

Section III. Description of the Sioux Falls Study Area

The population of Sioux Falls has grown steadily since its incorporation as a village in 1876. Rapid growth transformed the city during the “Dakota Boom” decade of the 1880s, when the population mushroomed from 2,100 to more than 10,100 by 1890. Population growth continued throughout the following decades and made Sioux Falls a regional urban center.
Sioux Falls 2015 II-1

Sioux Falls is a regional hub for transportation, health care, employment, retail, and services. The city is located along the banks of the Big Sioux River, at the junction of I-29 and I-90, and due to its geographic placement within the United States, the city benefits from rail and air improvements [Map 2—national vicinity map]. The following information in this section was gathered from previous Long-Range Plans, Comprehensive Development Plans, and Census Bureau documents.

The Long-Range Plan uses the four-step travel demand process: trip generation, trip distribution, mode choice, and trip assignment in both urban and rural areas to complete the travel forecasting process. The data that is used in forecasting future transportation needs consists of the study area, population projections, number of households, land use projections, employment projections, retail locations, number of passenger vehicles, and Traffic Analysis Zones. The population projections and land use forecasts are not considered as absolute indicators of what the future will bring. Forecasts are influenced by certain factors such as the economy, technological discoveries, and community values. However, the following projections are based on our community’s history.

A. Geographic Boundaries

United States Code: Title 23 states that the metropolitan planning study area shall encompass, at a minimum, the existing urbanized area and the contiguous area to be urbanized within the 20-year forecast. The original Metropolitan Transportation Planning Area Boundaries contained eight townships (six in Minnehaha County and two in Lincoln County).

The geographic boundaries for transportation planning in the Sioux Falls area were enlarged prior to the 1994 Long-Range update. The current boundaries contain 20 townships—14 in Minnehaha County: Benton, Brandon, Dell Rapids, Edison, Hartford, Mapleton, Palisade, Red Rocks, Sioux Falls, Split Rock, Sverdrup, Valley Springs, Wall Lake, Wayne; and 6 in Lincoln County: Canton, Dayton, Delapre, La Valley, Perry, and Springdale [Map 1].

Due to the size of Sioux Falls within the study area—population, square miles, percentage of overall transportation system—the city of Sioux Falls and its three-mile platting jurisdiction receives the primary planning emphasis within this document.

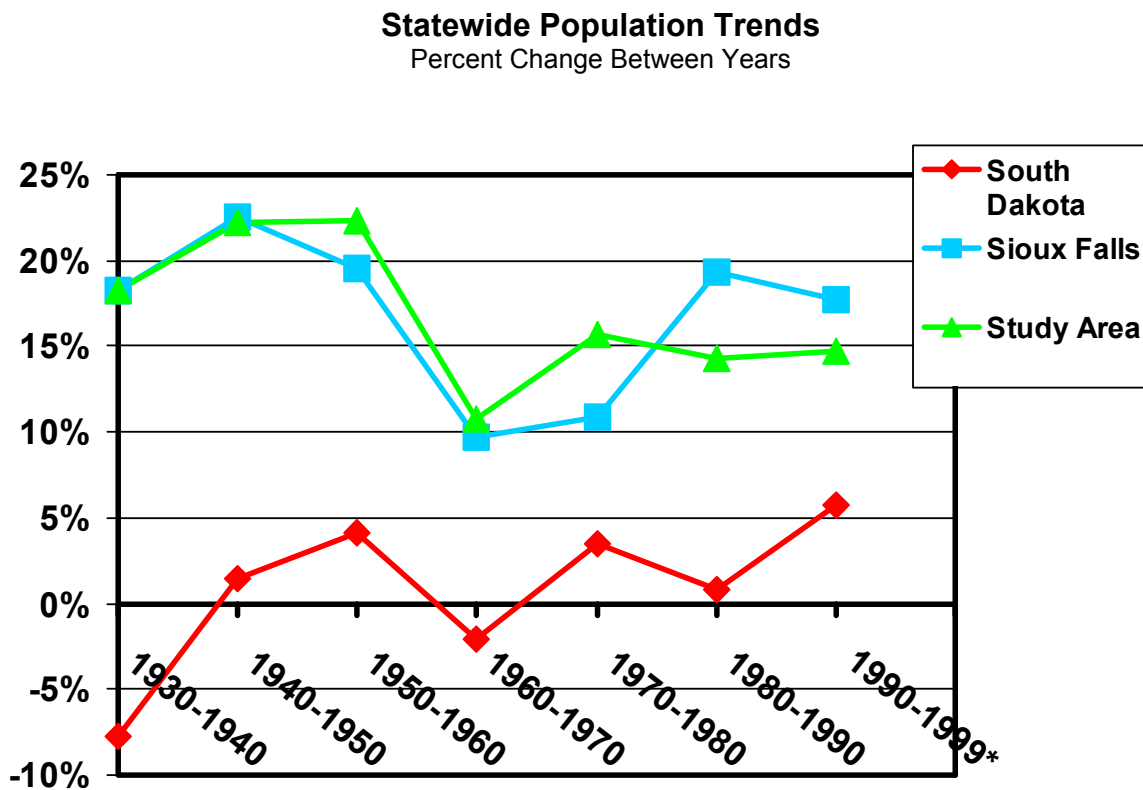
See Map 2 – US with states, major cities, Sioux Falls

