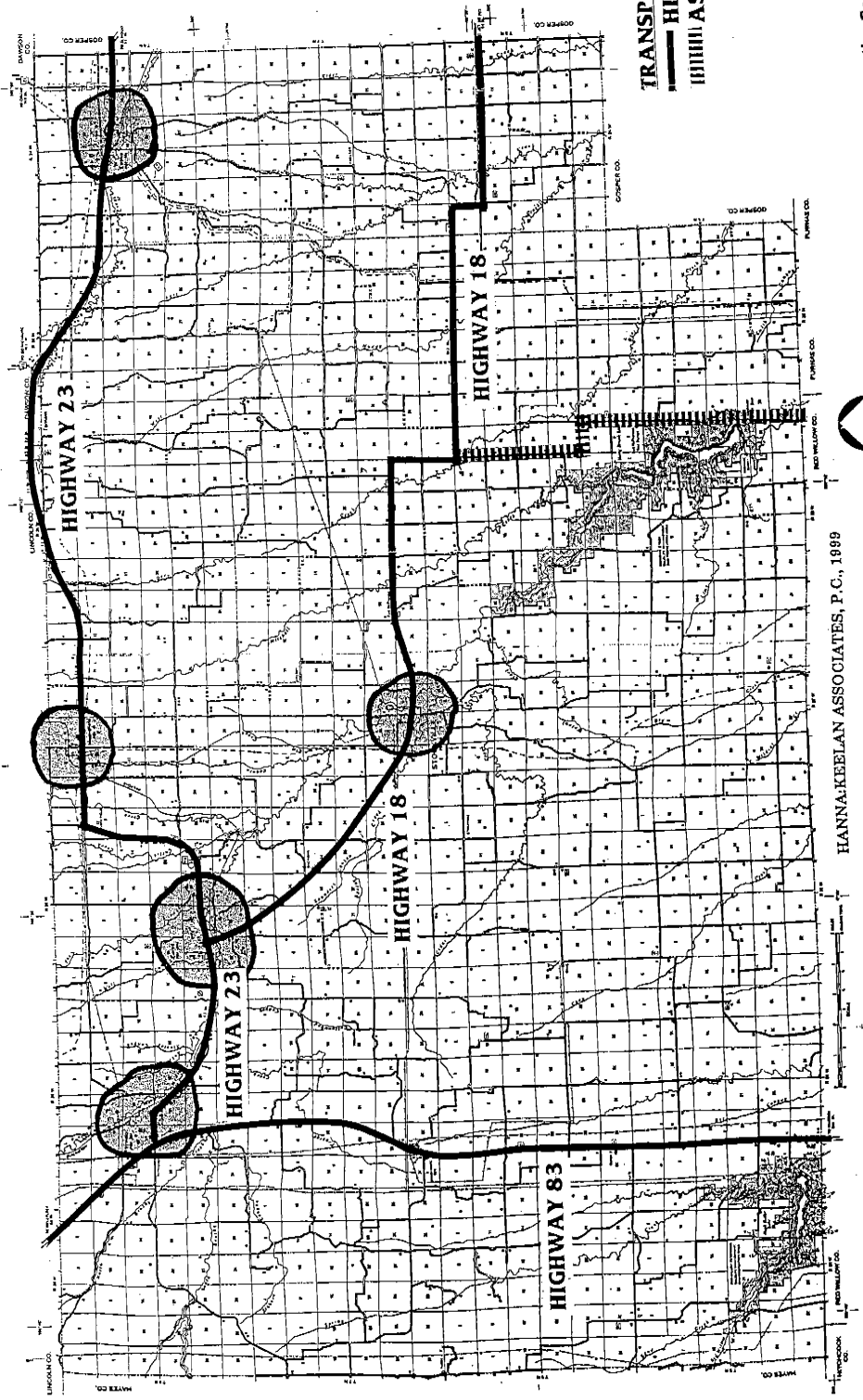
TABLE 6.1
TRAFFIC VOLUME-AVERAGE DAILY TRAFFIC COUNTS
FRONTIER COUNTY, NEBRASKA
1999

	<u>1993</u>	<u>1995</u>	<u>1997</u>
<u>Highway 23</u>			
At Maywood, West	1,220/170	1,300/190	1,350/195
At Maywood, East	1,190/165	1,250/170	1,215/170
One mile east of Curtis	830/135	890/140	930/145
One mile west of Moorefield	540/100	NA	NA
At Moorefield, East		525/95	610/110
<u>Highway 18</u>			
One mile south of Curtis	380/50	370/40	425/45
One mile east of Stockville	190/20	220/25	235/25
One mile east of Stockville	160/20	180/20	165/20
Six miles east of Stockville	90/15	90/15	135/20
Eight miles east of Stockville	80/10	80/10	90/10
One mile west of east county line	60/10	50/10	65/10
<u>U.S. Highway 83</u>			
Two miles south of Maywood	1,210/90	1,430/220	1,405/210
Seven miles north of southern county line	1,170/180	1,300/200	1,185/180
Three miles north of southern county line	1,215/180	1,350/200	1,215/180

