



## 2. Shape Growth

## 2. Shape Growth

The goal of effective growth management is based on a plan which designates where different types of new development should go, and determines when those areas should be opened for development. Identification of desirable future growth areas with sufficient land appropriate for development is a central component of the Comprehensive Development Plan. The growth management philosophy of Sioux Falls is to provide developable land when it is needed in amounts sufficient to prevent limited supplies from artificially driving up land costs. It is also important that the timing and location promotes orderly, compact new growth that allows the most cost-effective provision of public and private services.

The capital costs of providing schools, parks, streets, and fire and police protection to service new growth are generally quite comparable, regardless of location. The costs of extending utility lines, however, differs



### Growth Management Strategy

**Overall Intent:** To determine the location and phasing of new development out to the year 2040.

**Strategy:** Ensure that City utilities can be provided in a timely manner to planned development.

**Implementation Method:**  
Annexation

greatly according to location. The cost differential is particularly true for sanitary sewer service. For this reason, the designated growth areas have been examined on the basis of sanitary sewer basin boundaries.

While the costs of extending sewer is the primary consideration in designating future growth areas and the timing of their development, other factors have also been considered. The capacity of the transportation system to serve each area efficiently, the environmental suitability of land for development, and existing land use patterns are other key considerations. Both the quality and efficiency of development may suffer if the plan does not recognize these factors.

Exhibits 2.A–2.E: Annual Growth Rates  
Growth Inventory—How do we determine our growth rates?

<b>EXHIBIT 2.A: All Platted Land (Consumption)</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>5-YR AVG.</b>	<b>15-YR AVG.</b>	<b>AVG. GROWTH by Sq. Mile</b>
No. of Annexations	4	19	25	3	8	6.2	14.00	
No. of Annexations (acres)	195	1,048	1,195	45	242	273.40	728.63	1.14
No. of Rezoning	33	41	50	21	71	49.4	51.40	
No. of Rezoning (acres)	889	762	734	138	1,019	783.20	1,131.20	1.77
No. of Preliminary Plans (PP)	5	11	11	2	7	6.8	13.13	
No. of Preliminary Plans (acres)	127	491.7	609	50	303	295.80	821.37	1.28
No. of Plats (lots)	1,524	1,685	2,261	500		614.00	1,221.67	
No. of Plats (acres)	N/T	1,461	2,062	533	1,392	997.20	NA	1.56

<b>EXHIBIT 2.B: Developable Platted Lands</b>	<b>Actual 2009*</b>	<b>Actual 2010</b>	<b>Actual 2011</b>	<b>Actual 2012</b>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Actual 2015</b>	<b>Median</b>
Platted Residential	534	174	134	387	602.3	364	290	364
Platted Industrial	48	9	25	52	35.3	32	41	35
Platted Commercial	124	46	19	81	102.2	22	55	55
Platted Office	13	34	4	186	70.1	16	29	29

\*January 1, 2009, platting fees effective

<b>EXHIBIT 2.C: Acres by Land Use</b>	<b>Platting Average</b>	<b>26 Years [Annual Figures]</b>	
		<b>High</b>	<b>Low</b>
Residential	355	439	293
Industrial	35	40	20
Commercial	64	70	35
Office*	50	152	76
<b>Subtotals</b>	<b>504</b>	<b>701</b>	<b>424</b>

\*Office average does not include institutional plats

<b>EXHIBIT 2.D: 2040 GMP, 26-Year Period</b>		
Single Family	10,856	418
Multifamily	2,046	79
Public/Semi-Public*	1,750	67
Industrial	5,200	200
Commercial	2,600	100
Office	2,080	80
<b>Total</b>	<b>24,532</b>	<b>944</b>

\*Not including ag or public lands

Sioux Falls is platting an average of 504 acres a year. However, Sioux Falls had a high of 810 and a low of 182.

The amount of platted land is a fairly true indicator of land development within our community. Projecting our land use needs forward, and using the table at below left, the City consumes 944 acres per year. Comparing our actual platting figures, based upon land use, we have been fairly accurate.

### EXHIBIT 2.E: Land Use Demand

2040 PROJECTIONS [revised and amended]				2040 Plan/26 Years	
Land Uses		High (acres)	Low (acres)	High (acres)	Low (acres)
Single Family Residential	18,094 units at 2.7 /acre + 50% multiplier	10,052	6,701	387	258
Multiple-Family Residential	16,370 units at 18 / acre + 50% multiplier	1,364	909	52	35
Public/Semi-Public*	1,450 acres of parks	1,450	1,450	67	56
Industrial	20 acres per year + 100% multiplier	1,040	520	40	20
Commercial	35 acres per year + 100% multiplier	1,820	910	70	35
Office	50 acres per year + 100% multiplier	3,952	1,976	152	76
<b>Total Developable Acres</b>		<b>19,978</b>	<b>12,466</b>	<b>768</b>	<b>479</b>
<b>Total Sq. Miles</b>		31	20		

\*Not including ag or public lands

18,094 is the number of additional single family homes projected through 2040.  
 16,370 is the number of additional multifamily units projected through 2040.