B. Population

The city of Sioux Falls remains the largest city in South Dakota with a 1990 population of 100,836. Rapid City is the next largest city in the state with 54,523. Sioux Falls' estimated 1999 population is 124,000. Approximately 87 percent of the people in the study area live within the city limits of Sioux Falls; 97 percent live in Minnehaha County.

Population trends between 1930 and 1999 projections for South Dakota, the study area, and the city of Sioux Falls have consistently paralleled each other. At the same time, the average annual growth rate in South Dakota is .08 percent, while Sioux Falls and the study area are at 1.7 percent [Chart 1].

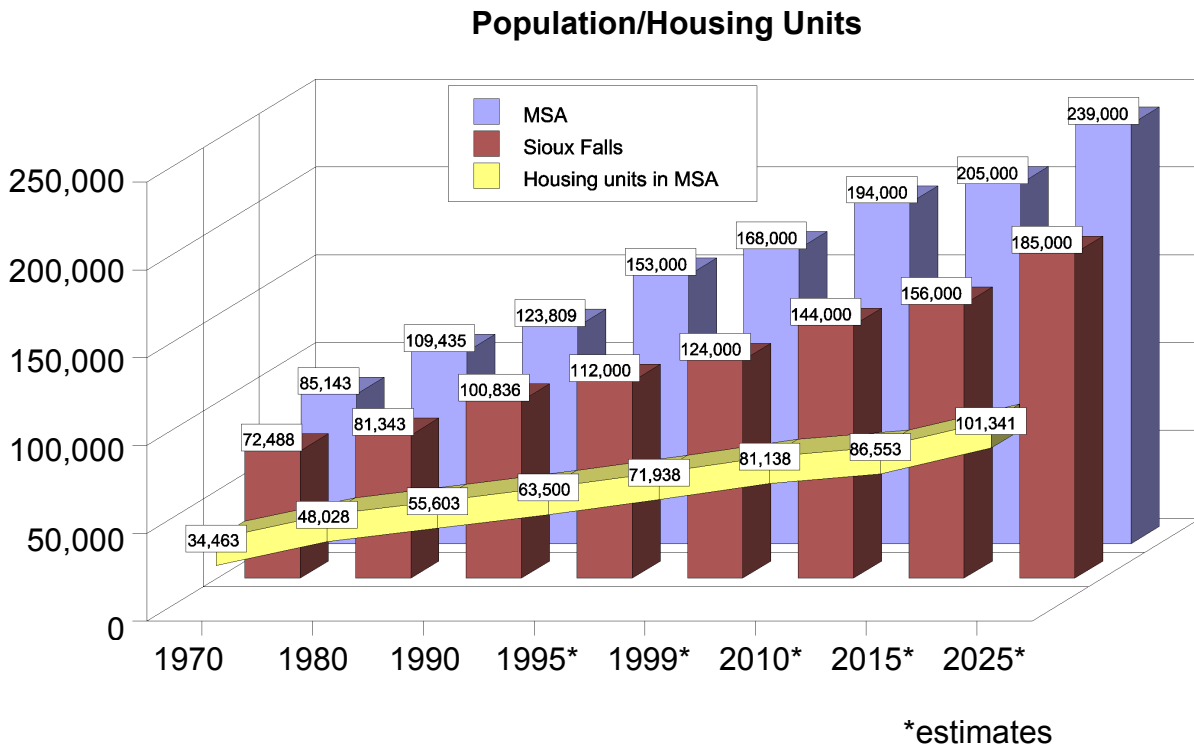
Chart 1



Census figures have shown that both the elderly and disabled populations are growing faster than the general population. Therefore, their needs will need to receive more consideration in future transportation proposals. The biggest change will occur when the “Baby Boom” generation starts to reach 65 years of age around the year 2010.

