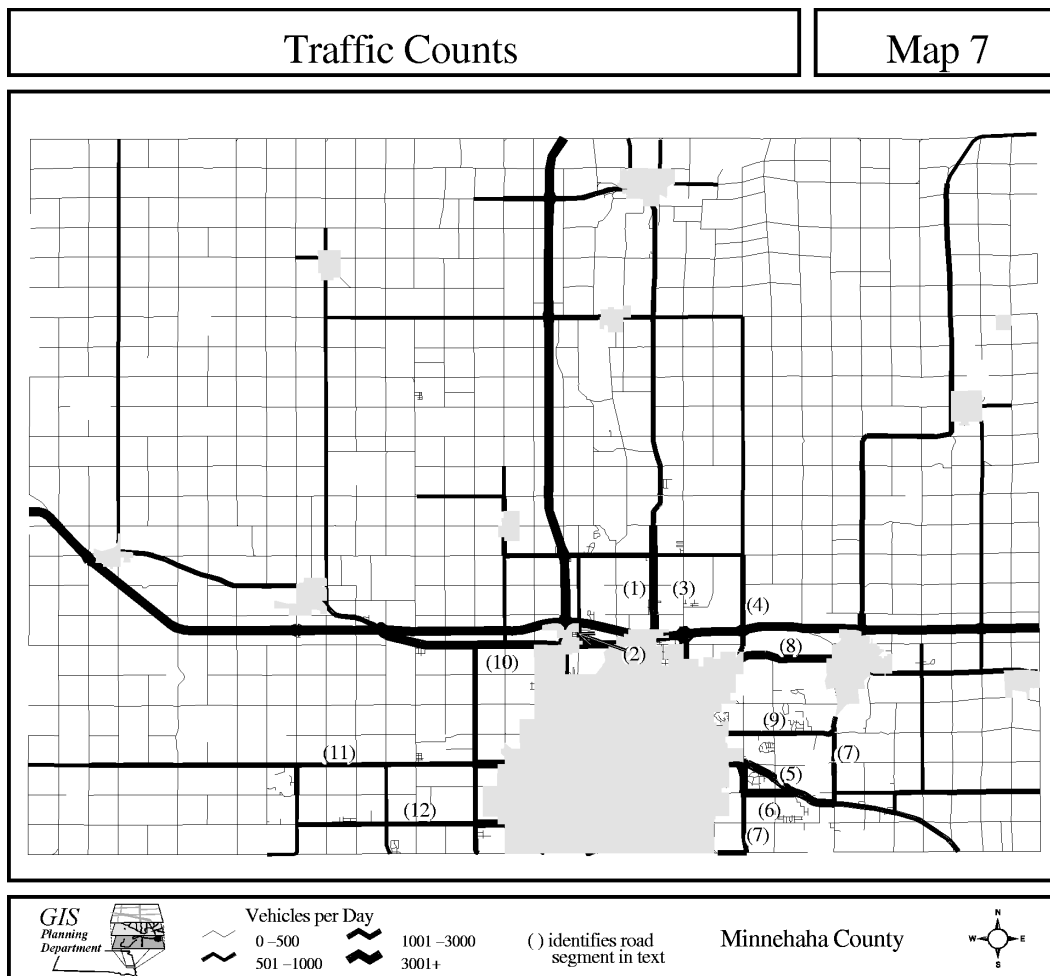


Traffic Patterns

Traffic counts conducted by the State DOT and the County Highway Department provide useful information on existing and future traffic patterns. This data will also be utilized to determine the most appropriate locations for future commercial and industrial development.

Interstate 90 crosses the lower one-third of the county and provides exits at seven locations in addition to interchanges at Interstates 29 and 229. The Cliff Avenue interchange is the only exit located within the city of Sioux Falls. Traffic volume on the rural portion of I-90 varies from 9,800 to 11,200 vehicles daily. I-29 bisects the county from north to south and provides three rural and five urban exits. Daily traffic volumes range from 14,200 just north of the I-90 interchange to 10,700 near the Dell Rapids



exit. Commercial and industrial development has occurred at each of the rural interchanges except Valley Springs.