The projected demand for land needed to accommodate future development is over 48 square miles, while about 53 square miles is identified for land supply within the 2040 plan horizon for future development.

## Growth Areas

Growth management also provides for economical provision of City services by coordinating public facility improvements with private development. For purposes of long-range planning, the growth management strategy addresses the following development areas (see Map 2.A: “Development Areas”):

### Urbanized Area *(Existing or recently approved development/annexed areas.)*

Land is either developed or considered in-fill development within this area. Development in this area should have the infrastructure maintained at high standards with any redevelopment consistent with Shape Neighborhoods, Shape Transitions, and Shape Places (Chapters 3, 4, and 5). Because City services are already available within this area, opportunities should be explored to develop and redevelop this area.

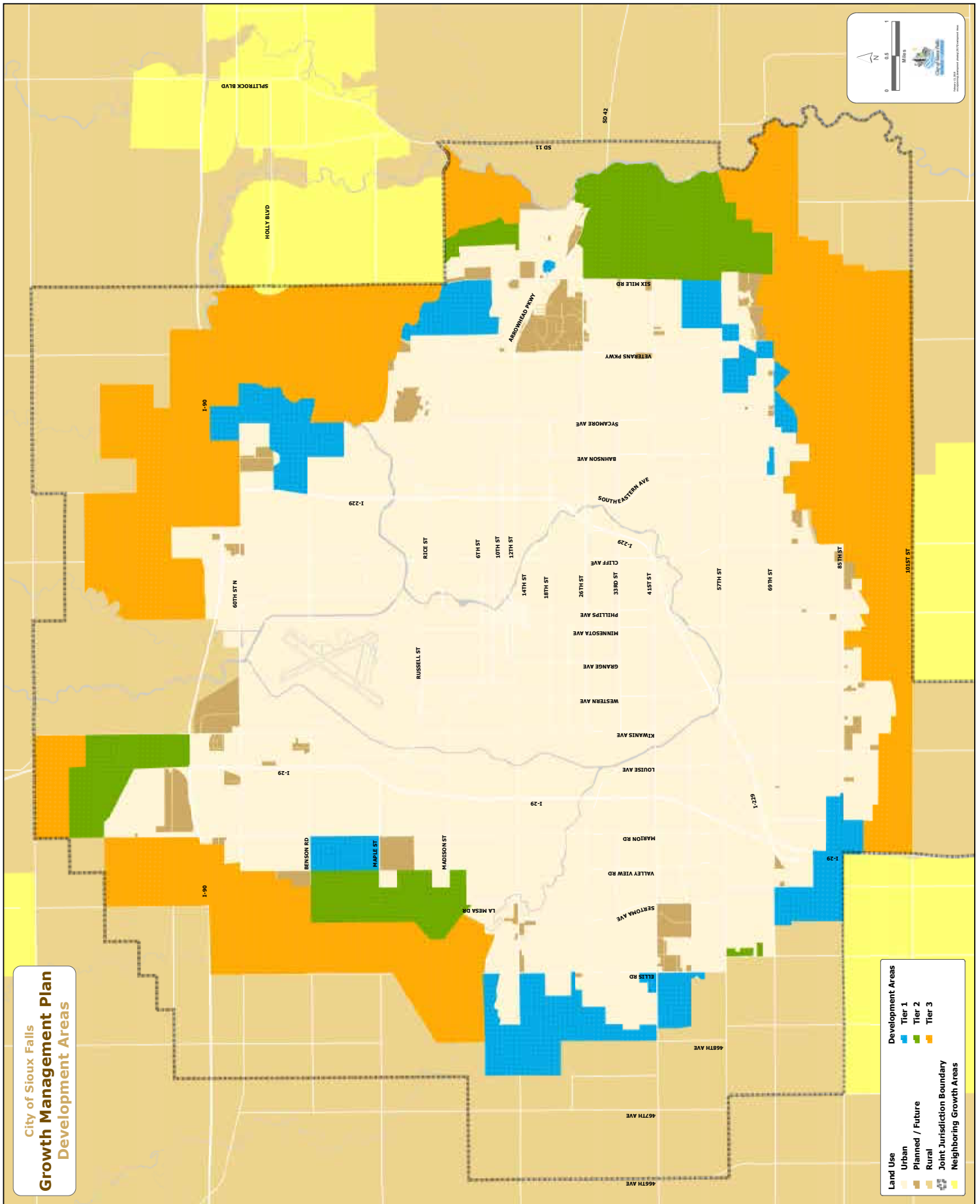
### Planned Urbanized Area *(Urban services are available and new development is able to be approved.)*