Growth is a characteristic of a dynamic, healthy community, and from that standpoint, population growth is the major indicator of a strong community. Sioux Falls' population has been projected to grow at a conservative 1.8 percent per year.

Chart 2



C. Households

The number of households, densities, and locations are the key elements in forecasting transportation needs. Based on 2.32 people per household within the Sioux Falls 2025 Growth Area, future land use projections show a need for approximately 80,000 dwelling units. In 1999, there were 52,272 dwelling units within the platting jurisdiction boundaries. As mentioned earlier, housing densities in newer subdivisions will generally range from 2.5 to 3 units per acre. Therefore, the growth area for residential land may consist of 5,481 additional acres (using the 50 percent multiplier). Future residential development will be in four major locations; the two largest, by land volume, are in the east and northwest areas of Sioux Falls.

D. Growth Plan

People generally drive to and from the locations where they live, work, shop, and receive services. Transportation planning tries to address these trips through a process of forecasting the trips produced (from land uses) and the trips attracted (to land uses). These trips are then assigned to the surrounding roadways. Therefore, land uses directly impact and are impacted by the transportation system that is designed.

A review of the 1995 land use plan for Sioux Falls shows a well-planned community with a land use inventory of eight categories and 56 square miles. The two largest uses of land are single-family residential developments at 7,900 acres and transportation at 6,900 acres. As a result of abundant developable land in the Sioux Falls area, residential uses have developed at a relatively low density.

As the study area grows in population, households, and employment, the community needs to plan for the accompanying land, services, and infrastructure. The government entities within the MPO have been working together for over 20 years to manage growth, scattered development, and limit “urban sprawl.” This managed growth creates the most efficient use of our limited resources.

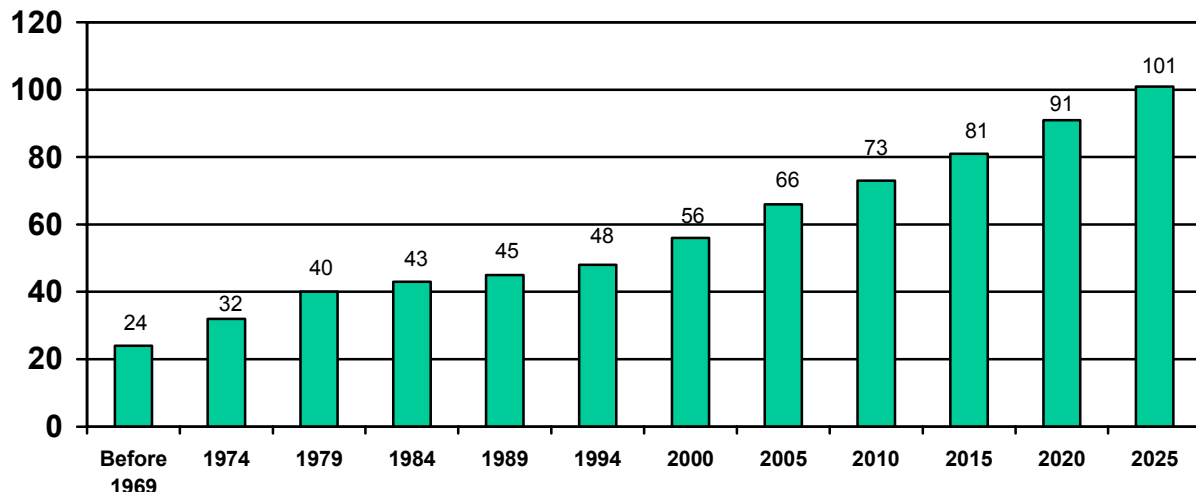
The 2025 Growth Area shows a need for an additional 20 square miles of land from the Sioux Falls 2015 Growth Area. The 20 square miles will be added in a contiguous manner to the outside of the 2015 Growth Area [Map 3]. A Regional Transportation Study was completed in August 1995 in order to determine the best roadway system to serve these new areas. It stated that an arterial corridor within the proposed growth areas would best serve the needs of the entire region. Therefore, as the MPO continues to analyze the concept of a regional arterial corridor, transportation planning will rely on the direction set forth in Sioux Falls 2015: *“In new development areas, land use changes of agricultural lands should be approved only as demand and the orderly extension of services would warrant.”*

Sioux Falls 2015 IV-1

Chart 3

City of Sioux Falls Growth Area

(in square miles)



See Map 3 2025 Growth Plan

Major retail areas consist of downtown Sioux Falls, Empire and Empire East Malls, Western Mall, and Meadows on the River. The majority of these developments are located in the southwest portion of the city. Smaller commercial areas are concentrated along specific arterial streets, such as Minnesota Avenue, East 10th Street, and West 12th Street. The public has requested that additional commercial nodes be developed, outside of the previously stated concentrated areas, to serve these new growth areas. This type of development pattern was spelled out in detail within Sioux Falls 2015 and will be addressed in later sections.

