

CHAPTER 7: LAND USE AND GROWTH

St. Cloud's urban and natural amenities, along with its direct access to major transportation corridors, make it an attractive place for commerce and to live. Because of these factors and its proximity to the Twin Cities Metropolitan Area, St. Cloud has experienced steady growth over the past several decades. Continued urban growth of the St. Cloud area and along major commerce routes poses many land use challenges. The strain between urbanization and the traditional agricultural character of surrounding areas is at the forefront of this struggle. As St. Cloud grows and urban land uses extend into the neighboring townships, development pressure is placed on the surrounding agricultural areas. Thus, agricultural preservation, environmental protection and annexation dynamics have become increasingly important for the city. This makes careful consideration of the city's future land use and growth areas very important.

Included in this chapter is an inventory and analysis of existing conditions, discussion of the development paradigm and future land use and development plans for the city and its growth areas.

INVENTORY AND ANALYSIS

INTRINSIC SUITABILITY

The St. Cloud area has an abundance of natural beauty and environmentally sensitive areas. The Mississippi River flows through the area, with plains reaching out from both its east and west banks. The area is home to a variety of plant and animal life, and a source of recreation and enjoyment for residents and visitors. Protection of these sensitive areas not only allows them to be enjoyed for generations to come, but also contributes to the quality of life for St. Cloud residents today.

The features of the natural environment, such as wetlands and waterways, are components of the city's green infrastructure system. Green infrastructure is the city's natural support system that includes an interconnected network of waterways, wetlands, woodlands, natural areas, parks, conservation lands, wildlife habitat, prime farmland and other open spaces that maintain natural ecological processes, sustain water resources and contribute to the health and quality of the St. Cloud area. As the city grows, it develops plans for roads, bridges, sewers, utilities and other components of its physical infrastructure. The city also recognizes that enhancing and maintaining its green infrastructure is an important component of ensuring the livability of the city as it grows.

Natural features, such as soils and riparian areas, are capable of supporting certain kinds of development but pose constraints for others. To determine the constraints and opportunities created by these natural features in the St. Cloud area, an intrinsic suitability analysis was completed. This analysis involved reviewing multiple natural features to determine the lands that are most suitable for development and the lands that are important components of the city's green infrastructure that should be preserved. The intrinsic

suitability analysis was used to inform the master planning and target area planning processes. Each natural feature included in the analysis is described below.

WETLANDS

In the past, wetlands were generally regarded as obstacles to development rather than opportunities. Federal and state laws passed in the 1800s and early to mid 1900s encouraged draining wetlands. Today, public attitudes have changed. The Wetland Conservation Act, enacted in 1991, created a “no net loss of wetlands” policy and provided for the mitigation of drained or filled wetlands.

Wetlands provide many benefits, and the benefits vary according to the type of wetland, the season of the year, the location of the wetland within a watershed, and the land uses that affect the hydrological and ecological integrity of the wetland. Common wetland functions are listed below:

Water Quality Protection: Wetland plants absorb nutrients during their growth and development. The water leaving the wetland is cleaner because the nutrients are removed. Wetlands also temper water flows, which provides time for sediments to settle before the water leaves the wetland and enters other wetlands, lakes, or streams.

Floodwater Detention: Wetlands retard floodwaters and provide temporary storage of stormwater. This reduces the amount of damage to roads, bridges, crops, etc. by reducing peak discharges.

Aesthetics, Recreation, and Education: Wetlands provide areas to observe plant and animal species. They provide open space amenities to residential and commercial developments. Hunters, fishermen, and wildlife observers visit wetland areas. Wetlands also provide areas to study ecological processes.

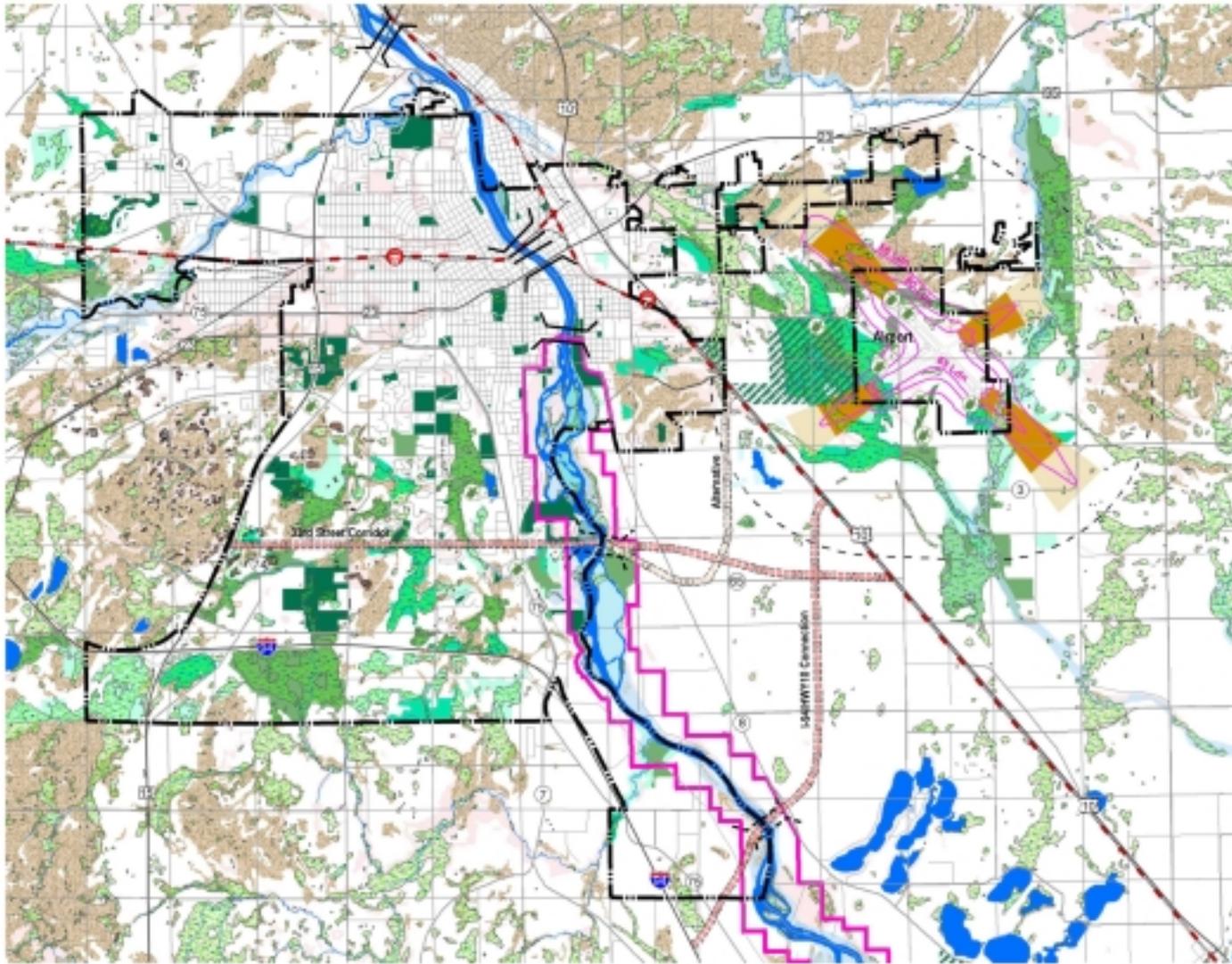
Wildlife and Fisheries Habitat: Many species of wildlife spend all or certain seasons of the year in wetland habitats for breeding, brood rearing, feeding and cover. Fish use wetlands for laying eggs, food, or protection.

Shoreland Stabilization: The vegetation in wetlands reduces the erosive forces of waves on lake and stream banks.

Wetlands in the St. Cloud area are quite extensive. Wetlands included on the National Wetlands Inventory (NWI) are shown on Figure 7-1, *Intrinsic Suitability Analysis*. The NWI is only an approximation of wetland areas and is not field verified. Wetlands are spread throughout the St. Cloud area, especially in southern St. Cloud, along the Mississippi River corridor, and east of the Mississippi River between Trunk Highway 10 and the Elk River.

St. Cloud has an abundance of natural beauty and environmentally sensitive areas.





LEGEND

- City Boundary
- Rare Species
- Northstar Train Station
- Northstar Corridor Transit Line
- Major Highway
- Railroad
- Proposed Major Highway Connection
- Existing River Crossing
- Proposed River Crossing
- Streams
- Airport Safety Zone A
- Airport Safety Zone B
- Airport Safety Zone C
- Airport Noise Contour
- Scenic River Zone
- Existing Park
- Natural Area, Low Priority
- Natural Area, Medium Priority
- Natural Area, High Priority
- Wildlife Area
- NWI Wetland
- 100-Year Floodplain
- Open Water
- Rock Outcrop Area
- Prime Farmland
- Soil with Severe Limitations for Dwellings with Basements

Intrinsic Suitability Analysis

Figure 7-1



In 1995, the city completed a *Natural Areas Inventory and Planning Framework* that inventoried natural features within St. Cloud and its growth areas, including wetlands. Although most wetlands provide some level of natural resource value, the quality of wetland areas varies throughout the study area. The environmental features were then prioritized based on the ecological characteristics of quality, rarity, and if the natural area is part of a larger natural resource complex. Most of the inventoried natural areas contain wetland complexes. In many urbanizing areas, major wetland complexes represent a large portion of land that has been skipped over for development because of the cost and regulatory barriers that must be overcome to prepare the sites for development. A few wetlands identified on the NWI were not identified as natural areas because of severe alterations to the wetland's hydrology and vegetative cover over time (e.g., fallow fields and pastures).

Recognizing that most wetlands are not suitable lands for development because of regulations and their biological/community importance and value, they represent a formidable constraint to development and an opportunity for restoration and enhancement. The *Natural Areas Inventory and Planning Framework* outlines planning tools to effectively protect or restore wetland areas and the *Environmentally Sensitive Areas Ordinance* regulates disturbances to natural areas, which include wetlands, based on their priority level.

SOILS

One of the most fundamental criteria for development is the nature of the soils. The intrinsic suitability analysis shows soils that pose severe limitations for dwellings or other structures with basements. Given advancements in engineering and construction technology, overcoming soil-based development constraints is typically a matter of increased planning, construction, and maintenance costs. Generally, soils that pose development constraints are located within or adjacent to floodplain areas, surface waters, and wetlands and surrounding rock outcrop areas.

Prime farmland soils, as defined by the U.S. Department of Agriculture, are also part of the intrinsic suitability analysis. These soils are best suited for crops since they have properties that produce the highest yields with minimal energy and economic resources, which results in the least potential damage to the environment. Prime farmland soils are concentrated in areas east of Trunk Highway 10 and north of the airport, primarily in Minden Township. Prime farmland soils are also scattered in the southern portion of the city. Although prime farmland soils do not represent a natural constraint to development, their intrinsic suitability for crops needs to be balanced with the city's need to accommodate growth.

BEDROCK

Bedrock is solid rock underneath the soil; therefore, a shallow depth to bedrock from the surface can pose severe development constraints. It limits dwellings with basements, and the installation of underground utilities. Preparing bedrock areas for development is typically cost prohibitive, and typically the remedy is to mine the bedrock before development occurs. However, small bedrock deposits can be cost prohibitive to mine and may preclude development from occurring.

Granite bedrock is visible at the surface in many areas around St. Cloud.



The best available soils data only identifies soils to a depth of 5 to 6 feet and does not indicate the depth to bedrock unless a rock outcropping, which is bedrock exposed at the surface, has been identified. The intrinsic suitability analysis shows where rock outcrop areas are located in Stearns County. A basic assumption is that the depth to bedrock is shallower in areas where rock outcroppings are located. The correlation between soils with severe limitations for dwellings with basements and the rock outcrop areas further supports this assumption. Most of these rock outcroppings are located in southwestern St. Cloud just east of Trunk Highway 15. The *Natural Areas Inventory and Planning Framework* also identified a rock outcropping area in Haven Township near the state of Minnesota Prison.

SURFACE WATERS / SHORELAND

The intrinsic suitability map shows all delineated surface water resources within the city and its growth areas. The Mississippi, Sauk, and Elk Rivers flow through portions of the city. The city also contains two lakes: Lake George and Donovan Lake. These resources permanently hold water and can serve as an amenity for the community; therefore, development within the shoreland areas of certain rivers and lakes must adhere to the shoreland management regulations.

The Minnesota Department of Natural Resources' (DNR) shoreland management program provides for the orderly development of shoreland and protects lakes and rivers from pollution by individual sewage treatment systems and non-point sources. The intent of this program is to encourage development of shorelands in ways that enhance water quality and preserve scenic resources. The program implements the Shoreland Management Act, which regulates all land within 1,000 feet of a lake and 300 feet of a river and the designated floodplain.

Shoreland regulations in St. Cloud apply to the Mississippi and Sauk Rivers. Three stream corridors that run through the city and its growth areas are included on the DNR's protected water inventory, although they are not included in the city's shoreland regulations. Mayhew Creek runs through Minden Township, Neenah Creek runs through southwestern St. Cloud, and an unnamed stream runs from the Sand Prairie Wildlife Management Area to the Elk River south of the airport. Although the aforementioned shoreland management regulations do not apply to these creeks, their intrinsic suitability is for conveying surface waters, especially during storm and flooding events.

South of the 10th Street Bridge, the Mississippi River is classified as a Scenic River. In 1973, the Minnesota Legislature passed the Wild and Scenic Rivers Act (Minnesota Statutes 103f.301 to 103f.345), to preserve and protect rivers with outstanding scenic, recreational, natural, historical and scientific values. It is intended to prevent damage to these exceptional rivers caused by intensive development and recreational overuse.

Rivers or segments of rivers included in the Wild and Scenic River system are classified as either "wild", "scenic" or "recreational". Wild rivers must exist in a free-flowing state, have excellent water quality, and have adjacent lands that are essentially primitive. For a river to be scenic, it must exist in a free-flowing state and adjacent lands must be largely undeveloped (lands that may have been developed for agricultural, residential or other land uses in places, but still present an overall natural character). Finally, recreational rivers are those that may have undergone some impoundment or diversion in the past and may have lands which are considerably developed, but that, if managed properly, are still capable of providing scenic recreational opportunities.

The DNR establishes minimum statewide standards for the preservation, protection and management of designated rivers above and beyond the requirements of shoreland and floodplain management regulations. The DNR works with local units of government to develop a management plan for each river that incorporates these standards and establishes special land use district boundaries. Each local unit of government must apply land use controls, through their local zoning and subdivision ordinances, to implement the management plan. The DNR is in the process of revising the 1976 Mississippi Wild and Scenic Management Plan. These changes may result in greater local authority in allowing development along the river corridor. The city and other local jurisdictions must act as stewards of the river and balance the need for development in these areas.

The Scenic River Zone of the Mississippi in the St. Cloud area is shown on the intrinsic suitability map. Development that occurs within the Scenic River Zone will need to consider additional development guidelines to protect the aesthetics of the river corridor.

FLOODPLAIN

The delineated 100-year and 500-year floodplain for the city's three rivers, Mayhew Creek, and the unnamed creek are shown on the *Intrinsic Suitability Analysis* map (see Figure 7-1). Lands within the 100-year floodplain have a 1 percent chance of flooding each year and lands within the 500-year floodplain have a 0.2 percent chance of flooding each year.

Lands within the 100-year floodplain areas pose severe constraints to development. This premise is further supported by the relationship of floodplain areas containing soils that pose severe limitations for development. The DNR administered Floodplain Management Program is intended to minimize the threat to life and property resulting from flooding. This program restricts development in floodplains by preventing structures from being built at too low an elevation in areas that have a high risk of flooding. It also controls encroachment so that the floodplain's capacity to hold water will not be reduced, which could lead to flooding of areas that are not typically prone to or prepared for flooding. Development is not restricted within the 500-year floodplain.

The city has adopted floodplain management standards to implement the DNR floodplain regulations and to ensure that the floodplain continues to function for its intrinsic purpose of holding floodwaters. The Floodway District (FW) and Flood Fringe District (FF) in the city are intended to control development in areas prone to flooding in order to minimize the losses associated with such disasters and to sustain the function of the floodplain. The FW District permits uses such as general farming, pasture, grazing, golf courses, tennis courts, parking areas and play areas and other uses that are minimally affected by flooding and have a minimal effect on the function of the floodplain. The FF District allows any uses of the underlying zoning district and requires that structures be built at an appropriate elevation.

NATURAL AREAS

As noted in the wetland section, the city carried out a *Natural Areas Inventory and Planning Framework* in 1995. All of the natural areas are shown on the intrinsic suitability map. The natural areas are generally located in southern St. Cloud, along river corridors, and east of Trunk Highway 10 surrounding the airport in Haven and Minden Townships. The natural areas contain many of the environmental

features previously discussed including: wetlands, rivers, streams, floodplain areas, soils not suited for development, shoreland areas, and rock outcrops. The natural areas represent clusters of the most sensitive environmental features within the city and its growth areas.

The natural areas are ranked in terms of priority for preservation based on quality, rarity, and if the natural area is part of a larger natural resource complex. A natural area that is ranked “high priority” will pose greater development constraints than a natural area that is ranked “low priority.” The city has adopted an *Environmentally Sensitive Areas Ordinance* that regulates the development of these natural areas and offers incentives that promote the protection of natural areas while providing an equitable economic return. The Ordinance notes that the city’s goal is to 1) protect high priority natural areas and avoid any deterioration; 2) conserve the quality of medium priority natural areas while allowing minor encroachments or disturbances; and 3) enhance the general ambiance and character of low priority natural areas through design, placement, and construction techniques. A Natural Areas Map is attached to the ordinance, illustrating the analysis by the City’s consultant using DNR, County and other sources. That map, Natural Areas Map — St. Cloud Environmental Ordinance, is included here on page 7-8. Additional background and resource information is available on the Minnesota DNR website, which can be consulted if future changes are made to the environmental ordinance.

RARE ANIMAL AND PLANT SPECIES

Eleven occurrences of rare animal species and one occurrence of a rare plant community were identified during the natural resource inventory in 1995. Southern St. Cloud includes three occurrences of the Blandings Turtle. The lands within and adjacent to the airport represent the highest biodiversity in the St. Cloud area. Nine occurrences of rare animal species, including Blandings Turtle, the sandhill crane, and the western hognose snake, have been reported in the airport area. In addition, a rare oak savanna community is located within the Sand Prairie Wildlife Management Area, which is adjacent to the airport.

Areas that contain rare plants and animal species pose severe development constraints. The Environmentally Sensitive Area Ordinance advocates that development and alterations should take place outside the areas where occurrences of rare species have been recorded. Rare plant and animal species areas receive the highest priority protection level and are ranked above high priority natural areas.

LAND USE INVENTORY

The purpose of a land use inventory is to quantify and analyze existing development in the city. An examination of current land uses reveals development patterns, densities and other land use scenarios that can provide direction for future development and redevelopment. This inventory, combined with other background information, is used to suggest where, at what intensity, and in some cases, when growth should occur. The inventory can also help to classify areas that should remain undeveloped or preserved. The kind of development and how that development is allowed to progress should be a reflection of the community’s needs and desires.