Infrastructure is available to this land area and it can be annexed. This area should be a priority for new facilities such as libraries, parks, fire stations, and schools. **Any infrastructure that has not been completed should be included within the five-year CIP consistent with Chapter 7: “Shape Facilities.”**

### Planned Urbanized Boundary *(Boundary that separates serviceable vs. unserviceable area.)*

Boundary between area where city infrastructure and services are currently available for new or existing urban development and the area where city services are not available for urban development at this time.

# Map 2.A: Development Areas



**Future Urbanized Area** (*Generally outside city limits and urban services will be available when programmed in CIP.*)

The areas of future development consist of lands along the urban fringe where new development will occur through the year 2040, thus creating new demands on City resources for new public facilities and services. Three tiers of phase growth are delineated in the Growth Management Plan:

**Tier 1:** Annexation advised within five years. All City services available within the five-year CIP period.

**Tier 2:** Annexation not advised. City services are projected to be available for development within 6 to 15 years (additional monetary resources needed).

**Tier 3:** Annexation not advised. City services are projected to be available for development within 16 to 25 years (additional monetary resources needed).

## Rural Areas

This is agricultural land beyond the future urbanized area and planned urbanized service area where the existing rural character is to be maintained.

### Rural Area

*(Agricultural uses outside city growth area.)*

The extraterritorial planning jurisdiction surrounding Sioux Falls contains vast areas of agricultural land on which urban

development will not be desirable during the planning period. Both city residents and the rural community have a fundamental interest in preventing scattered and haphazard development patterns in outlying areas. Rural area development policies should continue to be planned jointly by the City of Sioux Falls, Minnehaha County, and Lincoln County. In areas where development would result in problems which require extensive public and private expenditures to correct, existing and future property owners will be protected and governmental expenditures minimized by managing development in accordance with these policies.

Map 2.A: “Development Areas,” shows all growth management development areas (urbanized, planned urbanized, future, and rural) and provides a utility phasing plan for future urbanized development. The map should be updated each year to keep the citizens and development community updated as to the areas of the city that are available for urban services and development of the Growth Management Policy Framework.

For growth management to be successful, policies guiding the provision of urban services are needed. The growth management policy framework is intended to focus and direct the actions of the City into a consistent, workable growth management approach.

## Growth Management Policies

### Phasing of New Development

- Allow infill and contiguous growth along the city's boundaries.
- Maintain an adequate supply of development land within the urban service area at all times.
- Prevent unlimited outward expansion by maintaining **growth area boundaries**, with provisions for annexation timing and extension of streets and utilities according to the availability of services and infrastructure.
- Require adequate provision of City services before development is approved in future growth areas.
- Allow development agreements in tier 2 or tier 3 **future urbanized areas** that allow expansion of the urban growth area only if the developer pays for all infrastructure costs.
- Recognize the **growth area boundary** as the division between urbanized and rural areas, and maintain a sustainable and orderly pattern of urban growth and development that will promote an efficient use of present and future public investments in roads, utilities, and other services.
- Beyond the urban growth area, encourage agriculture to remain the dominant land use activity and minimize the cost of providing future public services and facilities by maintaining a rural population density and preserving agricultural lands.

- Limit the subdivision of land for nonfarm-related residential development outside the urban service area to low-density projects that will not conflict with agricultural operations or create negative financial impacts on local governments for provision of public services and facilities.
- Establish an area-wide approach to cooperatively manage future growth, including City and county governments, schools districts, townships, and public utility providers. (See also Chapter 7: "Shape Facilities.")
- Avoid scattered or strip commercial development and direct appropriate land uses into commerce center locations where adequate services are available, including transportation elements and proper water and drainage systems. (See also Chapter 3: "Shape Neighborhoods.")

### *Provision of Public Facilities*

- Provide and maintain parks and other public facilities at a uniformly high standard in all neighborhoods of the city. (See also Chapter 7: "Shape Facilities.")
- Maintain the river greenway corridor for public use and protect it from encroachment by incompatible uses. (See also Chapter 9: "Shape Resources.")
- Streets and public utilities should be maintained and reconstructed uniformly to City engineering standards. (See also Chapter 7: "Shape Facilities.")