Source: Nebraska Department of Roads, 1999



**TRANSPORTATION MAP
COUNTY LIMITS
FRONTIER COUNTY, NEBRASKA**



TRANSPORTATION LEGEND
—— HIGHWAY
||||| ASPHALT ROAD

ILLUSTRATION 6.1

HANNA-KEELAN ASSOCIATES, P. C., 1989



Frontier County Comprehensive Plan 1999-2009
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TRANSPORTATION PLAN

1999-2004 and Beyond Plan

There are ten projects identified in the State's 1999-2004 and Beyond Plan for state roads in Frontier County. One project is for fiscal year 1999, two projects are identified in the five year plan and seven projects are identified in the 2005 and Beyond Plan.

Projects for fiscal year 1999 are:

<u>Highway</u>	<u>Location</u>	<u>Length (MI)</u>	<u>Improvement</u>	<u>Estimated Cost</u>
Nebraska - 23	Maywood-Curtis	6.1	Milling, Resurfacing	\$610,000
Nebraska - 23	Moorefield West	0.0	Bridge	\$1,098,000
U.S. - 83	Lincoln Co. Line South	15.4	Armor Coat	\$130,000

Projects identified in the 2005 and beyond are:

<u>Highway</u>	<u>Location</u>	<u>Length (MI)</u>	<u>Improvement</u>	<u>Estimated Cost</u>
Nebraska - 18	Curtis - Stockville	10.2	Resurface, Bridge Widen	\$2,232,000
Nebraska - 18	Orafino East	0.0	Gr, Str., Gravel Surf.	\$2,669,000
Nebraska - 18	Orafino East	19.4	Surf.	\$3,218,000
Nebraska - 18	Orafino East	0.0	Gr, Str., Gravel Surf.	\$1,358,000
Nebraska - 18	US 283 - West	0.0	Gr, Str., Gravel Surf.	\$3,239,000
Nebraska - 23	Maywood - Curtis	7.6	Resurf., Br. Widen	\$1,944,000
Nebraska - 23	Moorefield East & West	5.9	Resurf.	\$1,198,000

**FUTURE COUNTY
CIRCULATION
SYSTEM**

The Frontier County One and Six Year Road Plan identifies eight projects in the One-Year Plan and 16 projects in the Six-Year Plan. The eight projects in the One-Year Plan also carry over to the Six-Year Plan.

One Year Plan

<u>Project #</u>	<u>Length</u>	<u>Improvement</u>	<u>Estimated Cost</u>
C-32 (111)	0.3	Grading, aggregate, right-of-way	\$6,000
C-32 (82)	0.1	New bridge, approach grading and gravel	\$223,000
C-32 (105A)	0.3	New bridge, grading, aggregate	\$316,000
C-32 (105B)	0.2	Grading, aggregate, right-of-way	\$10,000
C-32 (110A)	0.2	New bridge, grading, aggregate, fencing	\$251,500
C-32 (100B)	0.3	Grading, aggregate, drainage structures, right-of-way, fencing	\$69,000
C-32 (100B)	1.2	Grading, aggregate, drainage structures, right-of-way	\$70,000
C-32 (135)	2.2	Grading, aggregate, drainage structures, right-of-way, fencing	\$66,000

Six Year Plan

C-32 (109-III)	0.2	New bridge, grading, aggregate, right-of-way, fencing	\$200,000
C-32 (100A)	0.1	Box culvert, culvert, grading, aggregate	\$100,000
C-32 (100B-II)	1.5	Grading, aggregate, drainage structures, right-of-way	\$50,000
C-32 (17)	0.3	New bridge, grading, aggregate, right-of-way, fencing	\$215,200
C-32 (18)	0.2	New bridge, grading, aggregate, right-of-way, fencing	\$179,600
C-32 (20)	0.1	New bridge, grading, aggregate, right-of-way	\$228,800
C-32 (19)	0.2	New bridge, grading, aggregate, right-of-way	\$191,400
C-32 (22)	0.1	New bridge, grading, aggregate, right-of-way	\$124,300