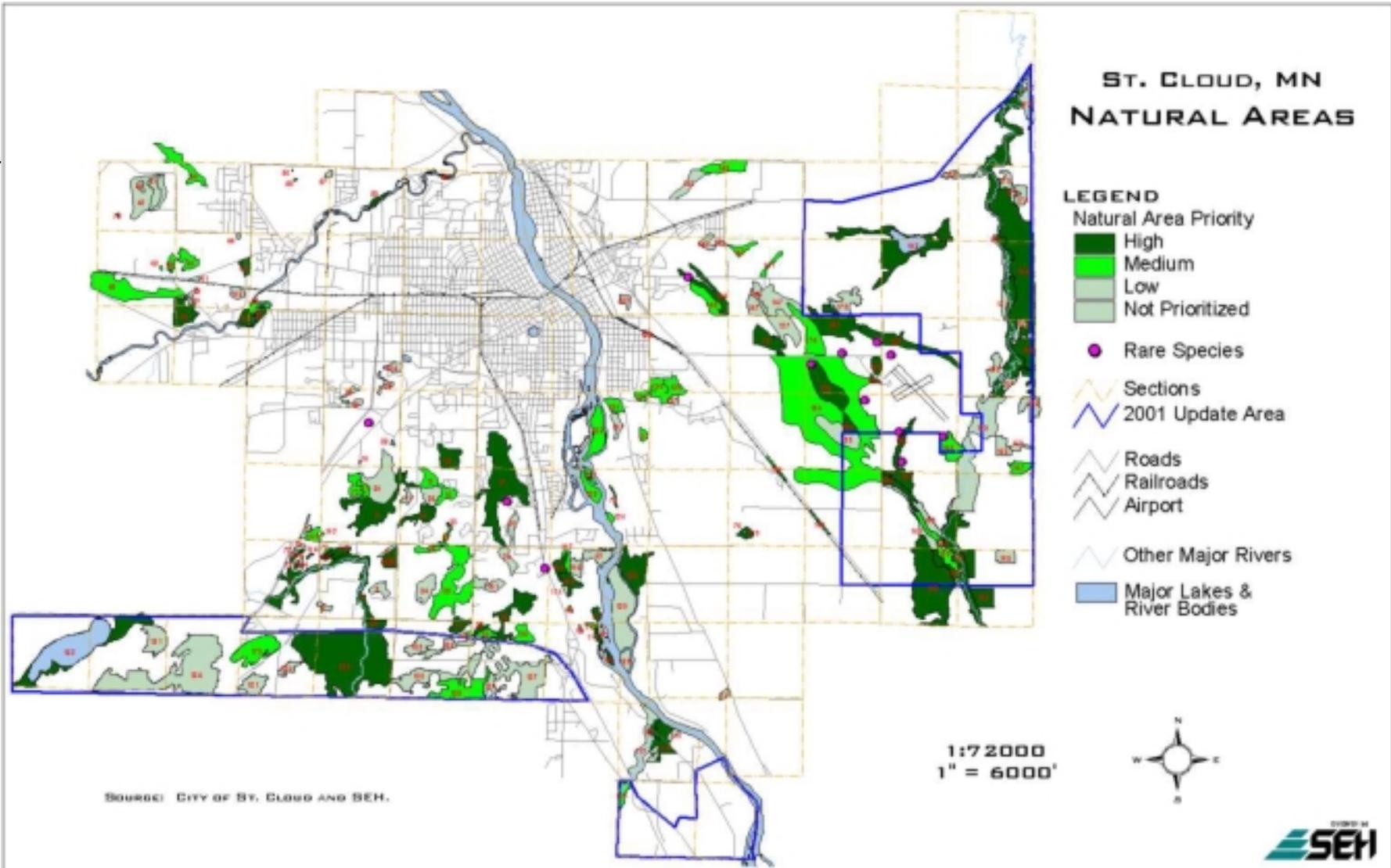


Table 7-1 shows St. Cloud's generalized existing land uses by acreage as of September 2003. This table shows that residential is the largest developed land use category in the city with right-of-ways being the next highest. Public / semi-public / institutional uses also make up a large part of the city's land use. Figure 7-2, *Existing Land Use*, maps the current land uses in St. Cloud. This map shows that the core of the city is comprised primarily of residential, commercial, industrial and public land uses with vacant / agricultural being located on the periphery.

RESIDENTIAL

Comprising 36 percent of the city's total developed area, residential development (single-family dwellings, duplexes and townhomes, multi-family dwellings and pre-manufactured housing) is the largest land use type in the city. Low-density dwellings consume the vast majority, nearly 90 percent, of the city's residential land.

PUBLIC / SEMI-PUBLIC / INSTITUTIONAL

Comprising 20 percent of the city's developed area, public and semi-public land uses make up an important portion of the city's land. This category includes educational, religious, health care, government, utility and other public uses. St. Cloud State University, located south of the city's downtown, and the airport, located east of the city, comprise a considerable portion of the city's public land. The Veteran's Administration (VA) property is also a significant public land use.

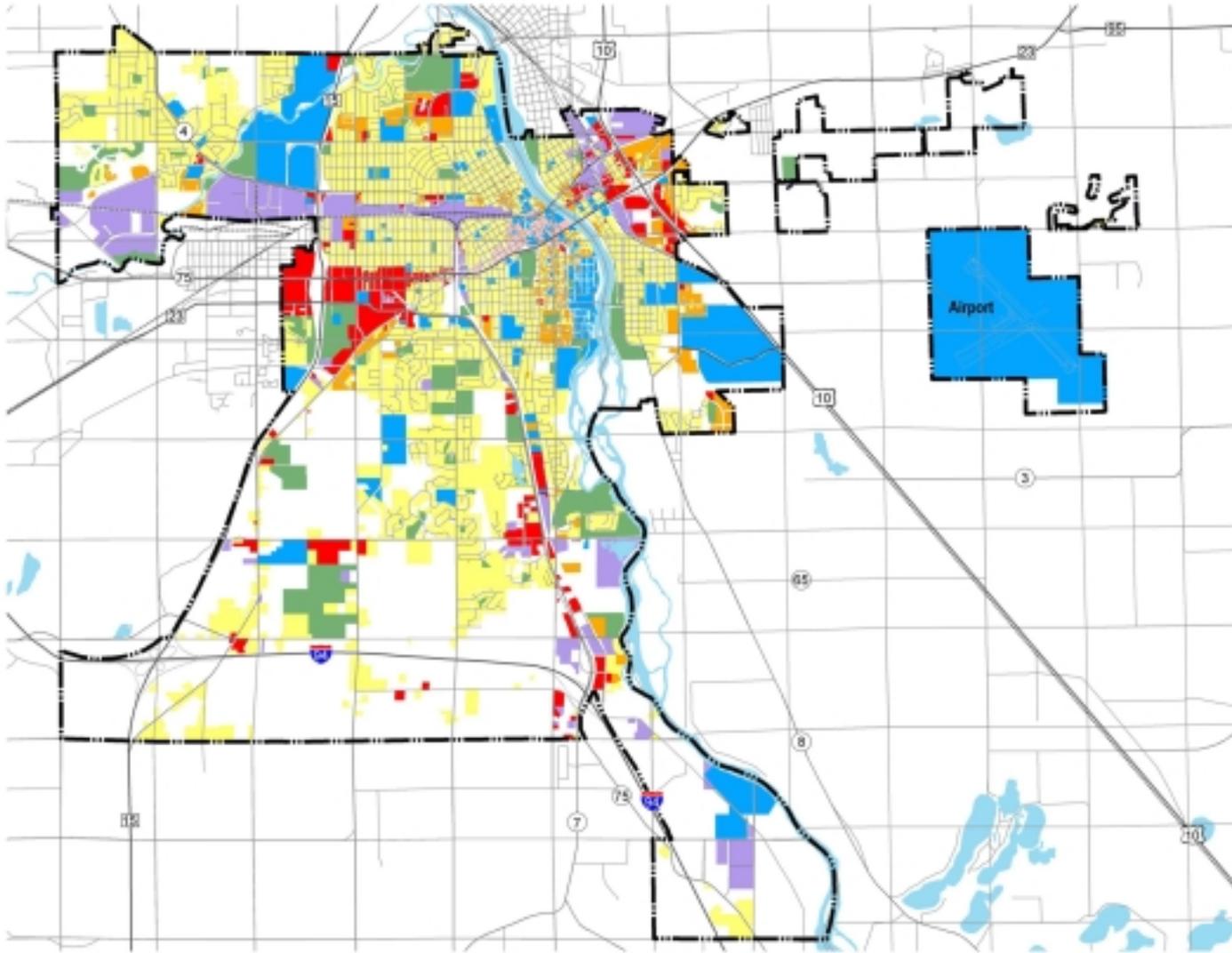
RIGHT-OF-WAY

Street and railroad right-of-ways consume approximately 21 percent of the developed portion of the city, and approximately 13 percent of its total land area. This percentage is due largely to the city's grid-like street pattern in the residential districts that make up the bulk of the city, and is not unlike that found in other similarly sized communities. Major right-of-ways in St. Cloud include Trunk Highways 10 and 15, which go north and south through the city, and Trunk Highway 23, which runs east and west. I-94 also traverses the city, and there are numerous railways.

Land Use Category	Acres	Percent (of Total Land Area)
Residential	5,831	22.4
Low Density	5,176	19.8
Medium to High Density	655	2.5
Public /Semi-public / Institutional	3,174	12.2
Right-of-Way	3,312	12.7
Industrial	1,282	4.9
Park / Open Space	1,506	5.8
Commercial	962	3.7
General	899	3.4
Downtown	63	0.2
Total Developed	16,068	61.6
Land Use Category	Acres	Percent (of Total Land Area)
Vacant / Agricultural	9,243	38.4
Total Land	25,311	97
Land Use Category	Acres	Percent (of Total Land Area)
Water	771	3
Total City	26,048	100

Note:

The acreage calculations are not perfectly accurate due to existing inaccuracies in the City's parcel base, but are sufficient for planning purposes. All acreages have been rounded to the closest whole number.



LEGEND

-  City Boundary
-  Railroad
-  Low Density Residential
-  Medium to High Density Residential
-  Downtown Commercial
-  Commercial
-  Industrial
-  Public/Semi-public/Institutional
-  Park/Open Space
-  Open Water
-  Vacant

Existing Land Use

Figure 7-2



INDUSTRIAL

Industrial uses make up a moderate portion of the city's land area. Approximately eight percent of the developed area of the city is used for industrial purposes. Industry is located in a number of areas throughout the city, but the largest concentrations exist along the rail line running east-west through the city, and in the southern portion of the city along County State Aid Highway (CSAH) 75 and between CSAH 75 and the Mississippi River. Some of the larger industrial parks include the airport business park, the I-94 Industrial Park, the St. Cloud Industrial Center and St. Cloud Industrial Center West, and the Apollo Industrial Park.

PARKS / OPEN SPACE

St. Cloud has 1,506 acres of parks and open space areas, accounting for nine percent of the developed land use in the city. There are a total of 86 parks scattered throughout the city. The developed parks range from neighborhood parks to regional parks.

COMMERCIAL

Commercial uses make up a relatively small portion of St. Cloud's total land area. There are approximately 962 acres of commercial development, which account for six percent of the city's total developed area. Commercial uses are concentrated primarily in the downtown; along major transportation corridors, particularly Trunk Highways 23 and 10; and in the western portion of the city along and between CSAH 75 and Trunk Highway 23/Division Street.

The downtown area consists largely of older one to three-story buildings with smaller retail and service-oriented commercial establishments facing the street. There are few new commercial structures in the downtown area and there are relatively few vacant spaces in the downtown. Larger retailers tend to be located around the Trunk Highway 23/15 node, including a regional shopping mall, Crossroads Center, and highway-oriented businesses such as fast food restaurants, convenience stores, gas stations and other auto-oriented businesses.

VACANT / AGRICULTURAL

This category includes vacant land, which could be available for development, including existing undeveloped, platted lots and land that had been actively used for some purpose, but which has been abandoned. In this case, buildings on the site associated with the former land use could be still standing but vacant, or they could be already torn down. Vacant land does not include park or open space land owned or controlled by a government agency, such as the city, a township, the county, or the state, or a private organization such as the Nature Conservancy, which are all classified as parks/open space. Large yards or spacious grounds around and owned by another use, such as a school playground, are also not included; these are classified with the related primary use.

This category also includes agricultural land. Although St. Cloud is a growing and thriving urban center, agricultural uses currently

comprise a portion of the city's total land area. These are located primarily in the southern area of the city. Although some of this land is actively farmed, it is in the path of urban development and may be suitable for residential, commercial and industrial uses in the near future.

Vacant and agricultural land comprises 9,243 acres, or 38 percent of the city's total land area. However, it is worth noting that a fairly large portion of this area, 23 percent, is floodplain or wetland.

WATER

Open water comprises 771 acres or approximately 3 percent of the total city. The primary water feature in St. Cloud is the Mississippi River. Lake George, located just southwest of the core downtown area, is also an important water feature in St. Cloud, as is the Sauk River. These water bodies are some of the prime scenic and recreational features of the city, and efforts to preserve them should be continued and enhanced where appropriate.

WETLANDS AND FLOODPLAIN

Shown on the *Intrinsic Suitability Analysis* map (Figure 7-1), wetland areas are identified by the National Wetlands Inventory. Floodplains are identified by the National Flood Insurance Program. There are approximately 3,511 acres of wetlands and floodplain areas within St. Cloud, accounting for nearly 14 percent of the city's current total land area. Some of the city's wetlands are within "developed" parcels, but may also be located inside parks, agricultural lands or other undeveloped areas. The amount of wetlands is expected to increase as the city annexes additional lands.

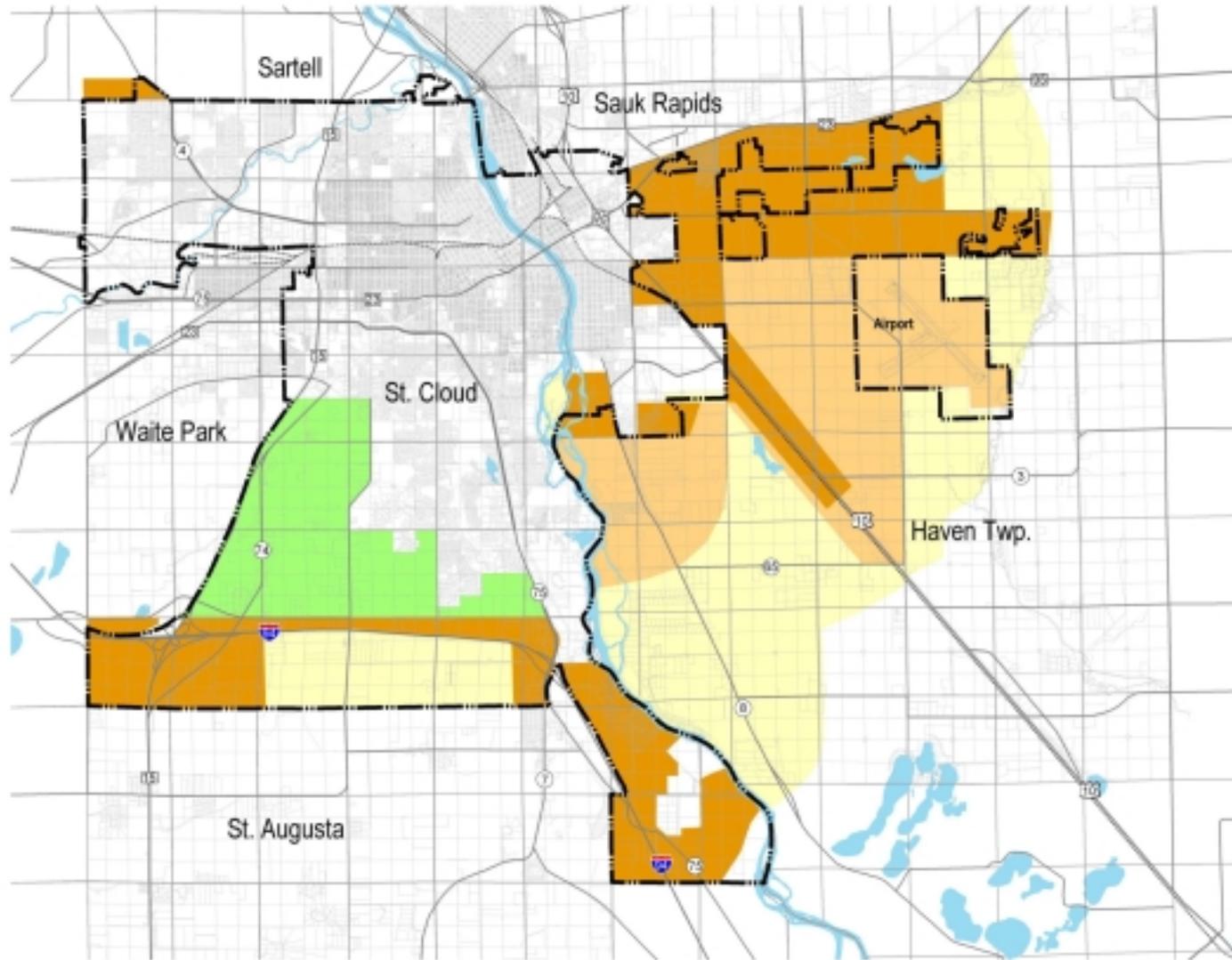
CITY GROWTH AREAS

This Comprehensive Plan identifies future land uses for significant undeveloped areas, both within and outside the city. The areas designated for future growth and development within this Plan were identified as growth areas in two previous planning documents: the 1993 Comprehensive Plan, and the 2000 St. Cloud Area Joint Planning District Plan ("District Plan"), which are described below.

The Future Land Use Plan contained within this chapter identifies desired future land uses within the identified growth areas at full urbanization many years into the future. Development in these areas should occur to the extent possible in a staged, compact and orderly fashion as city services are available.

RELATIONSHIP TO THE DISTRICT PLAN

The District Plan is the product of a cooperative planning effort involving the five cities of Sartell, Sauk Rapids, St. Cloud, St. Joseph and Waite Park; as well as Benton, Sherburne and Stearns Counties. It serves as a framework to guide these communities in their local



LEGEND

- Current City Boundary
- Open Water
- Growth Areas from the 2000 District Plan:
 - Primary Growth Area
 - Secondary Growth Area
 - Ultimate Service Area
- Growth Areas from the 1993 Comprehensive Plan:
 - Significant Growth Areas Remaining from the 1993 Comprehensive Plan

St. Cloud Growth Areas

Figure 7-3



comprehensive planning and growth management efforts. It establishes growth areas outside each city in the St. Cloud area, which are categorized as “Planned Urban Areas” (primary and secondary) and the “Ultimate Service Area”. The areas that were anticipated to accommodate St. Cloud’s growth are shown in Figure 7-3, *St. Cloud Growth Areas*.

According to the District Plan, the Planned Urban Areas lie outside of existing urbanized areas and are in the direct path of urban growth. These areas should be protected against development patterns that may hinder their ultimate transition to urban use. The primary areas are expected to develop at urban densities, with urban services within the next 20 years. Lands within the Secondary Planned Urban Areas are not expected to urbanize until beyond the 20-year horizon, but still need to be preserved for urban development.

The Ultimate Service Area is the area that can ultimately be provided with wastewater services from the St. Cloud treatment plant. According to the District Plan, this land is not expected to be used for urban development for some time to come, but still represents an asset to the St. Cloud area and should be protected from large lot, unsewered development and other premature development. Development should also be carefully coordinated with adjacent cities to ensure it follows planned growth patterns. Until such time as full urbanization occurs, a variety of land uses not requiring urban services are suitable for these areas at rural densities including agriculture, residential, industrial and commercial.