- Avoid widening and signalization of arterial streets and other major streets where the livability and safety of adjacent neighborhoods would be diminished by such action. (See also Chapter 6: “Shape Corridors.”)
- Secure suitable park, school, and fire station sites ahead of development within growth areas. (See also Chapter 7: “Shape Facilities.”)
- Integrate park and open space areas into residential neighborhoods based upon the master plan. (See also Chapter 7: “Shape Facilities.”)
- Provide direct pedestrian and bicycle access from residential neighborhoods to schools, commercial centers, and recreation areas. (See also Chapter 5: “Shape Places.”)
- Design residential street layouts to utilize existing contours, and encourage street connectivity with limitations on cul-de-sacs and dead-end streets. (See also Chapter 6: “Shape Corridors.”)
- Prevent heavy through-traffic on minor residential streets by requiring a system of collector streets between adjacent subdivisions. (See also Chapter 6: “Shape Corridors.”)
- Secure sufficient rights-of-way with development to accommodate the City’s major street system, including a system of arterial streets. (See also the document *Sioux Falls MPO Long-Range Transportation Plan*.)
- Coordinate school impacts associated with future development with the appropriate school districts, and continue the policy of

### Exhibit 2.F: Future Development Land Projected Supply and Demand (in acres)

This is a summary of the vacant land area available for development in each growth area, both within and outside of the current city limits.

Land Uses	Demand	Supply
Single-Family	10,052	10,854
Multifamily	1,364	1,502
Industrial	1,040	3,161
Commercial	1,820	1,820
Office/Institution	3,952	3,991
Public	1,450	1,520
<b>Total Developable</b>	<b>19,678</b>	<b>22,848</b>
Conservation	3,895	3,895
Right-of-Way	5,425	5,425
Existing Rural Res.	2,200	2,200
<b>Total Acres</b>	<b>31,198</b>	<b>34,368</b>
	(≈48.7 sq. miles)	(≈53.7 sq. miles)

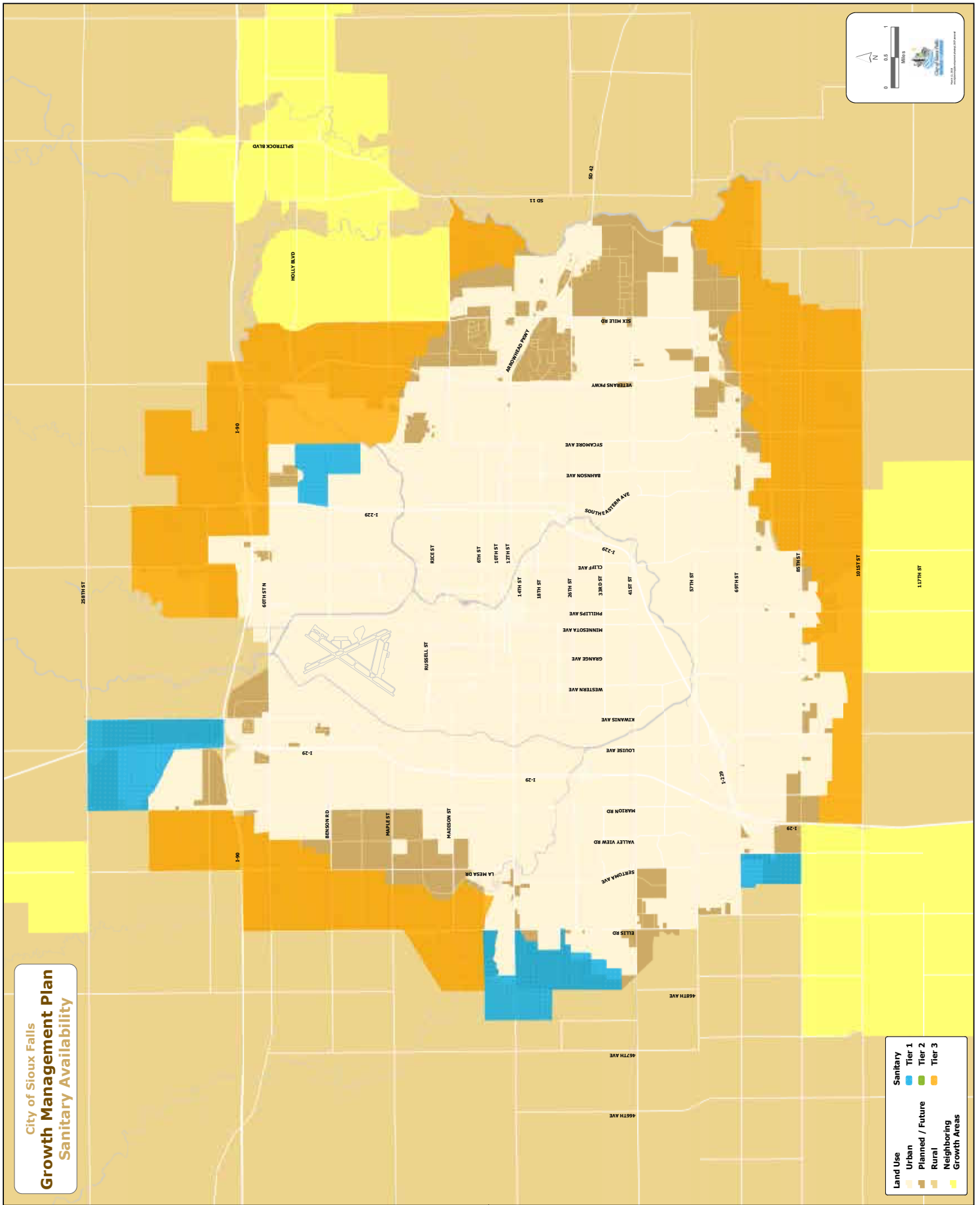
Notes:

1. Demands is derived from Exhibit 2.E.
2. Supply is determined by the amount of acres identified in the future land use map subtracted by an undeveloped acres ratio (Source: Nexus Study for Aterial Street and Water Distribution Platting Fees).

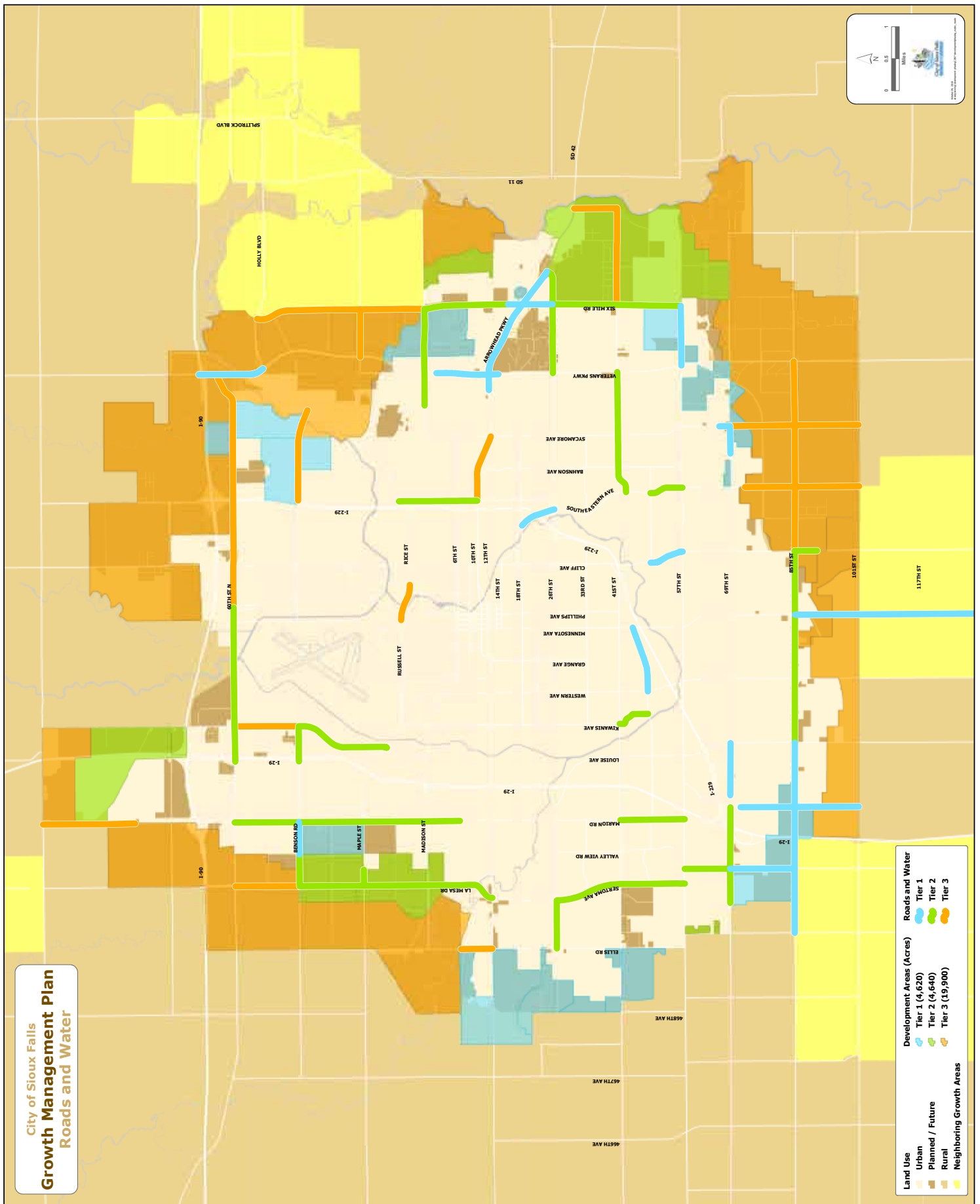
Nexus Study Ratios	
Single-Family	75%
Multifamily	75%
Industrial	85%
Commercial	80%
Office	80%
Public	85%