The industrial areas are concentrated on the north central portion of the city and the northern fringe of downtown. These land uses take advantage of the existing transportation system: I-29, I-229, I-90, Joe Foss Field, and Burlington Northern Santa Fe rail lines.

Sioux Falls began its life as a town at a location that continues to be the core of the city—downtown. With the river and roadway grid pattern creating the spine for all future development, the city has continued to expand outward from this core. Downtown gives Sioux Falls its identification and its sense of community. It remains the region's employment center, and the commercial district continues to thrive. The cultural center of the city is also located downtown, which helps to sustain a population of citizens that can live, work, and play without the need for a personal vehicle.

When reviewing land use and transportation, there are two major traffic generators in Sioux Falls that receive significant attention due to their impacts on the system: retail shopping and employment. "The Empire [Mall] estimates that 14 million shoppers visit the center each year to experience what many consider to be the best shopping between Denver and Minneapolis" (Sioux Falls Chamber of Commerce). Employment is discussed in the next section.

E. Employment

Employment has been projected to increase through population increases and job expansion. The Sioux Falls area growth rate will be slightly higher than the national rate based on projections made by U.S. Department of Labor. "Continued migration within the state to the metropolitan areas is expected and the state's low tax rates and high work ethic will continue to attract new businesses to the urban areas" (*State Intermodal Long-Range Plan*).

The SD Department of Labor estimated that the Sioux Falls MSA has 114,800 nonfarm and salaried workers in June 2000 (Labor Management Information Center). The majority of this employment is within the city of Sioux Falls, but the Market Research survey results state that at least 33 percent of these workers come from outside Sioux Falls. With 33,000 people a day (260 days a year) traveling into Sioux Falls, that's 8.5 million visits a year.

The Sioux Falls area of influence for employment extends out approximately 30 miles. This is a rough estimate of how far people are willing to commute to work daily in Sioux Falls. Sioux Falls 2015 identifies three primary employment centers: the northern industrial park area, downtown, and the southwest commercial area. Approximately one-third of all the employees work in these three areas (10,500 in downtown, 9,000 in the industrial park, and 8,500 in the southwest area).

“The economic survival of every local community depends on its continuously importing and exporting goods, services, and workers. Hence all communities find it necessary to be physically linked to all other parts of a metropolitan area and the country. This occurs through an interlocking network of roads, streets, and other transportation arteries. Because of the regional nature of these networks, the traffic they carry is heavily influenced by conditions outside the boundaries of each community.”

Stuck in Traffic, Anthony Downs, p. 3

F. Commercial - Retail Sales

The amount of retail sales in most metropolitan areas contributes significantly to the tax base of the general fund. In the city of Sioux Falls, the sales tax rate is 6 percent on most items—depending on the purchase; 2¢ or 3¢ on the dollar goes into the City’s general fund. This revenue makes up 44 percent of the total revenue generated for the City, while approximately 17 percent of the general fund goes toward highways and streets.

The Sioux Falls 2015 plan has adopted development policies regarding commercial developments. Between 1995 and 2015, the plan calls for an additional 1,400 acres of commercially developable land. Commercial development is categorized into downtown, existing business corridors, neighborhood and community centers, and other mixed-use areas. Large regional shopping centers over 100,000 square feet will be provided along major street and highway intersections where street and utility services are adequate to accommodate such uses. Large commercial developments are proposed to be located at the intersections of two arterial roadways. Mixed-use areas will provide space for retail uses in addition to office parks and industrial development and some multifamily uses in appropriate locations. These areas provide for the location of employment centers at sites which are convenient to residential development and accessible from existing or proposed transportation facilities. The thrust of this effort should be toward establishing land uses which are compatible with both the major streets and adjacent neighborhoods.

As the largest retail center between Denver and Minneapolis-St. Paul, Sioux Falls offers the consumer a vast selection of goods with over 3,200 retail stores scattered throughout the metropolitan area. Depending on the cost of the purchase, the Sioux Falls area of influence encompasses approximately 80 miles and 350,000 consumers [Map 4]. Even though Sioux Falls ranks 228th out of 321 metropolitan market areas in the nation in population, it ranks 37th in the nation in median household Effective Buying

Income with \$41,611 per household, compared to the national average of \$35,377. (Source: Sioux Falls Development Foundation.)