This Comprehensive Plan identifies future land uses for the entire city and most of the land within its “Ultimate Service Area” identified in the District Plan.

1993 COMPREHENSIVE PLAN GROWTH AREAS

The 1993 Comprehensive Plan identified growth areas, which at the time were outside the city limits. Today, all of these areas have been annexed into the city, but significant portions of them remain largely undeveloped, as shown in Figure 7-3.

DEVELOPMENT ALTERNATIVES

While it is true that alternative choices and strategies are considered throughout the planning process, in this context the term “alternatives” is used to refer to basic land use and growth approaches that employ fundamentally different strategies to basic community shaping forces.

For the 1993 Comprehensive Plan, alternative growth scenarios were prepared based on a set of constant and variable forces. These included:

Constant Forces

- Residential, commercial and industrial growth projections
- The presence of numerous wetlands throughout the area
- Sanitary sewer capacity

Variable Forces

- Level of intergovernmental cooperation
- Development pattern (density, urban vs. rural)
- Major road pattern
- Neighborhood form
- Future growth pattern of major institutions
- Location and nature of major retail centers
- Amount, location and pattern of open space
- Future abandoned railroad areas and older industrial uses

In terming the first set of forces constant, the alternatives analysis did not mean that they could and would not be shaped by comprehensive plan strategies; rather, that they represented tangible and measurable factors that were held constant, in part to better emphasize the effects of the different choices related to the variable forces.

Development forecasts were prepared by Maxfield Research Group for residential, commercial and industrial growth. From these projections, four alternative growth scenarios were constructed based upon the variable forces. A summary of each is included in the Appendices.

ALTERNATIVE A – 1993 PLAN

The four alternatives were analyzed and reviewed by the Comprehensive Planning Committee. The Committee chose Alternative A as the alternative that best portrayed the ideal growth pattern for the city of St. Cloud. Following is a summary of the Alternative A scenario.

The Alternative A development scenario assumes a high level of cooperation both between and within governments — higher than existed at that time. Given that cooperation, the scenario depicted a regional approach to growth and development. Under that scenario, the major plan elements played out as follows:

Pattern of Development

Optimally, the scenario assumed all premature and sprawling development would be prevented through a combination of stringent restriction for on-site sewage disposal systems and an enforceable regional plan to open new areas for development strategically, only after previous areas have been filled and wastewater treatment capacity efficiently utilized.

The scenario recognized, however, that market forces would make it difficult to achieve regional symmetry, primarily an evenly distributed development pattern around the Division Street corridor. The anticipated pattern would lean toward the south and northwest. The scenario suggested that focusing amenities in less desirable areas to the east and southwest could alter the pattern sufficiently to the east.



Alternate A. Land Use



1993
Comprehensive
Plan Update and
Market Forecast

Designers, Illustrators and Planners, Inc.
Market Research Group, Inc.
Mark L. Eddy, President, Inc.
10000 Poplar Avenue

-  Existing Residential and Institutional
-  Commercial
-  Industrial
-  Open Space
-  New Multi-Family
10,000 Units @ 7.5 units/ac.
-  New Single Family
10,000 Units @ 0.95 units/ac.
-  Major Arterial
-  Arterial
-  Thoroughfare
-  Parkway Thoroughfare

Alternative A - Land Use
1993 St. Cloud Comprehensive Plan

Figure 15

Market Forecasts

The regional market forecasts suggested the following development to occur within a 20-year timeframe:

- 500,000 square feet of retail
- 450 acres of industrial
- 10,000 units of multi-family residential
- 10,000 single-family residential units distributed:
 - 7,500 units @ 3 dwelling units per acre
 - 1,500 units on 2 acre lots
 - 1,000 units on 5 acre lots
- 16.4 square miles

Road Pattern

- Regional parkway/beltway on 25 miles
- Reconciled Area Planning Organization (APO) plan
- Bridge crossing to the south
- Improved downtown access
- Internal St. Cloud parkway collector system including 10th/ Michigan Avenue

Neighborhood Form

- Continuation of old St. Cloud neighborhood pattern @ 3 dwelling units per acre; about half the density of the oldest neighborhoods, similar to the east side
- Focused on park, school, daycare, community center, etc. within ¼ to ½ mile walking distance
- Integrate multi-family, duplex, and 3- 6 unit buildings into neighborhoods
- 25 percent larger estate type development “out in the country”

Institutions

- Orderly expansion plans developed for SCSU and St. Cloud Hospital
- Orderly transition from institutional to single family neighborhoods
- Improved institutional and adjoining multi-family architectural integrity
- Greater utilization of downtown by both institutions for out-patient, classroom and conference facilities

Major Centers

- Division Street corridor seen as “downtown” of the region
- Coordinate land use, parking, circulation, transit design and appearance
- Unified theme and promotion
- Joint management between Crossroads and downtown

Open Space

- 25 mile parkway/beltway
- Three regional parks connected by the parkway
- Neighborhood parks as focal points for new development
- Two new golf courses
- Wetland utilized as open space and private development amenities
- Mississippi river corridor from Sartell to Minneapolis
- Extensive system of rail trail corridors and older railroad related industrial sites converted to community park use

Older Railroad Industrial and Rail Corridors

- Corridors converted to trails (except east side Burlington Northern, Amtrak line)
- Waite Park and St. Cloud railroad yards converted to parks for Superfund or ISTEA projects

KEY CHANGES SINCE THE 1993 PLAN

A number of the opportunities afforded under the Alternative A scenario from the 1993 Plan have been realized or are in progress, including the following:

Pattern of Development

- Opportunity/ Assumption: Premature and sprawling development prevented through a combination of stringent restriction for on-site sewage disposal systems and an enforceable regional plan to open new areas for development strategically.
 - A regional plan has been adopted which identifies planned growth areas and recommendations to prevent premature development that may hinder future urbanization of those areas.
 - The city has actively worked with, and continues to work with, surrounding counties and townships to minimize urban sprawl through the use of orderly annexation agreements:
 - The merger of the city of St. Cloud and St. Cloud Township;
 - The court-ordered annexation of a portion of the former St. Augusta Township;
 - An orderly annexation agreement with Minden Township;
 - Orderly annexation agreement with LeSauk Township and
 - The Sherburne County residential density requirement of 1 unit per 40 acres have all decreased the likelihood of premature, sprawling development.
- Opportunity / Assumption: Focusing amenities in areas to the east and southwest to facilitate regional symmetry in development.
 - Airport expansion plans; potential additional expansion opportunities.
 - The city of St. Cloud has acquired property along Neenah Creek and some of the planned future Plum Creek Regional Park.

Market Forecasts

- Opportunity / Assumption: The market forecasts suggested the following development to occur within a 20-year timeframe:
 - 500,000 square feet of retail
 - Rainbow Village, Crossroads Center expansion underway, 2nd Street South development.
 - 450 acres of industrial
 - Since 1993 the I-94 Business Park has opened, which includes New Flyer, Antioch, and future home to Anderson Trucking.
 - In 2001, the 372 acre Airport Industrial Park was annexed, zoned, and platted in the Minden Township Orderly Annexation Area. No construction has commenced.
 - 10,000 units of multi-family residential
 - 1,726 multiple family residential units have been constructed, and 165 multiple family residential units have been annexed between 1993 and 2002.
 - 10,000 single-family residential units distributed
 - 1,849 single-family homes have been constructed, and 2,813 single-family homes have been annexed between 1993 and 2002.
 - 16.4 square miles
 - At the end of 1992, St. Cloud was approximately 15.5 square miles in area. Between 1993 and 2002 the city has annexed approximately 25.3 square miles, including land incorporated into the city when it merged with St. Cloud Township, for a current total of approximately 40.8 square miles.

Road Pattern

- Opportunity/ Assumption: Regional parkway/beltway on 25 miles
 - A conceptual beltway has been identified in the District Plan.
 - St. Cloud Southwest Arterial Alignment Study identifies a preferred alignment for a major component of the beltway along 33rd Street South from CSAH 75 to Trunk Highway 15, then connecting to CSAH 137.
 - The APO has identified a preferred alternative for a portion of the beltway known as the West Metro Corridor. The preferred alignment establishes a new east-west collector from County Road 1 in Sartell to County Road 4.
- Opportunity/ Assumption: Bridge crossing to the south
 - MnDOT has been studying several alternatives to locate a new, high capacity roadway and Mississippi River bridge to connect I-94 and Trunk Highway 10.
 - Among the alignments MnDOT is studying, the District Plan identifies “Alternate A” as the preferred alignment. However, alternative alignments may be appropriate. (See discussion under Proposed I-94 to Trunk Highway 10 Connection below.)
 - The District Plan also identifies a second, local crossing approximately aligned with 33rd Street South. An APO scoping study concluded that a 33rd Street South alignment on the west side of the River was the preferred location. The potential alignment on the east side is yet to be determined. (Note: Possible alignments were identified during the Haven Township Growth Area Master Plan process. See Haven Township Growth Area Master Plan below.)

- Opportunity/ Assumption: Improved downtown access
 - The “ring road” and Mall Germain have been removed to improve downtown access.
 - A 1st Street North to 2nd Street North connection has been installed.
 - MnDOT’s proposed plan for Trunk Highway 10 will eliminate direct access to Trunk Highway 10 from East St. Germain Street. Access will be via frontage roads, which will be access Trunk Highway 10 at Trunk Highway 23 and Benton Drive.
 - East St. Germain Street is planned to be converted from two to four lanes from downtown to Trunk Highway 10 to improve traffic movement.
- Opportunity/ Assumption: Internal St. Cloud parkway collector system including 10th Street/ Michigan Avenue
 - 10th Street South has been extended to connect with CSAH 75. Portions have also been widened, with plans for additional widening underway.
 - Cooper Avenue expansion plans
 - As part of MnDOT’s plan for Trunk Highway 10, Michigan Avenue will be reconnected to Trunk Highway 10 via an interchange.

Neighborhood Form

- Opportunity/ Assumption: Neighborhood form focused on park, school, daycare, community center, etc. within ¼ to ½ mile.
 - The city has been moving away from smaller, “tot lot” type parks to acquiring land for larger regional and neighborhood parks.
- Opportunity/ Assumption: Neighborhood form integrating multi-family, duplex and 3-6 unit buildings into neighborhoods.
 - The development of the Westwood PUD exemplifies the city’s commitment to the integration of varying densities of residential development.

Institutions

- Opportunity/ Assumption: Orderly expansion plans developed for SCSU and St. Cloud Hospital
 - Status: SCSU adopted a master plan, which identifies growth plans and objectives.
 - The city and hospital have worked together to expand the MD, Medical District zoning around the campus to accommodate expansions.

Open Space

- Opportunity/ Assumption: Three regional parks connected by a parkway.
 - Stearns County has acquired Quarry Park. (Expansion is expected in the future.)
 - The city of St. Cloud has acquired property along Neenah Creek and some of the planned future Plum Creek Regional Park.
- Opportunity/ Assumption: Two new golf courses.
 - The Fairways (18 hole) and Boulder Ridge (9 hole) have been established.

- Opportunity/ Assumption: Extensive system of rail trail and older railroad related industrial sites converted to community park use / corridors converted to trails
 - Construction of the Beaver Island Trail (with future expansion north to Hester Park).
 - Connections to the Lake Wobegon Trail and Warner Lake are planned.
 - In the future, the city may explore running trails parallel to active rail lines, on railroad property.
 - Currently, the city will consider trail development toward park dedication requirements during platting.

In addition, a number of changes have occurred that impact the alternative assumptions, projections and variable forces. Following are some of those changes:

- Changing demographics
 - Population growth
 - Household size
 - Median age
 - Population dispersal within the region
 - Ethnic make-up of the community
- Health care, Technical College and St. Cloud State University expansions
- Changing business climate
 - Fingerhut workforce reduction and building vacancies
 - Significant new commercial and industrial I-94 Industrial Park established: Antioch and New Flyer developments, Anderson Trucking
 - Rainbow Village construction
 - Crossroads expansion underway
 - 2nd Street South Development
- Merger of Rockville, Pleasant Lake and Rockville Township into the city of Rockville
- Additional growth area along I-94

Proposed I-94 to Trunk Highway 10 Connection

A key factor in the city and region's future development and form will be the placement of a new high capacity roadway and Mississippi River bridge to connect I-94 and Trunk Highway 10. As mentioned previously, MnDOT has been studying several alternative alignments. Among the alignments MnDOT is studying, the District Plan identifies "Alternate A" as the preferred alignment. However, alternative alignments may be appropriate as well. Following is a summary of the issues and considerations related to this decision:

- Impact of River Crossing on City/Regional Development Pattern
 - The east side of St. Cloud is inadequately connected with the remainder of the city and the western portion of the region.
 - Better access generally, and new bridge crossings specifically, are critically important to both the city's and the region's future.
 - The eastern and southeastern side of the St. Cloud region constitutes the majority of St. Cloud's growth potential.

- Considerations Relating to Alternate A Crossing
 - The land in this area presents the least constraints for development (environmental constraints, soils, slopes, etc.)
 - The Joint Planning District Plan contained a number of key requirements:
 - The identification and protection of primary, secondary and ultimate urban growth areas,
 - A long range master plan for wastewater treatment and conveyance, and
 - Support for an integrated transportation system in the region, including the 33rd Street South river crossing and Alternate A freeway connection
 - The western portion of Sherburne County contains its most viable agricultural land.
 - Many local residents and township officials are opposed to urban development in the near future.
 - Fortunately, the Sherburne County and Haven Township have agreed to adopt zoning that will limit premature, unsewered development in the interim.
 - The long-term preservation of the area for agricultural use and the orderly growth of the area in accordance with an adopted master plan are conflicting policies.
 - The Comprehensive Plan will need to balance these objectives and policies.

- Findings Regarding Alternates A & C (D)
 - Both options will improve access to eastern St. Cloud.
 - Both will involve the upgrading of Trunk Highway 10 from Clearwater to St. Cloud to freeway standards.
 - The current Alternate A/Trunk Highway 10 interchange design is complicated and cumbersome.
 - The matter of local access along Alternate A is uncertain and could require significant local cost.
 - If Alternate A goes in without a major local access interchange between I-94 and Trunk Highway 10, it will create a major barrier and have a detrimental effect on the local street system in this area.
 - Under a reasonable set of assumptions the “C” (or D) Alternate could facilitate a better alignment/crossing for the parkway.
 - Based on current information, it appears both alternates could be designed to address safety concerns.
 - It is unlikely that the wastewater interceptor would cross the river on a bridge structure.
 - According to MnDOT, both options would serve weekday and weekend traffic comparably.
 - With the current interchange design, it is unlikely that Alternate A would provide any particular advantage from the perspective of attracting and supporting economic development.

- Next Steps
 - Should St. Cloud determine Alternate A is not the city’s preferred alignment, it should:
 - Share its findings and thought process with the APO and the St. Cloud Area Joint Planning Board.
 - St. Cloud should seek to facilitate a dialogue and achieve an amendment to the District Plan that is consistent with its position regarding the freeway connection between Trunk Highway 10 and I-94.
 - St. Cloud and its regional partners should strongly assert that new position through the MnDOT planning and environmental review processes.
 - Should St. Cloud continue to support Alternate A, it would want to have a minimum of one local access to the corridor.

LAND USE ALTERNATIVES EXERCISE

A number of the key variable forces that drove the alternatives analysis for the 1993 Plan have been realized. With the adoption of the District Plan, intergovernmental cooperation has been elevated and regional growth areas identified. Thus, alternatives for the 2003 Plan focused on identifying land use and development patterns that reinforce the regional vision, rather than on preparing market forecasts, identifying growth areas and intergovernmental cooperation.

In July of 2002, the project consultants facilitated a land use exercise with the Planning Advisory Committee (PAC). PAC members were separated into small groups. Each group was provided with the following base maps:

- Existing land use
- Intrinsic suitability analysis
- Transportation issues
- Planned growth areas from the District Plan

The groups were also provided with paper “chips” representing various land use and development types. They were then asked to arrange the chips on a blank map of the city. Although each group came up with a different plan for St. Cloud and its growth areas, a number of commonalities emerged. Following are the comments categorized by general geographic area:

Airport Area

- Protect the long term viability and expansion potential of the airport
- Industrial/business uses wherever possible
- Preserve environmental corridor
- Possible regional park near Donovan Lake
- Need for an additional Mississippi River crossing

Southern Area

- Protect environmentally sensitive areas
- Highway commercial near future interchange of Trunk Highway 15 and 33rd Street South
- Protect function and mobility of 33rd Street South corridor as an arterial street
- Mixed density residential allowing flexibility of design and density
- Greenway corridor along 33rd Street South and Mississippi River corridors
- Protect Neenah Creek Park and potential school site for community facilities
- Transition from high density to mixed density to low density residential

West St. Cloud

- Continue mixed density development design in a manner similar to the Westwood PUD

Haven Township Growth Area

- Plan for major regional utilities corridor serving parts of the Haven Township growth area, Minden Township orderly annexation area and Sauk Rapids growth area
- Utilize a town center approach for new development allowing mixed residential and commercial sites
- Encourage low density development along the Mississippi River
- Development must have adequate access to transportation facilities

Environmental Issues

- Preserve the Mississippi River corridor for regional park or trail corridor
- Plan for future Mississippi River crossing to accommodate anticipated growth areas in Haven and Minden Townships
- Encourage regional greenway corridors along major traffic routes and environmental corridors
- Support expansion of wildlife areas as a nature center
- Donovan Lake area as a possible regional park
- Protect Neenah Creek Park for community wide facilities

Transportation Issues

- Transportation / greenway corridor
- Plan for adequate river crossings
- Integrate Northstar corridor site into local and regional plans
- Support a I-94 to Trunk Highway 10 river crossing

General

- Strong support for mixed residential neighborhoods that allow a variety of housing types and densities within a single development

LAND USE PLAN

This Land Use Plan focuses on providing additional areas for residential, commercial and industrial growth in St. Cloud and its planned growth areas while supporting and maintaining the existing developed core of the community. The Land Use Plan and associated map (Figure 7-4, *Land Use Plan*) describe the future land use designations for the city and its planned growth areas. The designations govern zoning and the city's future land use form. They provide a general framework for growth and development within St. Cloud and its growth areas at full development. The Plan text provides the policies, standards and principles to guide the city's future physical form and function; and serves as the basis for updating the zoning ordinance and other development controls that are enforceable under the city's police powers. The Land Use Plan map illustrates the land use categories for which the policies will apply.

OBJECTIVES

The Land Use Plan accomplishes several objectives: (a) it reflects existing development and generalized land use patterns, (b) it addresses the need to plan for the orderly expansion of urban development into the neighboring rural areas, (c) it supports the continuation of rural land uses in those areas until urban development occurs, and (d) it recognizes the natural environment. The land use and growth recommendations contained in this Plan provide for a balance between these components.