Map 2.B: Sanitary Availability



# Map 2.C: Water and Roads



City of Sioux Falls  
**Growth Management Plan**  
 Roads and Water

**Land Use**

- Urban
- Planned / Future
- Rural
- Neighboring Growth Areas

**Development Areas (Acres)**

- Tier 1 (4,620)
- Tier 2 (4,640)
- Tier 3 (19,900)

**Roads and Water**

- Tier 1
- Tier 2
- Tier 3

cooperative neighborhood-based school-park land acquisition and construction in new residential areas. (See also Chapter 7: “Shape Facilities.”)

- Discourage driveway entrances onto highways and arterials where locations may result in traffic hazards or impede traffic flow, and provide adequate right-of-way for future arterial traffic routes in accordance with the adopted major street plan. (See also the document *Sioux Falls MPO Long-Range Transportation Plan*.)

### ***Environmental Considerations***

- Prevent development in areas that are environmentally unsuitable for buildings or septic systems, and protect floodplains, major drainageways, steep slopes, or other natural areas from incompatible development which may result in environmental problems.

### **Land Use Consumption Projections**

The number of acres that will be needed to accommodate new development is shown in Exhibit 2.C: “Building Permit Acres by Land Use.” The calculations show the assumptions used to estimate the land needs of each land use type throughout the 25-year planning period. The estimates for each land use category include a multiplier based on the amount of development land considered necessary to meet market demands.

### **Growth Area Analysis**

The location and phasing of private and public development is contingent upon the efficient use of limited resources. Over the last five years, the City of Sioux Falls spent approximately \$93 million a year on capital projects. Therefore, it is critical that the funds are allocated in the right areas at the right time. Through the careful deliberation of areas to be annexed, the City will be able to logically extend facilities and utilities. (See Chapter 10: “Shape Implementation.”)

Although growth areas are generally determined by sanitary sewer basins (see Map 2.B: “Sanitary Availability”), growth areas should also be analyzed by all infrastructure needs. Without looking at other infrastructure needs, growth areas could be prematurely identified as serviceable and later determined to require infrastructure (water, roads, drainage) that is not available or not programmed into the City’s CIP. For that reason, Shape Growth also has taken into consideration all infrastructure based upon each utility’s master plan. Infrastructure and facilities master plans (see Chapter 7: “Shape Facilities”) have been mapped consistent with the growth areas.

### **Water and Arterial Streets**

Water mains are typically installed when a major arterial street is improved. Map 2.C: “Water and Roads” identifies a ten-year phasing of all arterial street and water main projects. Arterial streets must be paved before new urban

development connects to the arterial street. Water mains must be available to the new development area and must be provided in a looped manner so that long, dead-end lines (and stagnant water) are avoided.

## **Drainage and Flood Hazard Areas**

Drainage mainly concerns the collection of water from specific sites to more general locations. Floodplain mainly deals with the general collection of waters during rain events and the different stages of water movement and storage during flood events.

Drainage is serviced through two methods: (1) on-site drainage ponds, and, (2) regional drainage basins. On-site drainage ponds will need to provide for the rainfall and snow melt needs of the development site and detain it on the site. Regional drainage basins will have one or several drainage facilities which serve large drainage basin areas; these basin areas drain naturally through low areas into settlement facilities to improve the overall water quality. Each of these regional drainage basins is phased on Map 2.D: “Public Facilities and Proposed Drainage Basins” (at end of chapter).

Flood hazard areas contain two separate areas: (1) floodways, and, (2) floodplains. Floodways provide an area of fast-moving water during a flood event while floodplains provide an area of water storage and slower water flow during a flood event. There are multiple kinds of floodplains and floodways, but mainly those identified by the Federal Emergency Management Agency (FEMA) are the ones that are regulated. There may be some instances of localized flood areas that are not identified by FEMA but are identified

by the City of Sioux Falls. These regulations help to protect property values, community safety, and the environment by providing limits, restrictions, or retrofits to development in or along these flood areas. Flood maps can change more frequently than long-range plans such as a comprehensive plan, but the current effective floodplain (as of early 2017) areas are shown on Map 9.A: “Critical Open Space and Environmental Assets.”