TRANSPORTATION PLAN
COUNTY LIMITS
FRONTIER COUNTY, NEBRASKA

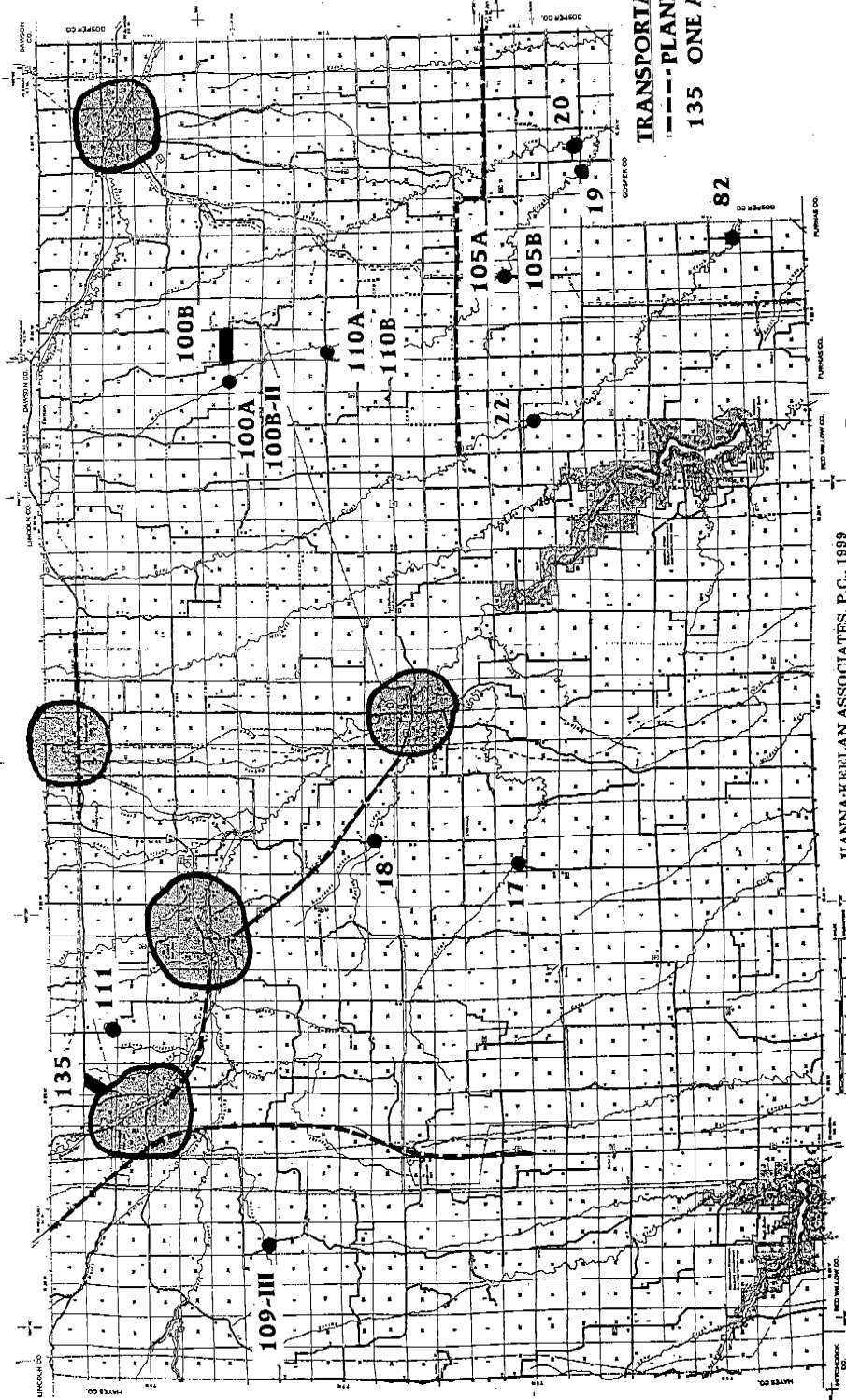


ILLUSTRATION 6.2

HANNA-KEELAN ASSOCIATES, P.C., 1999

Frontier County Comprehensive Plan 1999-2009
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Trails

A comprehensive trails plan for the State of Nebraska identifies one project for Frontier County. The project is for a potential joint **trail-with-rail** development, using crossings of parallel Highway 23 when possible. The trail will begin at Wellfleet and end at Elwood.

Air Service

Frontier County has one airport, located 1.5 miles east of Curtis. The Curtis Airport Authority owns and maintains the airport. The airport has one paved and lighted runway. The runway is 3,400 feet in length. The facility has five hangers and 12 tie downs. The nearest commercial airport is located in North Platte.

Rail Service

Frontier County is served by the Rail Net railroad. The rail lines are located in the northern part of the County. A rail line runs from Eustis to Farnam and another line is located adjacent Highway 23.

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Air Service

Frontier County has one airport, located 1.5 miles east of Curtis. The Curtis Airport Authority owns and maintains the airport. The airport has one paved and lighted runway. The runway is 3,400 feet in length. The facility has five hangers and 12 tie downs. The nearest commercial airport is located in North Platte.

Rail Service

Frontier County is served by the Burlington and Santa Fe railroad. The rail lines are located in the northern part of the County. A rail line runs from Eustis to Farnam and another line is located adjacent Highway 23.