It is the intent of this Plan to facilitate or create a community within which these elements exist:

- A variety of housing types,
- Adequate parks and community facilities,
- An efficient transportation system, and
- Ample business and commercial opportunities for residents and visitors

BASIC PLANNING PROVISIONS

In addition to the goals and strategies, there are a number of basic principles that are important to implementing the Land Use Plan as a whole. These are described below:

- Zone property in accordance with this Plan.
- Ensure adequate collector street access to all existing and new development in the city and its identified growth areas.
- Work to interconnect existing and new residential neighborhoods, parks, community facilities, schools and other points of interests with the transportation and trail systems.
- Work cooperatively with surrounding townships and counties to plan development of the city's designated growth areas.
- Work cooperatively with surrounding townships and counties to prevent urban development and limit densities in the city's designated growth areas until such time as development is imminent and those lands are annexed into the city.
- When development is proposed and lands are annexed, the development sites should be zoned in accordance with the Land Use Plan map.

PHYSICAL CHARACTER

There are five major elements that define the physical character of the city: (a) development pattern (density, urban vs. rural), (b) major road pattern, (c) neighborhood form, (d) future growth pattern of major community facilities/open space and (e) location and nature of major business centers. Several guiding principles have been established for each element as follows:

PATTERN OF DEVELOPMENT AND NEIGHBORHOOD FORM

- Promote infill development in the developed areas of the city.
- Promote a compact urban development pattern in new residential areas.
- Maintain agricultural densities in areas outside of the city in its planned growth areas until such time as urban development is imminent and the lands are annexed.
- Encourage open or green space in new residential neighborhoods.
- Integrate new multi-family, small lot, and life-cycle residential development throughout the city.

ROAD PATTERN

- Preserve the existing street pattern throughout residential infill areas.
- Establish collector streets through the city's planned growth areas.

OPEN SPACE/COMMUNITY FACILITIES

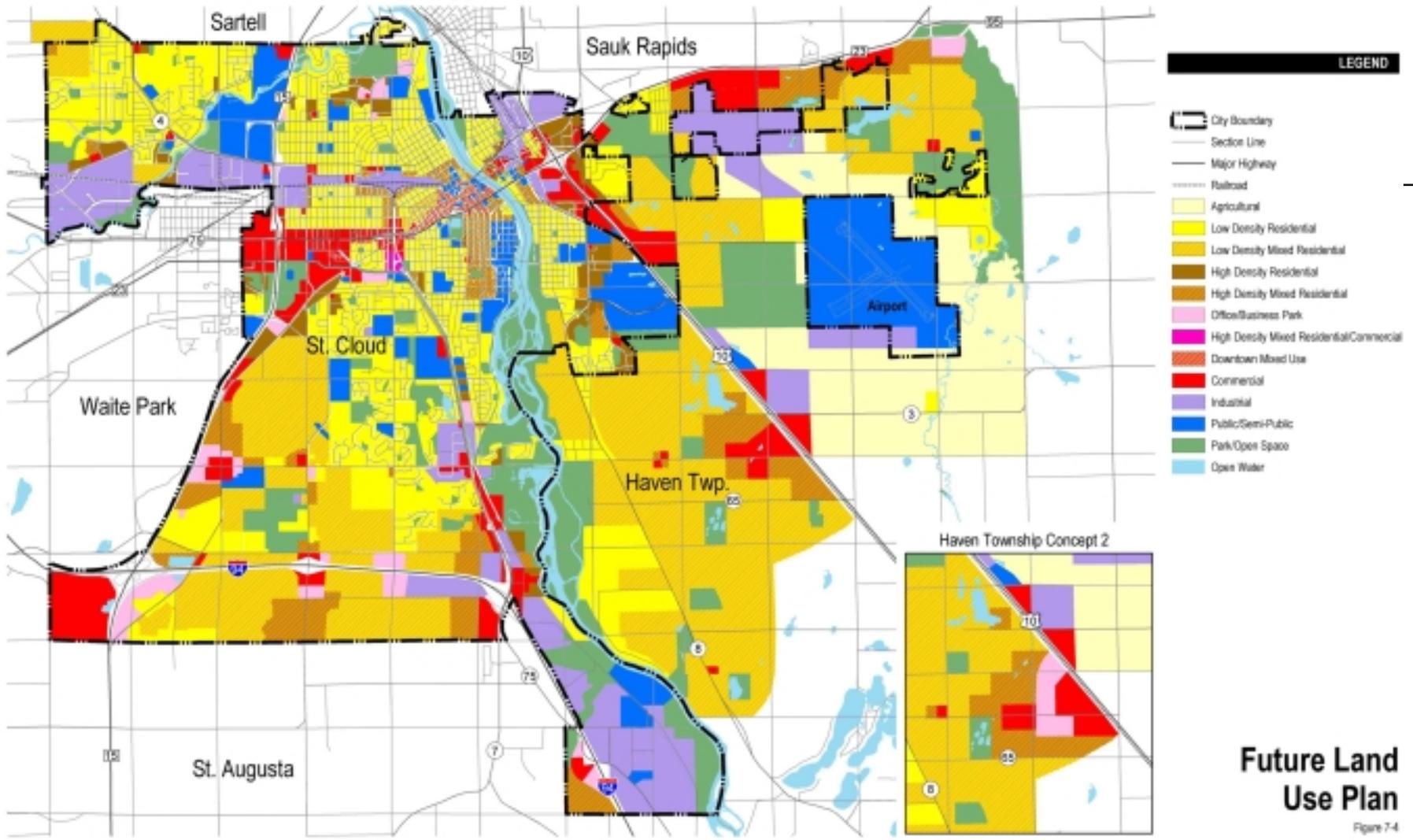
- Strategically locate community and neighborhood sized parks/open space.
- Plan pedestrian and bike corridors that connect commercial areas, parks and other points of interest.
- Continue upgrading and maintaining streets, parks, water/sanitary sewer and other infrastructure.

BUSINESS DISTRICTS

- Guide commercial and industrial expansion primarily to areas with adequate transportation access and infrastructure availability.
- Strengthen existing main commercial areas.

FUTURE LAND USE DESIGNATIONS

Nine unique land use categories have been identified to guide growth and development within St. Cloud and its planned growth areas. Below, each land use designation category is described. These are shown on Figure 7-4, *Land Use Plan*. The acreages for each land use category are detailed in Table 7-2, *Future Land Use, City of St. Cloud*. Also, a more detailed discussion of land use within the Master Plan areas is provided within those respective sections of this chapter.



Future Land Use Plan

Figure 7-4

RESIDENTIAL LAND USE CATEGORIES

The following policies are intended to guide the development of residential land uses identified on the Land Use Plan map. They describe the intent and implications of the residential land use categories. The categories and policies will be fully detailed in the zoning ordinance, which is one of the legal implementation tools for land use goals and policies.

Low Density Residential

The purpose of this category is to identify existing residential development with densities at 1-6 units per acre. Where it makes sense to expand an existing neighborhood with a low-density residential designation, this category should be used.

High Density Residential

The purpose of this category is to identify existing residential development with densities at 6-24+ units per acre. Where it makes sense to expand an existing neighborhood with a high-density residential designation, this category should be used.

Low Density Mixed Residential

The purpose of this category is to accommodate future residential uses on currently undeveloped land with a variety of housing types at low density, up to 6 units per acre. The following policies shall apply:

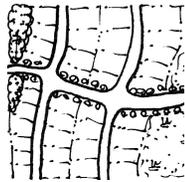
- The Low Density Mixed Residential category may allow single family detached, single family small lot, single family zero lot line, twin homes, four-plexes, townhouses or small apartments up to ten units per building, and similar low to medium density housing types within a given project or neighborhood.
- New housing developments 10 acres in size or less may develop with a single type of housing meeting the density and housing types within this category. A variety of housing styles within this single type is encouraged.
- New housing developments over 10 acres in size, but less than 20 acres in size, must provide at least two different housing types, one of which must account for at least 1/3 of the units in the project. A variety of styles within each housing type is encouraged.
- New housing development over 20 acres in size must provide at least three different housing types, each of which must account for at least 1/5 of the units in the project. A variety of styles within each housing type is encouraged.
- No more than 200 units of a single housing type will be allowed within one contiguous neighborhood without separation by a park or open space feature at least 200 feet in width, by significant number of housing units of another type, or by significant parcel of non-residential land use.
- Within the mix of units in a project, lower density housing types will be encouraged near other low-density housing types and lower activity areas. Higher density housing types will be encouraged near major roadways, non-residential uses, major activity areas, and other higher density housing types.
- Housing types shall be located within the project to be compatible with surrounding existing uses and with adjacent uses within the project, natural features, pedestrian access, roadways, and other pertinent site issues.
- An integrated system of natural areas, open space, recreational, and park elements shall be designed into all mixed residential projects, providing both internal and external connections.
- The specific policies and standards above can be varied within a Planned Unit Development (PUD) if there is demonstrated benefit to the community resulting from such flexibility.

High Density Mixed Residential

The purpose of this category is to accommodate future residential uses on currently undeveloped land with a variety of housing types at medium to high density, 6-24 units per acre. The following policies shall apply:

- The High Density Mixed Residential category may allow single family small lot, single family zero lot line, twin homes, four-plexes, townhouses, apartments, condominiums, and similar medium to high density housing types within a given project or neighborhood. A minimum of 6 units per acre overall is required in a given development project.
- New housing developments 5 acres in size or less may develop with a single type of housing meeting the density and housing types within this category.
- New housing development over 5 acres in size, but less than 10 acres in size, must provide at least two different housing types, one of which must account for at least 1/3 of the units in the project. A variety of styles within each housing type is encouraged.
- New housing development over 10 acres in size must provide at least three different housing types, each of which must account for at least 1/5 of the units in the project. A variety of styles within each housing type is encouraged.
- No more than 400 units of a single type will be allowed within one contiguous neighborhood without separation by a park or open space feature at least 200 feet in width, by significant number of housing units of another type, or by significant parcel of non-residential land use.
- Within the mix of units in a project, lower density housing types will be encouraged near other low density housing types. Higher density housing types will be encouraged near major roadways, non-residential uses, major activity areas, and other higher density housing types.
- Housing types shall be located within the project to be compatible with surrounding existing uses and with adjacent uses within the project, natural features, pedestrian access, roadways, and other pertinent site issues.
- An integrated system of natural areas, open space, recreational, and park elements shall be designed into all mixed residential projects, providing both internal and external connections.
- The specific policies and standards above can be varied within a PUD if there is demonstrated benefit to the community resulting from such flexibility.

EXAMPLES OF LOW AND HIGH MIXED DENSITY RESIDENTIAL DEVELOPMENT



< 10 acres

- One type of housing okay, single family is shown in this example



10-20 acres

- >1/3 of units single family
- <2/3 of units townhouses



20 acres +

- >1/5 of units single family
- >1/5 of units townhouses
- <3/5 of units apts/condos

COMMERCIAL AND INDUSTRIAL CATEGORIES

Industrial

The purpose of this category is to identify portions of St. Cloud and its planned growth areas that contain or should be developed for industrial use. Uses could include manufacturing, warehousing, assembly, truck terminals, mining, quarries, and other businesses that provide goods and services, but not directly to the public. Most future industrial development is intended to be located within industrial parks. An industrial park is a group of separate businesses located in one area of a city to concentrate their impacts, such as truck traffic, noise, etc.

Commercial

The purpose of this category is to identify portions of St. Cloud and its planned growth areas that contain or should be developed for general commercial use. Examples may include highway-oriented businesses such as fast food restaurants, convenience stores, gas stations and other auto-oriented businesses and large retailers. Limited office and service uses are appropriate in these areas as well.

The Land Use Plan also acknowledges the need to provide neighborhood commercial services throughout the city and its planned growth areas. The Land Use Plan designates several existing, larger neighborhood commercial areas as commercial. The Plan also recognizes the need to provide for neighborhood commercial services in new development within the city's planned growth areas. The Plan does designate some logical future neighborhood commercial areas as commercial, but additional areas may be appropriate as well.

It is essential that neighborhood commercial centers remain small scale, providing service primarily to the surrounding neighborhood. Larger, auto-oriented retail, office and service businesses are not appropriate neighborhood commercial uses. Also, the architecture and site design of neighborhood commercial areas must be compatible with the surrounding neighborhood. Such issues as building size, location on the lot, building materials, screening and other design issues are important.

Downtown Mixed Use

The purpose of this category is to provide for a variety of retail, service, public and office uses which are compatible with pedestrian movement and generate pedestrian activity in a compact, high-density environment. Residential land uses are also appropriate within this area, particularly high-density residential development.

Office, Business Park

The purpose of this category is to identify portions of St. Cloud and its planned growth areas that contain or should be developed for professional business and office use. It is anticipated that most new office development will be within planned business parks. Business parks typically contain a group of separate businesses concentrated in one area. These areas could include medical facilities, such as dentists, chiropractors, optometrists, etc., as well as other professional businesses, offices and services. Business parks may also include limited light manufacturing where offices are an integral part of the business operation. It may also include limited retail and service uses in support of office uses and employees, such as restaurants and convenience stations.

High Density Mixed Residential/Commercial

This designation applies to areas of the city where mixed-use (residential and commercial) development is encouraged. Although only one area on the Future Land Use map is designated High Density Mixed Residential/Commercial, additional mixed development areas may be appropriate through a PUD if there is demonstrated benefit to the community resulting from such flexibility.

PUBLIC AND OPEN SPACE CATEGORIES

Parks and Open Space

The purpose of this category is to identify portions of St. Cloud and its planned growth areas that contain existing or planned park and open space uses. Examples of park and open space uses include local and state parks, golf courses, wildlife areas, and other outdoor recreation facilities, as well as passive open space areas.

In addition to the parks and open space areas designated as such on the Land Use Plan map, new residential development should incorporate neighborhood parks as they are developed. The actual location of these parks/open spaces will be determined by the site design of each subdivision.

Public/ Semi-Public

The purpose of this category is to identify portions of St. Cloud and its planned growth areas for uses that benefit the public. This includes publicly owned uses, such as schools, city buildings, county buildings and utility/infrastructure related uses such as sewage treatment plants, power plants, etc. This also includes semi-public private institutional uses such as hospitals, colleges, churches, cemeteries, etc.

Both existing and known, planned public/ semi-public facilities are designated on the Land Use Plan map. Generally, existing community facilities should continue to be maintained and preserved at their current location. If a public facility or institution ceases to exist or moves from its present site, that site should be designated as the same use, other public / semi-public use, or the predominate land use that surrounds it until such time as a comprehensive plan amendment designates it differently. For example, if a church surrounded by low density residential relocates, the church property should either house a new church, other public use, or be designated for low-density residential development. In addition, new development should incorporate appropriate public/semi-public uses as they are developed. The actual location of these public/semi-public sites will be determined by the site design of each development.

INTERIM DEVELOPMENT

The Land Use Plan map identifies desired future land uses at full urbanization many years into the future. Many of these areas are currently undeveloped, and some are located outside the existing city limits. Prior to urban development, such areas should be protected against development patterns that may hinder their ultimate transition to the intended urban use. Thus, areas not currently developed should be maintained at very low-density residential and agricultural uses until such time urban development occurs.

**Table 7-2
Future Land Use Plan
City of St. Cloud
September 2003**

Land Use Category	Acres	Percent (of Total Land Area)
Residential	11,354	43.5
Low Density	5,630	21.6
Low Density Mixed	3,645	14
High Density	749	2.9
High Density Mixed	1,331	5.1
High Density Mixed Residential/ Commercial	23	0.1
Commercial	1,511	5.8
Downtown Mixed Use	75	0.3
Office	506	1.9
Industrial	2,815	10.8
Park / Open Space	2,457	9.4
Public /Semi-Public	3,258	12.5
Right-of-Way	3,312	12.7
Total Developed	25,311	97
Land Use Category	Acres	Percent (of Total Land Area)
Vacant / Agricultural	0	0
Total Land	25,311	97
Land Use Category	Acres	Percent (of Total Land Area)
Water	771	3
Total City	26,081	100

Note:

The acreage calculations are not perfectly accurate due to existing inaccuracies in the City's parcel base, but are sufficient for planning purposes. All acreages have been rounded to the closest whole number.

MASTER PLAN AREAS

The Land Use Plan and corresponding map outline the future use of land for the city and its planned growth areas. In addition, this Comprehensive Plan contains six Master Plan areas: Downtown, the Haven Township Growth Area, the Minden Township Orderly Annexation Area, the Airport Area, the I-94 Corridor, and the 33rd Street South Corridor. The Downtown Master Plan comprises its own chapter. The other Master Plans are included within this chapter.

The Land Use Plan should be adhered to when establishing zoning districts, approving plats, planning water and sanitary sewer infrastructure improvements and making zoning decisions, while the Master Plans should serve as additional guides. These Plans should be referenced in any orderly annexation agreements as well. The collector and arterial roadways shown on the Master Plans are also discussed in the Transportation chapter of this document.

MASTER PLANS

The city desires to provide an effective and efficient transition from rural to urban uses within its planned growth areas, while considering existing development and planning efforts of surrounding jurisdictions. In response, Master Plans were created for the undeveloped portions of the city and its planned growth areas in order to guide development in a logical and efficient manner and to protect growth, natural and transportation corridors.

There are five Master Plans contained in this section:

- Haven Township Growth Area
- Minden Township Orderly Annexation Area
- Airport Area
- The I-94 Corridor
- The 33rd Street South Corridor

Public involvement was an important component of the master planning processes. Subcommittees were established to guide the development of each Master Plan. Members of the subcommittees represented a broad cross section of interests and perspectives throughout the city and its planned growth areas, including residents, business owners, elected officials and other stakeholders. This group reviewed and commented on all work products and focused on preparing and recommending to the PAC the final Master Plans and attendant development principles for inclusion in the Comprehensive Plan.

Each Master Plan sets forth the basic development principles that have been embraced by the respective subcommittee, township officials where applicable, residents and city officials to guide future development.

The planning process for each Master Plan was divided into three phases:

- Background analysis of existing land uses and conditions,
- Public input meetings and issue identification, and
- Master Plan development and approval.

Public input meetings were held throughout each phase.

Below is a summary of the key issues, planning process and development principles for each Master Plan area. Also included are maps representing the locational dimensions of each Master Plan.

MINDEN TOWNSHIP ORDERLY ANNEXATION AREA MASTER PLAN

Portions of the city's Ultimate Service Area lie within Minden Township. Most of that area is already included in an orderly annexation agreement. The Master Plan for Minden Township includes all land within the orderly annexation area, which is located between Trunk Highway 23 and the Benton County line, and between Trunk Highway 10 and the Elk River.

INVENTORY AND ANALYSIS

- The entire Master Plan Area is included in an orderly annexation agreement between the city of St. Cloud and Minden Township.
- Numerous tracts of land have been annexed to the city throughout the Master Plan Area.
- Trunk Highways 23 and 95 are arterial roadways with traffic counts approaching 13,000 average daily trips (ADT) and they border the entire northern edge of the Master Plan Area.
- There are three full crossings or full intersections on Trunk Highway 23.
- An improved frontage road system and improved access to the Master Plan Area has been studied by the APO and MnDOT, which will improve the transportation system for the area.
- Benton County Road 8 and Benton County Road 47 run east and west through the area.
- There are three collector streets running north and south (25th Avenue Northeast, 35th Avenue Northeast and 55th Avenue Northeast) through the Master Plan Area.
- There are portions of a frontage road running parallel to Trunk Highway 23.
- Property immediately adjacent to the southern side of Trunk Highway 23 is sparsely developed with residential, commercial and industrial uses.
- A large tract in the middle of the Master Plan Area is dedicated to the Airport Industrial Park.
- Urban development exists on the east side of the Master Plan Area, consisting of single and multi-family dwelling units, and commercial and industrial development.
- Large lot, single-family development exists on the east side of the Master Plan Area.
- Portions of the Master Plan Area have sewer access, which runs east of the Airport Industrial Park along County Road 47 to the Fairways Golf Course and adjacent residential development.
- The area has an abundance of natural and wetland areas, including the Elk River, which serves as the eastern boundary of the Master Plan Area.
- Donovan Lake is located in the east-central portion of the Master Plan Area and provides a natural amenity to the area. Residential development plans have been created that incorporate Donovan Lake, including potential park and trail development.