## **Park and School Sites**

New park land is acquired according to the guidelines within the Parks and Recreation System Plan. Neighborhood parks should be accessible and within a one-half-mile service area of all residential areas, and consist of five to ten acres for a play structure, picnic shelter, and play fields. Most neighborhood parks are coordinated with the neighborhood elementary school.

Community parks are 20 to 40 acres and include off-street parking to allow access to multipurpose facilities, such as aquatic centers and athletic fields.

Regional parks are 80 to 100 acres and include off-street parking to allow access to multipurpose facilities, including athletic fields, playgrounds, and recreation centers.

*Conservation and nature areas* are specialized park types in locations which preserve wildlife habitat, woodlands, and wetlands through open space development.

Schools are identified by each school district according to their needs. Generally, elementary schools should be located every mile and a half from each other.

Map 3.A: “Future Land Use” indicates the general location for all school and park sites to provide guidance to developers and City officials in the development review process.

## Fire Stations

Fire stations are located based upon access and response times maintained by the Fire Rescue staff. For a more detailed description of fire station location criteria, see Chapter 7: “Shape Facilities.” These standards assist the community in ensuring their structures have fire protection. Future fire stations are identified on Map 2.D: “Public Facilities and Proposed Drainage Basins.”

## Rural Development Considerations

Problems can occur when urban growth takes place in scattered and inappropriate areas next to agriculture and rural residential properties. Conflicts may include increased traffic and noise for rural residential properties and increased groundwater pollution from septic tanks.

Long-range planning and joint decision-making involves both the City and two counties and is necessary to ensure that future urban development makes orderly transition from rural areas to urban areas. The Shape Sioux Falls 2040 Plan pertains directly to special areas of development concern. The intent of this plan is to provide both Sioux Falls and the two counties with information needed to respond during joint-jurisdictional proceedings and annexations.

## Wayne Township Growth Area

- Poor soil characteristics and an ill-defined surface drainage system pose significant problems to the outward expansion of the urban area south of 41st Street.
- Annexation of the Prairie Meadows Sanitary District will occur as the City addresses storm drainage and transportation elements in this area.
- Maintain present lot sizes which exist within the Prairie Meadows Sanitary District until other municipal services become available. The service area boundary of the sanitary district will not be expanded before annexation occurs.
- Preserve the floodplain area along 12th Street for open space and park use in conjunction with the Skunk Creek greenway improvements.
- Extend the greenway system along Skunk Creek and integrate future improvements with the reclamation of quarried sites.
- Limit further development around Ellis due to its location over the aquifer, and the absence of a central wastewater treatment system.

## Benton Township Growth Area

- Avoid expansion of the residential subdivisions Martindale Tracts and Skyline Heights, based upon the potential for conflict between residential uses and nonresidential uses. Urban utilities will be required before expansion of Reppert’s Subdivision occurs.

- Preserve the floodplain area along Willow Creek for open space and park use in conjunction with the greenway improvements.

### **Mapleton Township Growth Area**

- The cap of 432,000 gallons per day of sewage or 12.96 MG/month in the Renner Sanitary District will be reached if all platted lots are developed. This will leave a substantial area of the district without service. Pressure to develop these areas can be expected.
- Do not permit new development within the Renner Sanitary District boundary unless connection is made to the Renner Sanitary Sewer District central collection system.
- Several subdivision lots within the sanitary district lack development appeal due to poor or nonexistent streets, undersized lots, and the absence of other urban amenities.
- Preserve the floodplain area along the Big Sioux River and Slip-up Creek for open space and park use in conjunction with the greenway improvements.
- At one point, Slip-up Creek was identified as a future reservoir area for city water needs. However, following the emergence of the Lewis & Clark water project, the reservoir is no longer being considered for that purpose. Instead, the Slip-up Creek area should be preserved as a rural agricultural area.

### **Sioux Falls Township Growth Area**

- Consider sand and gravel extraction as an appropriate interim use prior to industrial development, particularly in the area east of I-229 and south of I-90. Consider environmental constraints with steep terrain.
- Reserve floodplain for park and open space purposes and eventual connection with the Big Sioux River greenway system.
- Limited residential development may be allowed on the steep slopes in the northeastern portion of the growth area.
- Developing area should maintain a low density consistent with minimal provision of utilities and services.