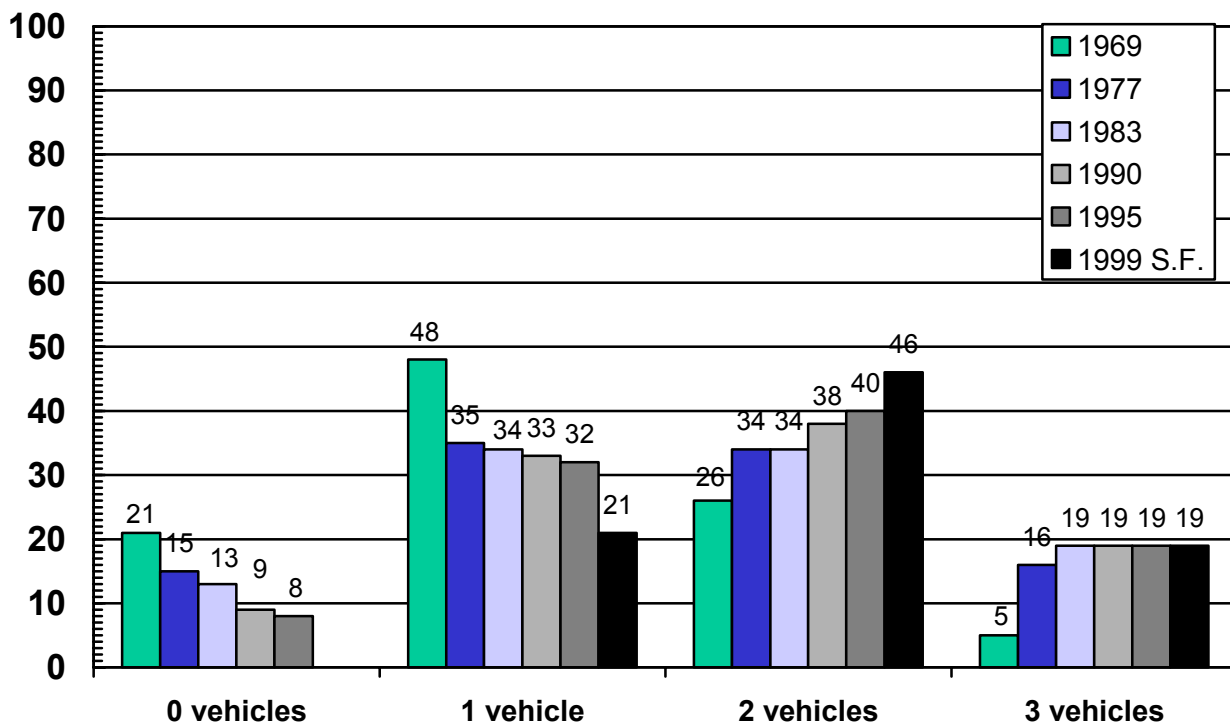
G. Passenger Vehicles

The number of passenger vehicles on the road and the number of vehicles per household are critical in preparing adequate traffic demand forecasts [Chart 4]. Households with no vehicles make considerable fewer trips than households with two or more vehicles. If the model uses an underestimated number of passenger vehicles, it may also be underestimating the number of person trips, person trip lengths, congestion, and traffic counts.

As travel demands for families increase, the need for additional vehicles per family becomes more and more necessary. In estimating the number of passenger vehicles within the study area, the County Treasurer’s Office was contacted.

Chart 4

Households by Number of Vehicles
by percent



Source: U.S. Department of Transportation, Federal Highway Administration, *National Personal Transportation Survey, Our Nation's Travel* (Washington, DC; 1997).

See Map 4 Areas of Influence

As of October 1999, the total number of registered vehicles in Minnehaha County was 155,993. There are approximately 25,000 vehicles in Lincoln County.

H. Traffic Analysis Zones

Statistical information that is generated from the Bureau of the Census can be processed into various-sized categories such as Census Tracts, Census Blocks, or Transportation Analysis Zones. Transportation Analysis Zones (TAZ) are geographic units used specifically to process information for transportation planning. TAZ-Up was the program created to update the TAZ boundaries for the 2000 Census and is being updated at the same time as this Long-Range Plan update. When completed, all land in Minnehaha County and Lincoln County will be within a TAZ [Map 5].

See Map 5 Traffic Analysis Zones