- The Master Plan Area is located north of the St. Cloud Regional Airport, which overlaps with the A and B Flight Zones of the airport. These flight zones limit the amount and type of development within the zones. Included in the B Zone is the southeast corner of the Airport Industrial Park, which will limit the use of this property:
 - A Zone – no development allowed
 - B Zone – height, use and occupancy limitations
- Farming and other agricultural uses are prevalent in the area.
- Existing sewer capacity will allow current development plans to continue. Additional sewer capacity will be needed to allow further development within the Master Plan Area. Sewer is available in limited portions of the Master Plan Area including the entire western edge of the area, Airport Industrial Park and the Fairways development.
- MnDOT has recently completed a study to redefine the function of Trunk Highway 10. (*Trunk Highway 10 Interregional Corridor (IRC) Study*) Trunk Highway 10 will become a “freeway” facility through the community. The southwestern edge of the Master Plan Area is adjacent to Trunk Highway 10. The study recommends limited access to Trunk Highway 10 in the future, which has implications on future and existing commercial development along the corridor. A new interchange is proposed at Michigan Avenue and County Road 7 (Del Tone Road). Improvements to the existing frontage road system are planned to efficiently move people and goods and services within the area. (Within the Haven Township Growth Area Master Plan).

PROCESS AND ISSUES

The planning process for the Minden Township Orderly Annexation Area Master Plan began in January 2002, with the first public input meeting held in February of 2002. Participants identified general issues that will impact development in the Master Plan Area, which were used as a basis for analyzing potential development scenarios for the area. The following issues were identified:

- Potential airport expansion (12,000 ft runway)
- Additional public input
- Coordination/cooperation between Minden and Haven Townships, also Sherburne and Benton Counties regarding roadways, sewer, etc.
- Potential large “big box” retail along Hwy 23
- Industrial development infill
- Development within Airport Impact Zones
- Enforcement of the new residential-airport zoning
- Local well protection
- Residential development and the farming community
- Residential development and airport noise
- Wetlands/watershed
- Mayhew Creek/Elk River Floodplain
- Federal, state and local funding

A meeting held in May focused on the review of current issues and solicited public input on future land use within the area. The Master Plan subcommittee and citizens were presented with future land use alternatives, which they discussed and revised via small group exercises.

Land use recommendations included:

- Planning in accordance with the St. Cloud Regional Airport plans
- Buffering between land uses
- Alternatives for future north/south road corridors
- Future location of an “events center”
- Regional park location
- Protection of prime agricultural land
- Identification of unsuitable soils
- Parks and open space
- Intergovernmental cooperation

Subsequent meetings were held in July, August and September to reaffirm the Master Plan recommendations and obtain final acceptance of the Plan by the Master Plan subcommittee members.

DEVELOPMENT PRINCIPLES

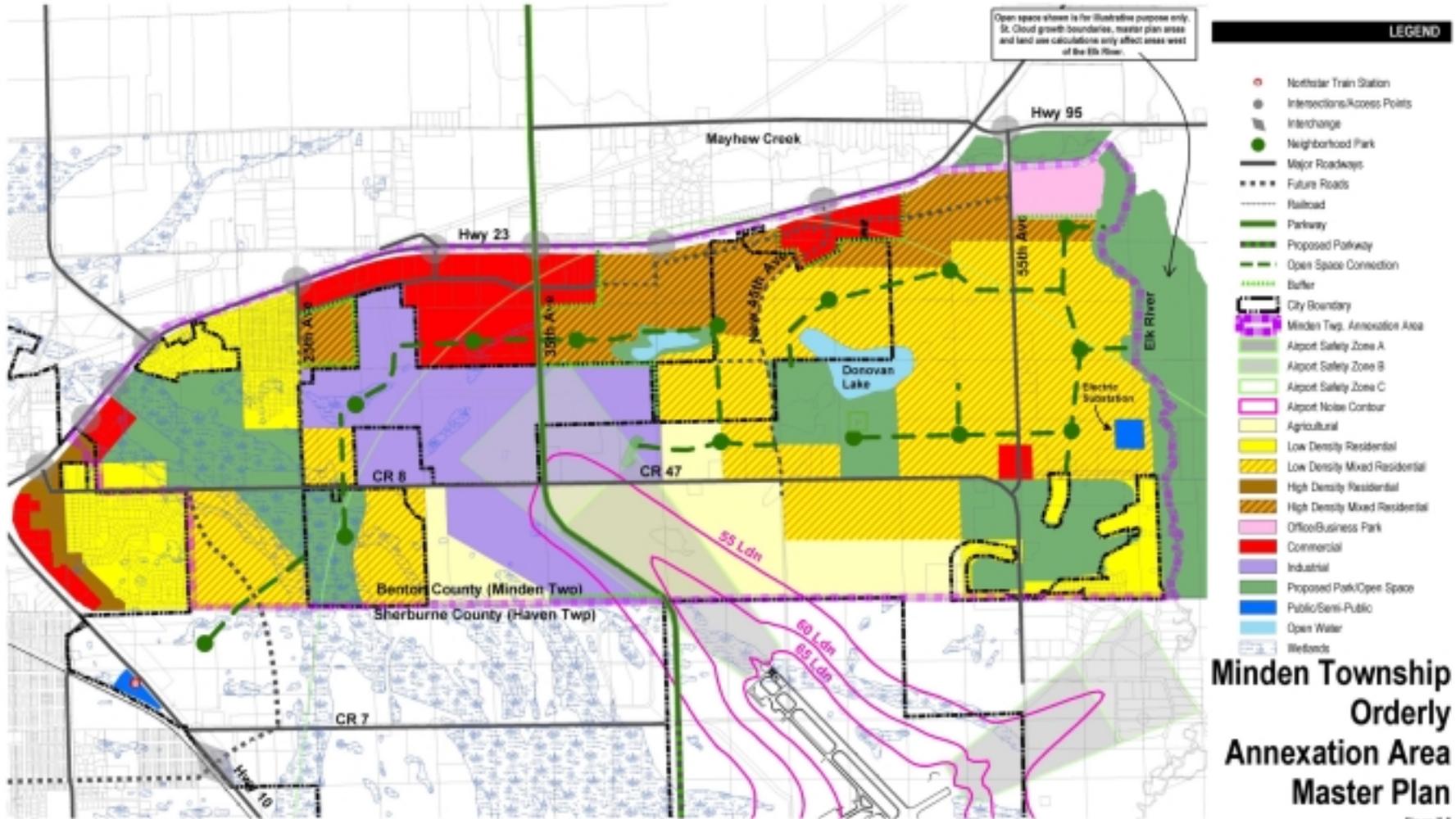
The following principles shall guide development within the Master Plan Area and become an integral part of this Plan. The development principles also guided the creation of Figure 7-5, *Minden Township Orderly Annexation Area Master Plan*, and shall serve as a land use template for the community. Figure 7-5 shows open space uses are intended for areas east of the Elk River. Land east of the Elk River is beyond the planning area and Growth Boundary for this Plan, but if and when it develops, the city, county and township, as applicable, will need to ensure such development is compatible with the sensitive environment immediately adjacent to the Elk River.

The following principles shall guide development within the Master Plan Area and become an integral part of this Plan. The development principles also guided the creation of Figure 7-5, *Minden Township Orderly Annexation Area Master Plan*, and shall serve as a land use template for the community. Table 7-3, *Future Land Use Plan, Minden Township*, details the mix of land uses in the plan.

Land Use Principles

Principle #1: Recognize the operations of the St. Cloud Regional Airport and impacts to future development within the orderly annexation area of Minden Township. Future development must take into account airport expansion plans, noise impacts, and flight patterns.

Principle #2: Continue to support the operation of the St. Cloud Regional Airport by protecting adjacent property from incompatible land use and buffer existing and future land uses from encroachment.



**Minden Township
Orderly
Annexation Area
Master Plan**

Figure 7-5



Principle #3: Recognize the Federal Aviation Administration’s Flight Zones A and B, and deter development and incompatible land uses in accordance with the restrictions of those existing and projected zones. (Note: The flight zones shown on Figure 7-5, as well as other maps within this document, are intended for planning purposes only, and indicate what the approximate boundaries would be with an 8,000 foot runway. The exact delineation of these zones is established within the airport zoning regulations.)

Principle #4: Protect the ground and surface water and sensitive soils within the orderly annexation area by ensuring development occurs in an orderly fashion and municipal services are available.

Principle #5: Protect existing farming operations until such time they cease from incompatible land uses with the use of transitional zoning and buffering to guard against noise, odor and field work.

Principle #6: Promote and protect the abundance of wetlands and environmental features, including the Elk River, which borders the eastern edge of the Master Plan Area from incompatible land uses and encroachment.

Principle #7: Create buffering zones between land uses such as 1) residential and industrial; 2) airport and residential; 3) commercial and residential, and 4) residential and Trunk Highways 10 and 23 in order to protect and enhance the quality of life in the area.

Principle #8: Identify areas for agricultural preservation adjacent to St. Cloud Regional Airport for continuing operation and to facilitate future expansion of the airport where appropriate.

Park and Open Space Principles

Principle #1: Protect the Mayhew Creek/Elk River flood plain by limiting development and improving the usefulness of the area with the creation of additional parkland, trails, walking paths and other recreational uses.

Principle #2: Create a community or regional park located in the Donovan Lake area with connections and pedestrian trails to other neighborhood parks and areas of interest within the Master Plan Area.

**Table 7-3
Future Land Use Plan
Minden Township
September 2003**

Land Use Category	Acres	Percent (of Total Land Area)
Residential	1,393	38.4
Low Density	148	4.1
Low Density Mixed	916	25.3
High Density	5	0.1
High Density Mixed	324	8.9
High Density Mixed Residential/ Commercial	0	0
Commercial	326	9
Downtown Mixed Use	0	0
Office	56	1.5
Industrial	281	7.7
Park / Open Space	980	27
Public /Semi-Public	10	0.3
Right-of-Way	0	0
Total Developed	3,046	84.0
Land Use Category	Acres	Percent (of Total Land Area)
Vacant / Agricultural	528	14.6
Total Land	3,574	98.6
Land Use Category	Acres	Percent (of Total Land Area)
Water	52	1.4
Total City	3,626	100

Note:

The acreage calculations are not perfectly accurate due to existing inaccuracies in the City’s parcel base, but are sufficient for planning purposes. All acreages have been rounded to the closest whole number.

Principle #3: Create additional open space and park areas within planned residential neighborhoods, specifically creating connections between the park areas and neighborhoods.

Transportation Principles

Principle #1: Create additional north and south transportation corridors to promote transportation continuity between Trunk Highway 23 and Benton County Roads 8/47.

Principle #2: Utilize the APO study regarding frontage roads to Trunk Highway 23 and transportation access to the Master Plan Area.

Principle #3: Create additional north and south collector streets at 25th Avenue Northeast and 45th Avenue Northeast to create transportation continuity and efficient transportation movement in the area. Develop design standards to promote an attractive and safe corridor at 45th Avenue Northeast to support the large residential use in this area.

Principle #4: Develop 35th Avenue Northeast as a parkway corridor to support the efficient movement of traffic, and to support the planned circumferential road system identified for the St. Cloud region.

Economic Development Principles

Principle #1: Promote commercial development along Trunk Highway 23 bordering the northern side of the Master Plan by encouraging large commercial and retail development to serve the residents of the Minden Township Orderly Annexation Area and the east side of St. Cloud

Principle #2: Encourage infill commercial and retail development along the Trunk Highway 23 corridor where appropriate and develop building and landscaping requirements to create an aesthetically pleasing commercial corridor.

Principle #3: Promote the development of the Airport Business Park by coordinating economic development activities with the city of St. Cloud, St. Cloud Opportunities and East Central Electric.

Principle #4: Recognize existing and future land uses when locating industries to the Airport Business Park to protect against adverse impacts from incompatible industrial uses and utilize buffering options.

Principle #5: Create additional opportunities for office space development in a corporate setting that is compatible with surrounding land uses and environment.

Principle #6: Encourage heavy industrial uses (i.e. mining, mineral extraction, gravel pits, etc.) to be located in industrial land use designations.

Code Enforcement Principles

Principle #1: Sustain the implementation of the residential airport zoning districts to inform developers and potential homebuyers that development will be within an area that is impacted by the St. Cloud Regional Airport.

Principle #2: Continue to implement sound planning principles, develop zoning districts and implement zoning regulations for the Master Plan Area to ensure high quality residential, commercial and industrial development.

Intergovernmental Cooperation Principles

Principle #1: Maintain a strong working relationship between the Minden Township Orderly Annexation Area Planning Board and the city of St. Cloud to ensure urban growth is orderly and efficient.

Principle #2: Continue to maintain communication between the Minden Township Orderly Annexation Area Planning Board, city and area residents regarding land use and policy decision-making.

Principle #3: Encourage multi-jurisdictional cooperation in planning growth areas, including the acquisition of right-of-way and easements for the placement of roads, water and sewer lines and storm sewer.

Principle #4: Identify multi-jurisdictional partnerships, and federal, state and private funding sources to assist with development costs regarding the construction of municipal services, roads, and utilities to reduce the cost of development for existing and future residents.

Principle #5: Enhance multi-jurisdictional cooperation between Minden and Haven Townships regarding future planning, specifically connecting regional park systems and extension of municipal services as future land uses are identified.

Principle #6: Work with the city of Sauk Rapids to identify planning efforts north of Trunk Highway 23 (included in an orderly annexation agreement) to ensure coordination of utilities, road and municipal services as they relate to the Master Plan Area.

HAVEN TOWNSHIP GROWTH AREA MASTER PLAN

Portions of the city's Ultimate Service Area lie within Haven Township. A small portion of that area is already included in an orderly annexation agreement. The Master Plan for the Haven Township Growth Area includes all land within the orderly annexation area, plus additional land east and south. Some portions of Haven Township are included in the Master Plan for the Airport Area as well.

INVENTORY AND ANALYSIS

- Trunk Highway 10 is an arterial roadway bordering the east side of the Master Plan Area with existing traffic counts in excess of 20,000 ADT.
- There are three major intersections off of Trunk Highway 10 within the Master Plan Area, at Sherburne County Roads 3, 65 and 60.
- Sherburne County Road 8 serves as an arterial street and runs north and south through the Master Plan Area.
- Property immediately adjacent to Trunk Highway 10 is sparsely developed with industrial and commercial uses.
- The Burlington North Santa Fe rail line runs parallel to Trunk Highway 10 within the Master Plan Area.
- The Master Plan Area is largely undeveloped, consisting mainly of agricultural uses.
- Area farmers and residents feel the area has a significant amount of prime farmland (that they feel should be preserved) based on production. However, the area is predominately irrigated and consists mainly of sandy soils. According to local and state agricultural agencies, the Master Plan Area is not identified as prime farmland by definition.
- The Mississippi River borders the western edge of the Master Plan Area.
- There are numerous environmental features including: granite outcroppings, wetlands and the Mississippi River.
- The Mississippi Wild and Scenic River corridor borders the entire western edge of the Master Plan Area. Significant limitations on land use and setbacks will influence the development adjacent to the corridor. Standards for development along the corridor are currently being revised by the DNR. Future development in these areas should reflect the goals and requirements of the management plan for the river.
- Urban development exists in the northern edge of the Master Plan Area, consisting mainly of single-family dwelling units.
- Large lot, single-family residential development exists along the Mississippi River and in large-tract subdivisions.
- Granite City Ready Mix, Inc. has a large gravel and mining operation in the northeast quadrant of the Master Plan Area.
- Sewer availability to the Master Plan Area is extremely limited. Additional sewer capacity will be needed for further development within the area. It is anticipated that additional sewer capacity will be based on development pressure and future annexations. Additional trunk sewer lines will need to be constructed to serve development in the Master Plan Area as well as the Minden Township Orderly Annexation Area and Airport Area Master Plans. Future growth within the Haven Township Master Plan Area will be slow in nature based on this issue.
- The city of St. Cloud has identified the 33rd Street South corridor, on the west side of the river, as an arterial roadway and the primary location of the new 33rd Street South bridge crossing the Mississippi River. The bridge will provide access to Haven Township and provide an additional east/west crossing to relieve pressure at 10th Street and Trunk Highway 23. A new bridge at 33rd Street South will promote development in the Haven Master Plan area and promote the circumferential roadway concept for the community.

- MnDOT is currently completing a study to redefine the function of Trunk Highway 10. (*Trunk Highway 10 Interregional Corridor (IRC) Study*) Trunk Highway 10 will become a “freeway” facility through the community. The entire eastern edge of the Haven Township Master Plan Area is adjacent to Trunk Highway 10. The study calls for limited access to Trunk Highway 10 in the future, which has implications on commercial development along the corridor and access. A new interchange is proposed at Michigan Avenue and Sherburne County Road 7 (Del Tone Road) and a potential interchange at Sherburne County Road 65 if local funding becomes available. A frontage road system will be required to efficiently move people and goods and services within the area.
- Trunk Highway 10 and I-94 Connection (Alternate A). Alternate A is one of many connections being studied by MNDOT and will present a development barrier within the Master Plan Area. In addition, no access will be allowed to local facilities, and the interchange at Trunk Highway 10 would be located within the vicinity of Sherburne County Road 65. Although Alternate A is identified in the District Plan, it may no longer be the city’s preferred alignment. (See discussion Updated Alternative A.)

PROCESS AND ISSUES

Public involvement was an important component of the Haven Township Growth Area Master Plan planning process. Background research and analysis for the Master Plan Area began in January 2002, and the first public input meeting held in February 2002. At this meeting, participants identified issues relating to development, land use, environment, adjacent land uses and the airport. The following issues were identified:

- Potential I-94 connection to Trunk Highway 10
- Limited access to Trunk Highway 10 if it becomes a freeway
- Additional retail and commercial development in the Master Plan Area
- Protection of the Mississippi Scenic River corridor
- Airport expansion and expanded service
- Passive and active recreation areas
- 33rd Street South bridge crossing
- Reclamation of the Granite City gravel pits
- Availability and timing of municipal services
- Increased population and impacts to natural resources (Mississippi River)
- Residential land uses and potential densities
- Future park development and coordination with Sherburne County
- Maintain the status quo and limit development

This information was utilized in developing the Master Plan’s principles, future land uses and other recommendations.

Subsequent public meetings followed in May, June, and October to reaffirm the Master Plan recommendations. Land use recommendations included:

- Planning in accordance with the St. Cloud regional airport
- Buffering between land uses
- Develop appropriate land uses along Trunk Highway 10
- Develop land uses with limited access to Trunk Highway 10
- Alternatives for future north/south and east/west road corridors
- Protection of the Mississippi River corridor and other natural resources
- Community/regional park locations
- Protection of prime agricultural land
- Identification of unsuitable soils
- Parks and open space
- Intergovernmental cooperation

The subcommittee recommended approval of the Master Plan on October 29, 2002.