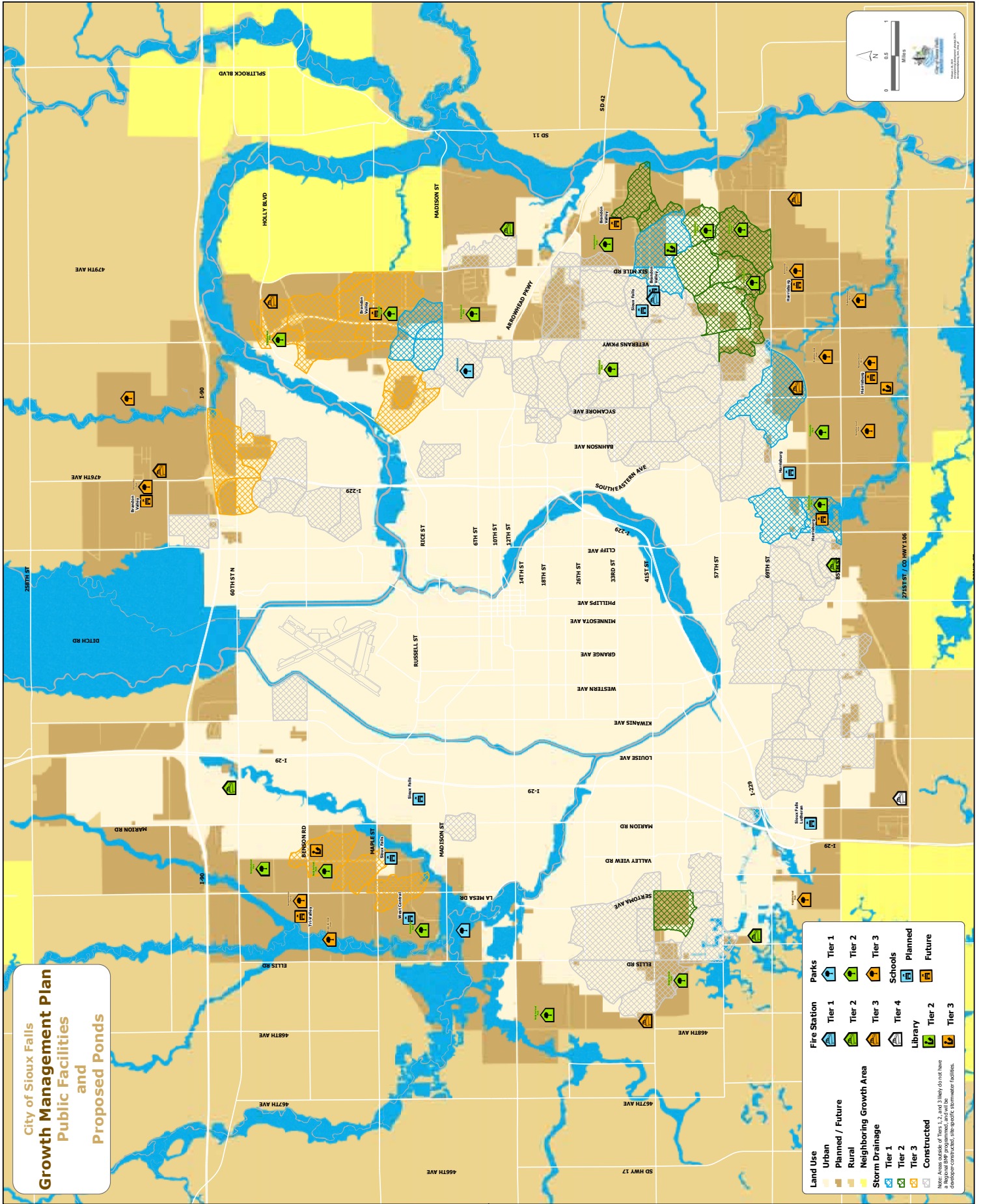
### **Split Rock Township Growth Area**

- Many existing rural residences are located in this township. Discourage expansion and further development of rural residential subdivisions where services are insufficient to meet anticipated demands.
- Promote the use of annexation and rezoning to appropriate zoning districts. By limiting access and requiring annexation, new developments can develop better land use transitions with existing developments.

### **Springdale Township Growth Area**

- Environmental constraints for rural development in this area include limitations for septic tank drain fields and dwellings with basements due to poor soils and a high water table.

Map 2.D: Public Facilities and Proposed Drainage Basins



- Continue to adhere to drainage plans to address stormwater runoff toward the east and south into Lincoln County. Use of natural drainageways and detention ponds should also serve as potential recreation/ open space corridors for the city.

### **Delapre Township Growth Area**

- Environmental constraints for development in this area include limitations for septic tank drain fields and dwellings with basements. A portion of Nine Mile Creek in the northwest area is included within the 100-year floodplain.
- Encourage the eventual development of central sanitary sewer facilities around the Tea Industrial Park.