Traffic patterns are strongly influenced by the population base and economic activity of Sioux Falls. Traffic counts are shown on Map 7 and the major road segments are discussed in the following sections.

- North - State Highway 115 (Cliff Avenue)⁽¹⁾ provides the primary access into the northern part of Sioux Falls. Over 8,000 vehicles per day travel on the highway segment just north of the I-90 interchange. The highway also carries 2,600 vehicles near the Baltic corner and over 2,400 vehicles between Dell Rapids and I-29. Alternative access from the north is provided by Kiwanis Avenue (Co. Hwy. 131)⁽²⁾ which carries nearly 1,100 vehicles near 60th Street N.

476th Avenue⁽³⁾, presently a gravel township road, connects to I-229 at the I-90 interchange northeast of Sioux Falls and has emerged as an important access route into the metropolitan area. Traffic uses a 2½ mile segment of 476th Avenue to avoid the increased congestion on Cliff Avenue, creating a strain on the gravel road. This unique interchange does not permit southbound vehicles to access I-90 from 476th Avenue, but once traffic enters onto I-229 the city's major industrial parks are accessible from the Benson Road interchange along with southern destinations in the metropolitan area.

County Highway 121⁽⁴⁾ connects to Rice Street in northeastern Sioux Falls and carries over 1,400 vehicles just north of the I-90 interchange. Traffic volume is influenced by the EROS Data Center located nine miles north of the interstate, an employment center for 400 workers.

- East - Highway 42⁽⁵⁾ serves southeastern Minnehaha County where traffic counts are impacted by the concentration of rural subdivisions east of Sioux Falls and the rapidly growing city of Brandon. The highway is also a major route for commuters and shoppers traveling to Sioux Falls from northwest Iowa. Over 2,700 vehicles pass through Rowena daily, increasing to 16,000 vehicles near Sioux Falls. East 26th Street (Co. Hwy. 146)⁽⁶⁾ carries nearly 3,000 vehicles at the intersection with Highway 42, and the count increases to 5,000 west of Powder House Road.

Traffic patterns are also influenced by Highway 11 (Powder House Road)⁽⁷⁾ which enters the county from the south, joining Highway 42 east for three miles, before heading north to Brandon. Counts range from 2,200 to 3,700 near 26th Street and 1,500 to 2,000 vehicles between Brandon and Highway 42.

Rice Street (Co. Hwy. 140)⁽⁸⁾ links Brandon and Sioux Falls, carrying 4,000 vehicles daily. Madison Street (Co. Hwy. 142)⁽⁹⁾ is also an important link between the two cities. Madison Street was originally a state highway but reverted to the county following reconstruction by the State DOT. Although current counts are not available, Brandon and several large rural subdivisions in the area contribute to significant travel on Madison Street.

- West - State Highway 38⁽¹⁰⁾ moves traffic into the northern industrial parks and to the airport, carrying 3,500 vehicles at the I-29 interchange. Highway 42⁽¹¹⁾ carries in excess of 2,500 vehicles on the rural portion, increasing to over 5,100 on the western edge of Sioux Falls. County Highway 148⁽¹²⁾, an extension of 41st Street in Sioux Falls, carries nearly 4,200 vehicles at the Ellis Road intersection.

Traffic counts provide a useful and objective way of determining appropriate locations for future commercial and industrial development. Traffic volume is generally an important determinant in the location of commercial uses. The county should encourage the siting of these developments at high traffic intersections to form a compact or nodal land use pattern. Since higher speed limits are associated with state and county highways, commercial uses should ideally be directed to intersections having four-way stops so dangerous turning movements can be avoided. Likewise, strip type development should be discouraged so that high speed traffic is not impeded by numerous vehicles entering and leaving the

roadways. Commercial development should also provide a convenience to highway traffic rather than being destination oriented. Destination uses promote more traffic that could potentially exceed roadway design capacity.

Agriculturally related industrial uses should also be accommodated in much the same manner as commercial uses. Although it may not be reasonable to concentrate all such development at major intersections, sites should at a minimum have access to a hard surfaced road. Consideration must also be given to the impact of additional traffic on existing roadways.