DEVELOPMENT PRINCIPLES

The following principles shall guide development within the Master Plan Area. These development principles also assisted in the development of the Figure 7-6 A and B, *Haven Township Growth Area Master Plan* (Concepts 1 and 2, respectively), and shall serve as a land use template for the Master Plan Area. The alternative concepts are based on two potential different locations for a future bridge crossing the Mississippi River. The exact alignment of any crossing will need to be studied and the final alignment will impact the land use surrounding it. Table 7-4, *Future Land Use Plan - Concept A, Haven Township*, and Table 7-5, *Future Land Use Plan - Concept B, Haven Township* detail the differences in each land use plan concept.

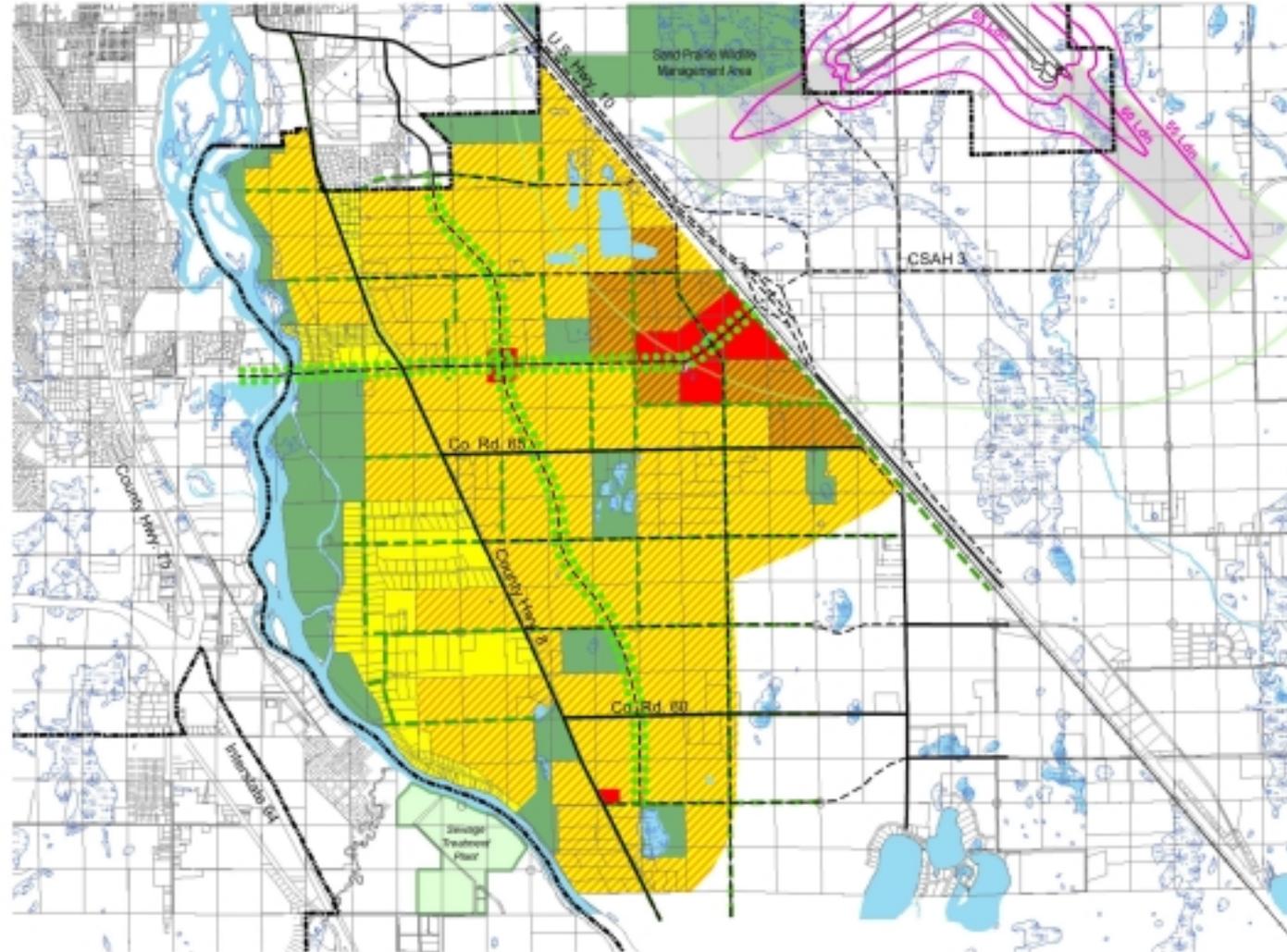
Land Use Principles

Principle #1: Recognize the operations of the St. Cloud Regional Airport and its impact to future development within the Master Plan Area. Future land use must take into account airport expansion plans, noise impacts and flight patterns.

Principle #2: Protect the ground and surface water and sensitive soils within the area by ensuring development occurs in an orderly fashion when municipal services are available.

Principle #3: Protect existing farming operations, until such time they convert to urban use, with the use of transitional zoning and buffering to guard against noise, odor and fieldwork.

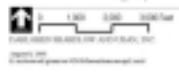
Principle #4: Protect existing mining operations, until such time as they convert to urban use, with the use of transitional zoning and buffering to guard against noise, odor and truck traffic.

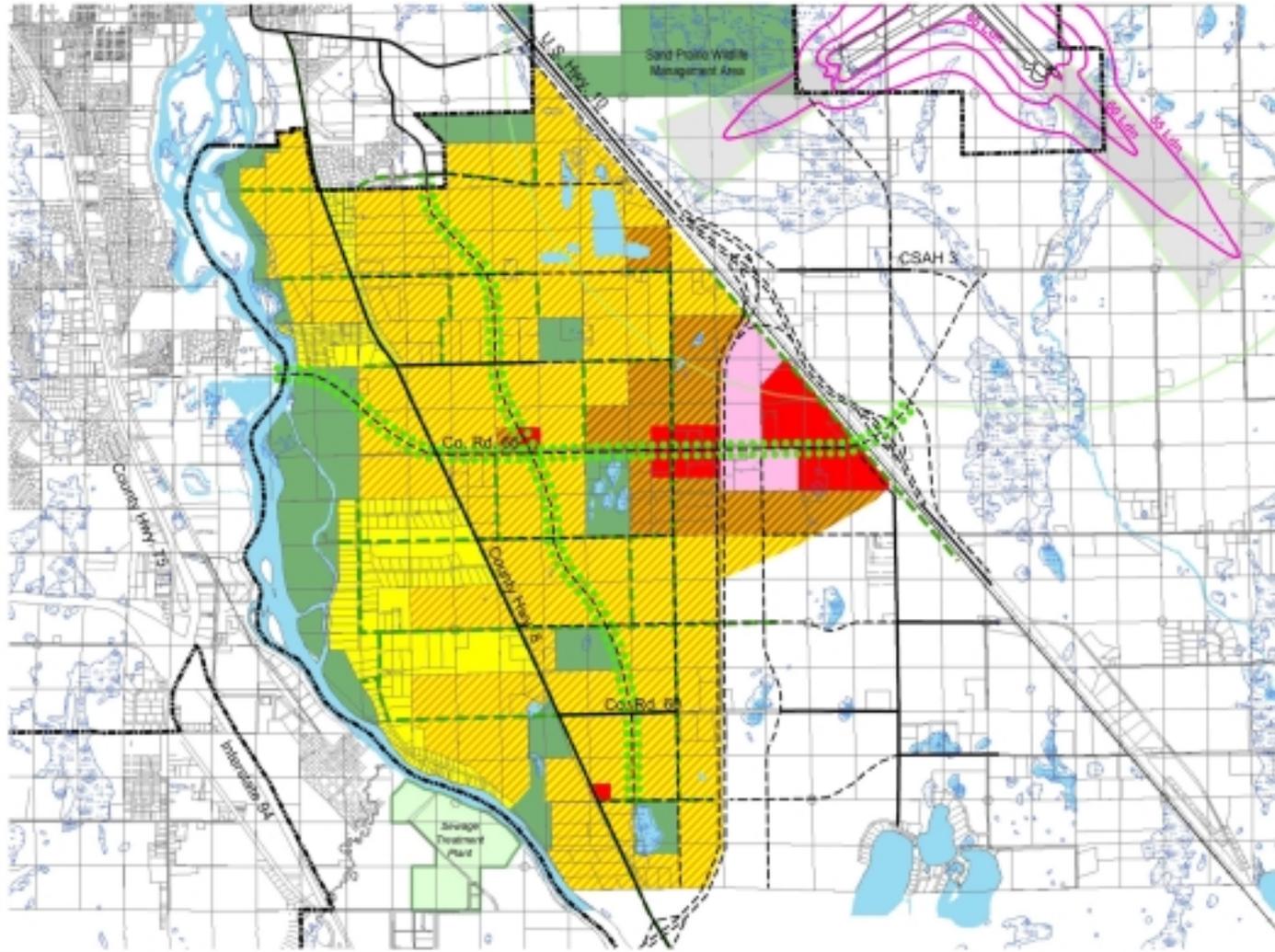


LEGEND	
	Existing Roadways in Area
	Future Roadways in Area
	Railroad
	Proposed Open Space Connection
	Pathway
	City Boundary
	Airport Safety Zone A
	Airport Safety Zone B
	Airport Safety Zone C
	Airport Noise Contour
	Low Density Residential
	Low Density Mixed Residential
	High Density Mixed Residential
	Commercial
	Proposed Park/Open Space
	Water
	Wetlands

Haven Township Growth Area Master Plan Concept 1

Figure 7-6a





LEGEND

- Existing Roadways in Area
- Future Roadways in Area
- Railroad
- Proposed Open Space Connection
- Parkway
- City Boundary
- Airport Safety Zone A
- Airport Safety Zone B
- Airport Safety Zone C
- Airport Noise Contour
- Low Density Residential
- Low Density Mixed Residential
- High Density Mixed Residential
- Commercial
- Office/Business Park
- Proposed Park/Open Space
- Water
- Wetlands

Haven Township Growth Area Master Plan Concept 2

Figure 7-8b



Table 7-4 Future Land Use Plan - Concept A Haven Township September 2003		
Land Use Category	Acres	Percent (of Total Land Area)
Residential	4,924	71
Low Density	732	10.5
Low Density Mixed	4,192	60.4
High Density	0	0
High Density Mixed	409	5.9
High Density Mixed Residential/ Commercial	0	0
Commercial	183	2.6
Downtown Mixed Use	0	0
Office	0	0
Industrial	0	0
Park / Open Space	1,083	15.6
Public /Semi-Public	0	0
Right-of-Way	0	0
Total Developed	6,599	95.1
Land Use Category	Acres	Percent (of Total Land Area)
Vacant / Agricultural	0	0
Total Land	6,599	95.1
Land Use Category	Acres	Percent (of Total Land Area)
Water	341	4.9
Total City	6,940	100

Note:

The acreage calculations are not perfectly accurate due to existing inaccuracies in the City's parcel base, but are sufficient for planning purposes. All acreages have been rounded to the closest whole number.

Table 7-5 Future Land Use Plan - Concept B Haven Township September 2003		
Land Use Category	Acres	Percent (of Total Land Area)
Residential	4,570	65.9
Low Density	732	10.5
Low Density Mixed	3,838	55.3
High Density	0	0
High Density Mixed	524	7.6
High Density Mixed Residential/ Commercial	0	0
Commercial	275	4
Downtown Mixed Use	0	0
Office	175	2.5
Industrial	0	0
Park / Open Space	1,054	15.2
Public /Semi-Public	0	0
Right-of-Way	0	0
Total Developed	6,598	95.1
Land Use Category	Acres	Percent (of Total Land Area)
Vacant / Agricultural	0	0
Total Land	6,598	95.1
Land Use Category	Acres	Percent (of Total Land Area)
Water	341	4.9
Total City	6,940	100

Note:

The acreage calculations are not perfectly accurate due to existing inaccuracies in the City's parcel base, but are sufficient for planning purposes. All acreages have been rounded to the closest whole number.

Principle #5: Promote and protect the abundance of wetlands and environmental features, including the Mississippi River, which borders the western edge of the Master Plan Area from incompatible land uses, encroachment and high-density development.

Principle #6: Create buffer zones between land uses such as 1) residential and industrial; 2) commercial and residential; 3) residential and Trunk Highway 10; and 4) all land use and the railroad to protect and enhance the quality of life and business in the area.

Park and Open Space Principles

Principle #1: Protect the Mississippi Scenic River Corridor (in conformance with the rules and regulations set forth by the state of Minnesota) by limiting development and improving the usefulness of the area by acquiring additional parkland and develop trails, walking paths and other recreational uses.

Principle #2: Create a community or regional park within the vicinity of significant environmental features that connects to other neighborhood parks and areas of interest within the Master Plan Area.

Principle #3: Create additional open space and park areas within planned residential neighborhoods that create connections between park areas and neighborhoods.

Principle #4: Create additional open space and park areas, in conjunction with development, at the current Granite City mining site as reclamation plans are implemented.

Principle #5: Create an open space and greenway corridor along the railroad bed to buffer future land uses from the railroad.

Transportation Principles

Principle #1: Create additional north and south transportation corridors to promote transportation continuity with Sherburne County CSAH 8. The corridor should be designed as a four-lane parkway to create an efficient and attractive transportation corridor.

Principle #2: Utilize the MnDOT *Trunk Highway 10 IRC Study* regarding future access points and creation of frontage roads parallel to Trunk Highway 10.

Principle #3: Create additional east and west collector streets to create transportation continuity and efficient transportation movement in the area. Develop design standards to promote safe and attractive corridors to support the large residential uses in this area.

Principle #4: Develop an eastern parkway, generally aligned with 33rd Street South, on the west side of the river, to support the efficient movement of traffic between Sherburne CSAH 8 and Trunk Highway 10, and consistent with the circumferential road system identified in the District Plan and the 1993 St. Cloud Comprehensive Plan.

Economic Development Principles

Principle #1: Promote retail commercial and light industrial development along Trunk Highway 10, where appropriate, to serve the residents of the Master Plan Area Area and east St. Cloud.

Principle #2: Encourage commercial and retail development along Trunk Highway 10 and 33rd Street South corridors where appropriate, and develop building and landscaping requirements to create a visually appealing commercial corridor.

Principle #3: Recognize existing and future land uses when locating light industries to the Master Plan Area. Protect existing land uses against adverse impacts from incompatible industrial development and utilize buffering options.

Principle #4: Create additional opportunities for office space development in a corporate setting that is compatible with surrounding land uses and environment.

Code Enforcement Principle

Principle #1: Continue to implement sound planning principles, develop zoning districts and modify zoning regulations for the Master Plan Area to ensure high quality residential, commercial and industrial development, pursuant to orderly annexation or other cooperative agreements and/or after annexation.

Intergovernmental Cooperation Principles

Principle #1: Maintain a strong working relationship between the Haven Township Board and the city of St. Cloud to ensure orderly and efficient growth.

Principle #2: Encourage re-negotiation of the current orderly annexation agreement with Haven Township that expires in 2004.

Principle #3: Continue to maintain communication between the Haven Township Board, city of St. Cloud, and area residents regarding land use and policy decision-making.

Principle #4: Encourage multi-jurisdictional cooperation in planning growth areas, including right-of-way acquisition and easements for the placement of roads, water lines, sewer lines and storm sewer lines.

Principle #5: Identify multi-jurisdictional partnerships, and federal, state and private funding sources to assist with development costs regarding the construction of municipal services, roads and utilities.

Principle #6: Enhance multi-jurisdictional cooperation between the city of St. Cloud and Haven Township regarding future planning, specifically connecting regional park systems and extension of municipal services as future land uses are identified.

AIRPORT AREA MASTER PLAN

The Master Plan for the Airport Area includes land within the city limits of St. Cloud, as well as surrounding areas in Haven Township.

INVENTORY AND ANALYSIS

- The major land use in the Master Plan Area is the St. Cloud Regional Airport. The remaining Master Plan Area is largely undeveloped.
- Sherburne County Roads 3 and 7 and 35th Avenue serve as collector streets.
- The western half of the Master Plan Area has highway oriented businesses and property owned by the city and St. Cloud State University.
- There is a large lot, single-family residential development in the northeast quadrant of the Master Plan Area.
- There is an abundance of environmental features including large and small wetlands complexes, the Elk River and the Sand Prairie Wildlife Management Area.
- There are planned expansions of the airport facilities.
 - The Airport 2000 St. Cloud Area Master Plan calls for extending the existing main runway from 7,000 to 8,000 feet, which will extend the A and B Flight Zones in the Minden and Haven Township Master Plan Areas. This will limit development within these areas and increase the radius of flight and noise patterns that currently exists.
 - Expansion of a crosswind runway
 - Construction of a new air traffic control tower
 - Possible location for a new helicopter base that may increase the noise level in adjacent areas
- MnDOT is currently completing a study to redefine the function of Trunk Highway 10. (*Trunk Highway 10 Interregional Corridor (IRC) Study*) Trunk Highway 10 will become a “freeway” facility through the community. The entire western edge of Master Plan Area is adjacent to the Trunk Highway 10. The study calls for limited access to Trunk Highway 10 in the future, which has implications on commercial development along the corridor and access. A new interchange is proposed at Michigan Avenue and Sherburne County Road 7, (Del Tone Road) which will provide improved access to the airport and provide commercial development opportunities at the interchange. A frontage road system will be required to efficiently move people and goods and services within the area.

PROCESS AND ISSUES

A kickoff meeting for the master planning process was held in November of 2002. At that meeting, participants identified general issues (positive and negative) that will impact development in the Master Plan Area. These issues were used as a basis for analyzing potential development scenarios for the area. The following issues were identified:

Current Roles

- Transportation Hub
 - Commuter hub to national air service
 - Serve Central MN
 - Private airplane service
 - Passenger service
 - Provides transportation to other regions
 - Close to the Twin Cities Metropolitan Area

- Community Facility
 - Medical air helicopter
 - Air cargo
 - Helicopters
 - Training center

- Economic Impact
 - Some economic impact
 - Good airport – generates business \$
 - Retains existing businesses
 - Support just in time manufacturing

Positive Attributes

- Service to the Community
 - Commuter flights
 - Convenient
 - Flight training center
 - Mostly small fixed-wing aircraft

- Size of the Facility
 - Mixed use-aviation services is a plus
 - Control tower
 - Runway expansion
 - Low cost parking
 - Training

- Economic Impact
 - Generates commercial business
 - Encourages new business
 - Partnership with airport and Northstar Corridor commuter rail
 - Expands local transit
 - Large economic development engine
 - Ability to attract higher paying jobs
 - Overall job creation
- Future Opportunities
 - Opportunity to limit encroachment of new residential development
 - Potential market for local businesses (tool)
 - Create airport related employment
 - Possible helicopter base (community center)
 - Cargo
 - Military

Negative Attributes

- Land Use Encroachment
 - Too close to houses – no buffer
 - Home values impacted
 - Insufficient space for future expansion – relocate
 - Too much residentially zoned area near the airport
- Impacts of Expansion
 - Expansion will have great negative effect on homes/farms
 - Noise increase
 - Impact on wetlands – environmental/wildlife
 - Farm impacts – reduction of farmable property
- Future Operations Concerns
 - Heliport no perceived benefit
 - We don't need military or air cargo base here
 - Toxic chemicals - potential spills
 - Distribution of traffic
 - Need a long range land acquisition plan

- Safety Concerns
 - Air safety
 - Current flight is over heavily populated area
 - Migratory bird conflicts with aircraft

- Future Regulations
 - Airport designated on abstract of new property purchases
 - Safety zone “B” is too restrictive – MnDOT Aeronautics/FAA/city
 - Restrict future residential development
 - Land use regulations – Zone B too big

- Economic impacts
 - Economic impact not convincing and uncertainty
 - Employees imported
 - Long-term social and increasing costs of noise pollution, road & railroad development to area residents

Additional meetings were held with the subcommittee and public in December and January to reaffirm the land use recommendations and gain final consensus on the Master Plan.

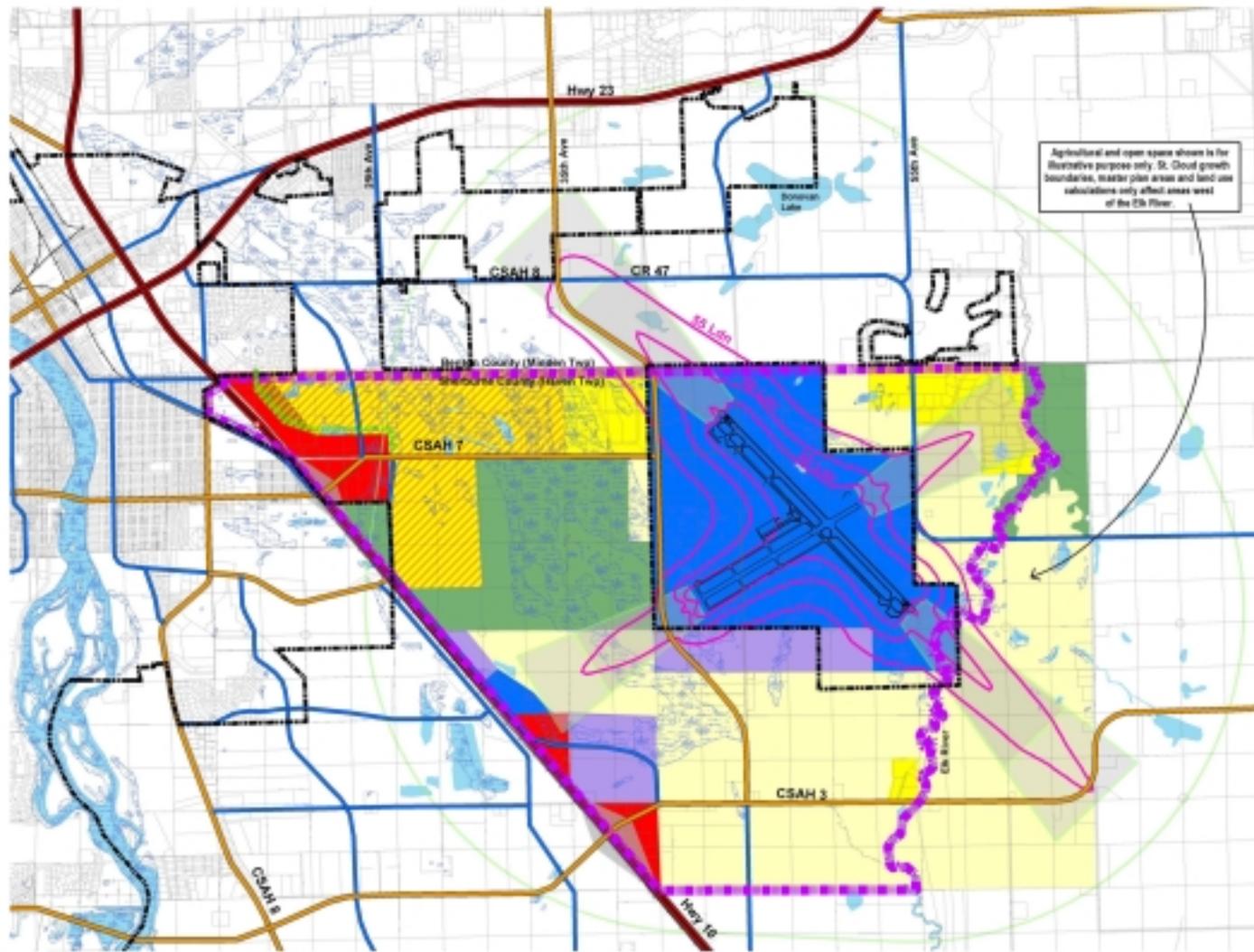
DEVELOPMENT PRINCIPLES

The following principles shall guide development within the Airport Sub- Area and become an integral part of the St. Cloud Comprehensive Plan. The development principles also guided the creation of Figure 7-7, *Airport Area Master Plan*, and shall serve as a land use template for the community. Figure 7-7 shows agriculture and open space uses are intended for areas east of the Elk River. Land east of the Elk River is beyond the planning area and Growth Boundary for this Plan, but if and when it develops, the city, county and township, as applicable, will need to ensure such development is compatible with adjacent planned land uses and the airport. Table 7-6, *Future Land Use Plan, City of St. Cloud - Airport Area Master Plan*, details the acreage for each land use category in the plan.

Intergovernmental Cooperation Principles

Principle #1: Maximize cooperation between the city, township and residents.

- Maintain township and county representation on the St. Cloud Regional Airport Commission.
- Pursue regional funding opportunities with surrounding counties, thus allowing greater participation by counties and townships.
- Pursue cooperative orderly annexation agreements for development areas identified for urbanization in city, county and township plans.



Agricultural and open space shown is for
 illustrative purpose only. St. Cloud growth
 boundaries, master plan areas and land use
 calculations only affect areas west
 of the Elk River.

LEGEND

- Buffer
- Future Interchange
- Principal Arterial
- Minor Arterial
- Collector
- Railroad
- City Boundary
- Airport Master Plan Area
- Airport Safety Zone A
- Airport Safety Zone B
- Airport Safety Zone C
- Airport Noise Contour
- Agricultural
- Low Density Residential
- Low Density Mixed Residential
- High Density Mixed Residential
- Commercial
- Industrial
- Park/Open Space
- Public
- Open Water
- NWM Wetland

Airport Area Master Plan

Figure 7-7



- The city of St. Cloud, Benton County, the Minden Township Orderly Annexation Area Planning Board, Sherburne County and Haven Township should provide timely notices of land use actions, such as zoning change, variance, conditional use and platting requests, where the application has a potential impact on the other jurisdictions.
- Utilize websites, newsletters and other media to inform area residents and property owners of current issues and future planning efforts.

Public Investment Principles

Principle #1: Maximize return on public investment in the St. Cloud Regional Airport.

- Periodically monitor direct and indirect economic impacts of the airport on the surrounding region.
- Pursue infrastructure improvements that benefit the St. Cloud Regional Airport and landowners within orderly annexation areas.
- Promote the St. Cloud Regional Airport as an economic hub by fostering commercial and industrial development, which complements the airport.

Land Use Principles

Principle #1: Minimize land use conflicts between the airport and surrounding uses.

- Support local zoning classifications that provide appropriate transition of land uses between potential residential development areas and the St. Cloud Regional Airport.
- Promote and support agricultural, industrial, commercial and recreational zoning classifications surrounding the St. Cloud Regional Airport.
- Support efforts by Sherburne County, Haven Township and the Minden Township Orderly Annexation Area Planning Board to protect agricultural uses and zones surrounding the St. Cloud Regional Airport.

**Table 7-6
Future Land Use Plan
City of St. Cloud – Airport Area Master Plan
September 2003**

Land Use Category	Acres	Percent (of Total Land Area)
Residential	1,112	19.4
Low Density	416	7.2
Low Density Mixed	668	11.6
High Density	0	0
High Density Mixed	28	0.5
High Density Mixed Residential/ Commercial	0	0
Commercial	253	4.4
Downtown Mixed Use	0	0
Office	0	0
Industrial	383	6.7
Park / Open Space	852	14.8
Public /Semi-Public	47	0.8
Right-of-Way	0	0
Total Developed	2,648	46.1
Land Use Category	Acres	Percent (of Total Land Area)
Vacant / Agricultural	2,979	51.9
Total Land	5,627	98.0
Land Use Category	Acres	Percent (of Total Land Area)
Water	117	2.0
Total City	5,744	100

Note:

The acreage calculations are not perfectly accurate due to existing inaccuracies in the City's parcel base, but are sufficient for planning purposes. All acreages have been rounded to the closest whole number.

- Pursue efforts by the St. Cloud Regional Airport and the city of St. Cloud to acquire identified parcels of land or air space rights in current and future Airport Zone A and Zone B. In addition to acquisition within Airport Zones A and B, support acquisition of property from willing sellers.
- Identify measures to mitigate noise from the airport property in an effective and efficient manner.
- Identify tracts of land for future industrial and commercial uses where public infrastructure improvements (roads, sewer and water) exist or are planned. Classify these sites for industrial and commercial on the future land use map.
- Increase awareness of Airport Zones A & B through official documents, maps, and other means. For all new developments, identify the airport zoning restrictions (Zones A and B) on all official approvals, including preliminary plats, conditional uses permits, final plats and any other recordable approvals.
- Support fair market value determination for future parcel acquisition that takes into consideration the highest and best use of the property.
- Prioritize future land acquisitions based on airport expansion plans, location of environmentally sensitive areas, noise abatement and property owner interest. Utilize Table 7-7, *Criteria for Considering Land Acquisition*, for selection criteria:

Table 7-7
Criteria for Considering Land Acquisition
St. Cloud Regional Airport Area

	Points			
	0	1	2	3
Airport Zone	N/A	C	B	A
Noise Decibel	<55 dbs	55 – 60 dbs	60-65 dbs	> 65 dbs
Development Status	Undevelopable	Existing non-residential land uses	Undeveloped – planned & zoned for future residential	Existing residential development
Cost	5% or greater than market value	Within 5% + or – of market value	5% or less than market value	N/A
Natural Area	N/A	Low priority – environmentally sensitive area	Medium priority – environmentally sensitive area	High priority – environmentally sensitive area
Willing seller	Eminent domain necessary	Negotiated property sale	Up to 25% of property donated	More than 25% of property donated
Area	Property < 5 acres in area	Property between 5 & 10 acres in area	Property between 10 & 40 acres in area	Property > 40 acres in area

Principle #2: Support continued orderly planning being done by Haven Township and Sherburne County.

- Recognize the improved planning efforts by Sherburne County and Haven Township in protecting rural areas from incompatible land use.
- Support efforts by Sherburne County, Haven Township and the Minden Township Orderly Annexation Planning Board to protect agricultural uses and zones surrounding the St. Cloud Regional Airport.

Principle #3: Consider both regional and local implications when considering changes and expansion to airport operations.

- When considering future airport expansion or changes in the operations at the airport, conduct the necessary noise, transportation and environmental studies. In addition, study the full economic impact of a proposed change to the airport operations, including direct, indirect and induced economic impacts of the proposal.
- Conduct the necessary noise contour evaluations for changes in significant airport operations.
- Inform area residents and public agencies of findings associated with studies relating to operational changes or facility expansions.

Environmental Principles

Principle #1: Maintain or improve the quality of water resources around the St. Cloud Regional Airport.

- Require that airport runoff and stormwater incidental to the operations at the St. Cloud Regional Airport is pretreated and/or retained before discharging to wetlands, streams and rivers.
- Encourage maintaining wetlands and drainage systems when accommodating new growth.
- Continue to implement the Wetland Conservation Act.
- Require sedimentation and erosion control techniques during development.
- Retain or restore vegetative buffers along the Elk River, creeks and wetlands.

Principle #2: Conserve natural areas that are compatible with the airport safety zones.

- Continue to enforce the *Environmentally Sensitive Areas Ordinance* that includes development guidelines, best management practices and land preservation tools.
- Seek alternative funding sources (private, state, and federal grants) other than city funding for property acquisition.
- Conserve and utilize natural areas through acquisition, best management practices, and land preservation tools as a buffer for the St. Cloud Regional Airport.

33RD STREET SOUTH CORRIDOR MASTER PLAN

The 33rd Street South Corridor Master Plan includes the area along 33rd Street South corridor between Trunk Highway 15 and the Mississippi River. The 33rd Street South Corridor Master Plan Subcommittee concentrated their efforts on the east and west ends of the 33rd Street South corridor. The proposed Master Plan guides development at the intersections of 33rd Street South and CSAH 74 on the west end, and 33rd Street South and CSAH 75 on the east end.

INVENTORY AND ANALYSIS

- 33rd Street South is a minor arterial with relatively high existing traffic counts on the east end of the Master Plan area due to a large amount of residential development.
- CSAH 75 runs north and south within the Master Plan area and serves as an arterial street with traffic volumes around 13,500 ADT.
- There are four major intersections at CSAH 74, County Road 136, Cooper Avenue and CSAH 75 within the 33rd Street South Corridor.
- County Road 136 and Cooper Avenue serve as major collector streets, and CSAH 75 is a minor arterial.
- The eastern half of the Master Plan area is largely developed with single-family dwelling units, commercial at the intersection of CSAH 75 and 33rd Street South, and limited industrial use.
- The western half of the Master Plan area is largely undeveloped, consisting of some large lot and small residential clusters.
- Some commercial and industrial uses exist along CSAH 74.
- Large agricultural uses exist.
- Cold Spring Granite Company owns large tracts northeast of the Master Plan area for their mining operation. The granite mining operation will be allowed to continue until their mining ceases and reclamation plans will be required for reuse of the property. The future land use for the Cold Spring Granite Company has been identified as residential according to the Future Land Use Plan.
- There is an abundance of environmental features including large and small wetlands complexes, creeks, Mississippi River, and granite outcroppings.
- The Neenah Creek Regional Park is located in the Master Plan area, and the city is pursuing development of the park for passive and active recreation, with connections to neighborhoods and other regional systems.
- The St. Cloud School District owns approximately 67 acres of land south of 33rd Street South; the future intended development of property is unknown at this time.
- There are two golf courses in the Master Plan Area: Boulder Ridge and the St. Cloud Country Club.
- The 33rd Street South corridor between CSAH 75 east and CSAH 75 west in St. Joseph was studied by Stearns County as a part of the Southwest Arterial Study.

- 33rd Street South has been identified as a future minor arterial and will be improved and widened in the future based on available funding and right-of-way acquisition. Homes will need to be relocated and access to 33rd Street South will be limited to major intersections. The Southwest Arterial Study suggests frontage roads will need to be incorporated into the design to serve existing residential and commercial developments.
- A Trunk Highway 15 and 33rd Street South interchange has been identified in the Southwest Arterial Study. The project construction is based on the availability of federal and local funding and right-of-way acquisition. Environmental issues at the interchange location include the presence of surface waters, wetlands, forested areas and granite outcroppings. Potential land uses adjacent to the interchange will be commercial, office and multi-family residential.
- The east end of the corridor is unique in the fact that a majority of the area has existing development, while the west end is largely farmland with limited development. A key component on the west end of the study area is the potential interchange at Trunk Highway 15 and the transition from existing land use to potential transportation oriented land uses.
- The majority of property on the east end of the Master Plan Area is proposed to be part of the future Plum Creek regional park.

PROCESS AND ISSUES

The planning process began with public meetings in September and October 2002. At this meeting, participants identified a number of issues relating to such things as development, land use, the environment and adjacent land uses. Specifically, the residents expressed their concerns with the future improvements and expansion of 33rd Street South. Also, residents expressed concern on the amount of traffic that will be generated with the completion of an interchange at Trunk Highway 15.

During these initial public input meetings, the following issues were identified:

- Need to protect existing recreational vehicle trails
- Wildlife management area
- Potential Native American artifacts – west of CSAH 74
- CSAH 74 – rebuilt, function, upgraded
- 33rd Street South improvements, design and time frame
- Low density mix – next to the golf course
- Scope of commercial, residential, mixed residential – amount versus need
- Trail connections – connecting trails north and south of 33rd Street South
- East end – Laudenbach Farm use – additional park and open space, Plum Creek Regional Park
- Future of existing businesses within the study area
- Commercial development area – west of CSAH 74 – what is useable?
- Multi-use trail system south of 33rd Street South
- Development of Neenah Creek regional park
- Utilize natural features with all development

- Commercial development at the 33rd Street South/Trunk Highway 15 intersection – environmental concerns
- Additional community facilities in the area (i.e. fire station)
- Additional street lighting along the corridor
- Development design standards along Trunk Highway 15

The 33rd Street South Corridor subcommittee and public also provided input regarding the generalized future land use within the Master Plan area at the October meeting. The Master Plan subcommittee and citizens were presented with future land use alternatives, which they discussed and revised via a small group exercise. Land use recommendations included:

- Planning in accordance with the provisions of the annexation agreement between the city and former St. Cloud Township
- Buffering between land uses
- Alternatives for future north/south and east/west road corridors
- Future location of residential/commercial/office and industrial land uses at the major intersections
- Additional park and trail locations
- Protection of prime environmental features
- Protection of existing business operations in the study area
- Improvements and expansion of 33rd Street South and limited access

DEVELOPMENT PRINCIPLES

The following principles shall guide development within the 33rd Street South Corridor Master Plan Area. The development principles also guided the creation of Figure 7-8, *33rd Street South Corridor Master Plan*, and shall serve as a land use template for the community. The acreages for each land use category shown on Figure 7-8 are detailed in Table 7-8, *Future Land Use Plan, City of St. Cloud - 33rd Street South Corridor Master Plan*.

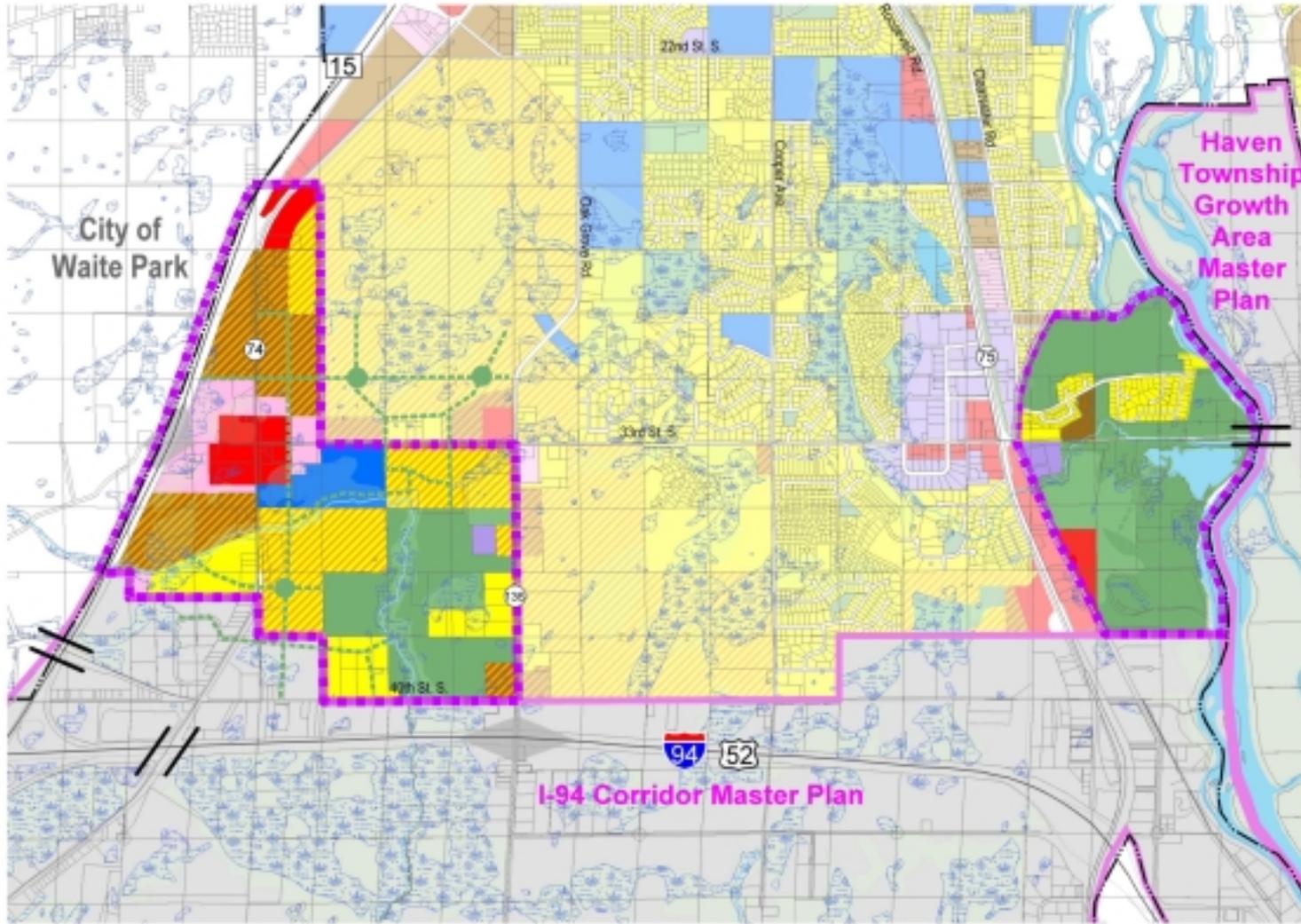
Land Use Principles

Principle #1: Concentrate intense commercial uses on major roadways and near major intersections, which have high traffic counts, good access and visibility.

Principle #2: Locate higher density residential uses near major roadways and services; however, do not exclude higher density residential uses near natural amenities such as wetlands and forested areas.

Principle #3: Locate residential uses within identifiable neighborhoods served by adequate collector streets, parks, trail connections and other community facilities.

Principle #4: Protect and/or buffer existing residential uses from the negative impacts associated with commercial or high-density residential development with the use of landscaping, berming, fencing, larger setbacks and other means.



0 1000 2000 3000 Feet

LEGEND

- Future Interchange
- Bridge Crossing
- Open Space Connection
- Neighborhood Park
- City Boundary
- 33rd Street Corridor Study Area
- Other Study Areas
- Low Density Residential
- High Density Residential
- Low Density Mixed Residential
- High Density Mixed Residential
- Office/Business Park
- Commercial
- Park/Recreation/Open Space
- Natural Areas
- Industrial
- Public/Semi-Public
- Open Water
- Wetland

**33rd St. S.
Corridor
Master Plan**

Figure 7-8

Table 7-8 Future Land Use Plan City of St. Cloud – 33rd Street South Corridor Master Plan September 2003		
Land Use Category	Acres	Percent (of Total Land Area)
Residential	628	41
Low Density	182	11.9
Low Density Mixed	233	15.2
High Density	11	0.7
High Density Mixed	202	13.2
High Density Mixed Residential/ Commercial	0	0
Commercial	90	5.9
Downtown Mixed Use	0	0
Office	79	5.2
Industrial	20	1.3
Park / Open Space	569	37.2
Public /Semi-Public	59	3.9
Right-of-Way	0	0
Total Developed	1,445	94.3
Land Use Category	Acres	Percent (of Total Land Area)
Vacant / Agricultural	0	0
Total Land	1,445	94.3
Land Use Category	Acres	Percent (of Total Land Area)
Water	87	5.7
Total City	1,532	100

Note:

The acreage calculations are not perfectly accurate due to existing inaccuracies in the City's parcel base, but are sufficient for planning purposes. All acreages have been rounded to the closest whole number.

Principle #5: Encourage new residential development to have a mixture of density and types of housing, including the integration of affordable housing.

Principle #6: Develop design standards for all property abutting Trunk Highway 15 similar to the design standards adopted in December 1995 for excess trunk highway right-of-way. Encourage the city of Waite Park to adopt the same design standards for the west side of Trunk Highway 15.

Principle #7: Integrate neighborhood commercial uses into future neighborhood designs, where appropriate.

Principle #8: Protect the existing mining of natural resources (Cold Spring Granite Quarry) until such time the mining operation is discontinued. The city of St. Cloud shall require a reclamation plan for the best use of the property once the operation is discontinued.

Parks and Recreation Principles

Principle #1: Connect open space, parkland and natural resources in a network of trails and wildlife corridors where appropriate to meet the needs of the community and/or neighborhoods.

Principle #2: Focus on the Neenah Creek Regional Park as a recreational destination.

Principle #3: Encourage the development of separated bicycle trails and pedestrian walkways to promote safety and access to neighborhoods.

Community Development Principle

Principle #1: Consider the location of additional community facilities such as fire stations, schools, community center and parks within the 33rd Street South Corridor Master Plan area.

Environmental Principles

Principle #1: Avoid wetlands, native species (endangered and threatened), environmentally sensitive areas and other significant natural resources during development.

Principle #2: Minimize the impact of urban development on rock outcroppings, wetlands, forested areas and other environmental features.

Principle #3: Mitigate impacts of development on environmental features within the Master Plan area.

Transportation Principles

Principle #1: Connect 33rd Street South corridor and its neighborhoods to the larger transportation system and the region, as defined in the St. Cloud Southwest Arterial Alignment Study.

Principle #2: Encourage the development of the 33rd Street South corridor with a “parkway” design to enhance mobility, safety, lighting and aesthetics along the corridor.

Economic Development Principles

Principle #1: Encourage “in-fill” light-industrial development west of CSAH 75 in the existing industrial park within the Southway Drive area.

Principle #2: Promote the creation of office and commercial development at the future interchange of 33rd Street South and Trunk Highway 15, where appropriate, with design standards to ensure quality and visual appeal for the community.

Principle #3: Encourage additional commercial and office use development at the intersection of CSAH 74 and 33rd Street South.

Principle #4: Consider neighborhood commercial development at the intersection of CSAH 136 and 33rd Street South.

DEVELOPMENT CONCEPT

Figure 7-9, *33rd Street Master Plan*, shows a development concept for portions of the 33rd Street South Corridor. The Development Concept is an illustration of what the 33rd Street South Corridor Master Plan might look like when developed.

Figure 7-9 33rd St Master Plan

Development Concept Plan for the 33rd Street corridor between Highway 15 and County Road 136



I-94 CORRIDOR MASTER PLAN

The I-94 Corridor Master Plan includes areas along I-94 from its intersection with Trunk Highway 15 to the Lynden Township border. The northern boundary of the Master Plan Area is 40th Street South, and the southern boundary is 250th Street. Portions of the Ultimate Service Area lie along the I-94 corridor. All of this area has already been annexed into the city of St. Cloud, with the balance of the area incorporated into the city of St. Augusta.

INVENTORY AND ANALYSIS

- The I-94 Corridor Master Plan area is largely undeveloped.
- There is a small industrial park, which was annexed by St. Cloud from the former St. Augusta Township, in the vicinity of Stearns CSAH 75 and south of I-94.
- An industrial park is located on the east side of the Master Plan area at the I-94 and CSAH 75 Interchange.
- Large commercial and multi-family residential development exists near the interchange of I-94 and CSAH 75.
- There are large parcels of undeveloped land at the interchange of I-94 and Trunk Highway 15, due to environmental constraints and access.
- Stearns CSAHs 74 and 75 and County Road 136 run north and south within the Master Plan area and serve as collector streets, while Trunk Highway 15 borders the western edge. 40th Street South serves as a collector street north of I-94.
- 250th Street and 255th Street serve as east and west collector streets.
- The western half of the Master Plan area is largely developed with some large lot, single-family development clusters.
- Large agricultural uses exist within the Master Plan area.
- There are a number of environmental features including large and small wetlands complexes and creeks.
- The Wild and Scenic River corridor borders the Mississippi river on the eastern edge of the Master Plan area, adjacent to residential and industrial uses.
- There is a small amount of commercial development at the intersection of 40th Street South and CSAH 74.
- The construction of a new interchange at I-94 and CSAH 75 to access the I-94 Industrial Park is scheduled for 2003.
- The potential connection between I-94 and Trunk Highway 10 Alternate A will be south of the Master Plan area, but may have impacts to development of the business park in the future if Alternate A is selected.

PROCESS AND ISSUES

The I-94 Corridor Master Plan process began with a public input meeting in October of 2002. To aid the city in understanding the issues facing the study area, meeting participants were lead through exercises to identify issues that impact development in the Master Plan Area. The following issues were identified:

- Discourage “leap frog” development
- Potential cost of water/sewer extension (establish a water/sewer plan)
- Development constraints in SW quadrant of Trunk Highway 15/I-94
- Transportation – circulation, volume and planning with the city of St. Augusta
- Protection and expansion of the existing snowmobile trail
- Enhancement of existing ATV trails and creation of additional trails
- Encroachment of industrial and commercial development into residential neighborhoods
- Land use – mining of natural resources adjacent to I-94
- Extension of existing city trails to the area – (coordination with St. Augusta parks and trails plan)
- “Gateway” design standards
- Ensure “neighborhood community”
- Potential uses of the old city land fill
- Additional parks and recreational areas for the residents

In addition to the meeting held in October, the I-94 Corridor subcommittee and public provided additional input regarding the generalized future land use within the planning area on November 20, 2002. The meeting focused on reviewing current issues and soliciting public input on future land use within the area. Land use recommendations included:

- Planning in cooperation with the city of St. Augusta
- Buffering between land uses and I-94
- Alternatives for future north/south and east/west road corridors
- Future location of residential/commercial/office and industrial land uses
- Additional park and trail locations
- Protection of prime environmental features
- Intergovernmental cooperation (cities of St. Augusta and Rockville)
- Protection of existing mining operations
- Protection of “rural character” in the Master Plan area

DEVELOPMENT PRINCIPLES

The following principles shall guide development within the I-94 Corridor Master Plan area. The development principles also guided the creation of Figure 7-10, *I-94 Corridor Master Plan*, and shall serve as a land use template for the community. Table 7-9, *Future Land Use Plan, City of St. Cloud - I-94 Corridor Master Plan*, identifies the acreages for each land use category shown on Figure 7-10.

I-94 and other transportation issues may be impediments to development within the Master Plan area. In addition, there are significant wetland and natural systems that limit the amount of developable land in the area. It is critical that site review and environmental assessments are used to identify those areas of environmental significance.

Land Use Principles

Principle #1: Concentrate intense commercial uses on major roadways and near major intersections, which have high traffic counts, good access and visibility.

Principle #2: Locate higher density residential uses near major roadways and services; however, do not exclude higher density residential uses near natural amenities such as wetlands and forested areas.

Principle #3: Create residential neighborhoods served by adequate collector streets, parks, trail connections and other community facilities.

Principle #4: Protect and/or buffer existing and future residential uses from the negative impacts associated with commercial development, high-density residential development and/or intensive transportation facilities (I-94, Trunk Highway 15, CSAH 74 and others).

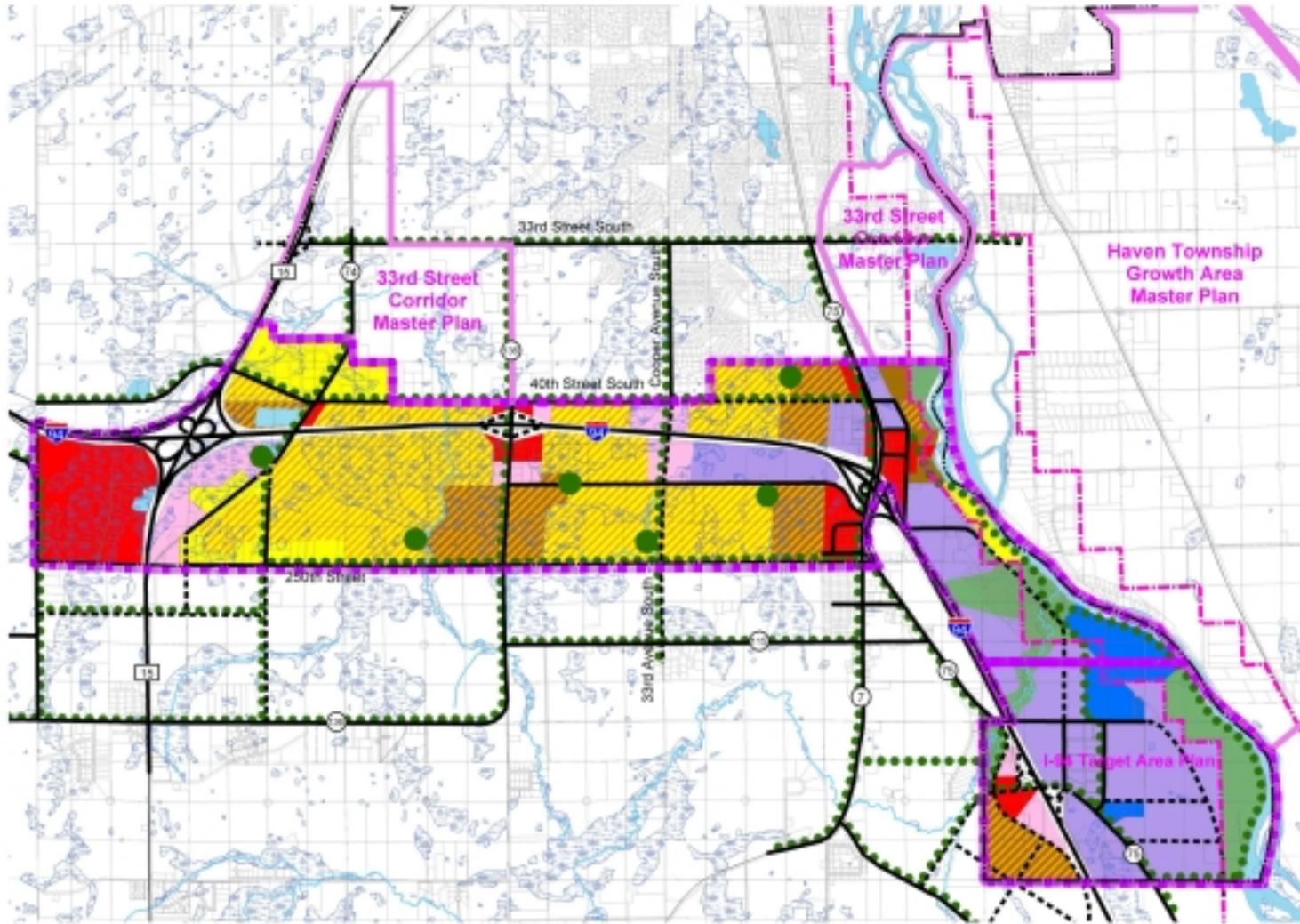
Principle #5: Require new residential development to have a mixture of density and types of housing, including the integration of affordable housing.

Principle #6: Develop building and landscaping design standards for the Trunk Highway 15 Corridor, Interstate-94 Corridor and CSAH 75 to ensure high quality development and visual appeal for the community as they serve as “gateways” to the community.

Principle #7: Integrate neighborhood commercial uses into future neighborhood designs, where appropriate.

Principle #8: Discourage urban development until such time municipal services (sewer and water) are readily available and cost effective as an effort to prohibit “leap frog” development.

Principle #9: Protect existing mining operations until such time the use is discontinued. Work with the mining operators to develop a reclamation plan that addresses both public and private issues related to the former mining area.



LEGEND

- Neighborhood Park
- Proposed Trails
- Existing Road
- - - Proposed Road
- ⋯ City Boundary
- ⋯ I-94 Corridor Master Plan Boundary
- ⋯ Other Study Area Boundary
- ⋯ Scenic River Zone
- Low Density Residential
- Low Density Mixed Residential
- High Density Residential
- High Density Mixed Residential
- Office/Business Park
- General Commercial
- Industrial
- Park/Open Space
- Public/Gene-Public
- Open Water
- Wetland

I-94 Corridor Master Plan

Figure 7-10



Parks and Recreation Principles

Principle #1: Connect open space, parkland and natural resources in a network of trails and wildlife corridors, focusing on the Neenah Creek Regional Park as a recreational destination.

Principle #2: Coordinate with the city of St. Augusta to extend and connect existing trails systems with the city of St. Cloud.

Principle #3: Encourage the development of separated bicycle trails and pedestrian walkways to promote safety and access to neighborhoods.

Principle #4: Support the continuation of motorized recreational vehicle trails within the Master Plan area and coordinate the expansion of these trails into the community and with the city of St. Augusta.

Principle #5: Protect the Mississippi Scenic River Corridor (in conformance with the rules and regulations set forth by the state of Minnesota) by limiting development and improving the usefulness of the area by acquiring additional parkland and developing trails, walking paths and other recreational uses.

Environmental Principles

Principle #1: Avoid wetlands, native species (endangered and threatened), sensitive areas and other significant natural resources during development.

Principle #2: Minimize the impact of urban development on rock outcroppings, wetlands, forested areas and other environmental features.

Principle #3: Mitigate impacts of development on environmental features within the Master Plan area.

Transportation Principles

Principle #1: Coordinate with the city of St. Augusta regarding future transportation planning to connect new local streets to the existing transportation network within the area.

**Table 7-9
Future Land Use Plan
City of St. Cloud – I-94 Corridor Master Plan
September 2003**

Land Use Category	Acres	Percent (of Total Land Area)
Residential	2,640	48.7
Low Density	409	7.5
Low Density Mixed	1,560	28.8
High Density	54	1
High Density Mixed	617	11.4
High Density Mixed Residential/ Commercial	0	0
Commercial	553	10.2
Downtown Mixed Use	0	0
Office	306	5.6
Industrial	1,205	22.2
Park / Open Space	472	8.7
Public /Semi-Public	209	3.9
Right-of-Way	0	0
Total Developed	5,384	99.4
Land Use Category	Acres	Percent (of Total Land Area)
Vacant / Agricultural	0	0
Total Land	5,384	99.4
Land Use Category	Acres	Percent (of Total Land Area)
Water	34	0.6
Total City	5,418	100

Note:

The acreage calculations are not perfectly accurate due to existing inaccuracies in the City's parcel base, but are sufficient for planning purposes. All acreages have been rounded to the closest whole number.

Principle #2: Consider a future I-94 Interchange at CSAH 136 to promote the movement of traffic in the region and provide for an additional access to I-94 between the interchanges at Trunk Highway 15 and CSAH 75.

Principle #3: Consider alternative north and south corridors to promote the movement of traffic across I-94.

Commercial and Industrial Principles

Principle #1: Encourage additional light-industrial development east of I-94 and adjacent to the existing I-94 business park.

Principle #2: Promote the creation of office use development along I-94, where appropriate, with design standards to ensure quality and visual appeal for the community.

Principle #3: Encourage additional commercial and office use development at the I-94/CSAH 75 Interchange, the I-94/Trunk Highway 15 Interchange and the future I-94/CSAH 136 Interchange.

Principle #4: Consider neighborhood commercial development at the intersection of CSAH 74 and 40th Street South.