



CITY OF GRANT

Comprehensive Plan Update 2040

for Submittal to Metropolitan Council for Review - December 31, 2019

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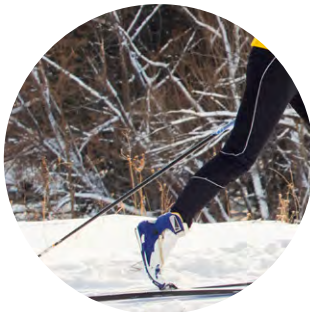
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C. Pavement Management Program



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CHAPTER 1:
Community & Planning Context





COMMUNITY & PLANNING CONTEXT - 12-31-2019
City of Grant Comprehensive Plan 2040

INTRODUCTION

The City of Grant is located approximately halfway between the urban core of St. Paul-Minneapolis and the County seat of Stillwater. Sometimes still mistaken as a township, the City of Grant is an established rural residential community with rolling topography, active agricultural uses, hobby farms and horse pastures. Being close to such urban areas, Grant is truly an oasis from the surrounding hustle and intensity of nearby communities. It is natural to think that in a City such as Grant, which has retained its large-lots and agrarian roots for so many decades, that planning is unnecessary; but planning is actually critical for the City so that it's rural character, agricultural uses and scenic views are protected for generations to come. The purpose of this Chapter is to provide the foundation and background for subsequent chapters of this Comprehensive Plan ("Plan").

The following sections of this Chapter include:

- A brief history of the City's past is provided to describe the community's deep rural and agricultural roots. The history of Grant provides context to the policy makers continued commitment to rural development patterns that are planned for in subsequent sections of this Plan.
- A short local and regional market snapshot describes the current development market and its relationship to this Plan development process.
- The Planning Context of this 2040 Plan is summarized including Metropolitan Council's role, as well as local objectives and the process used in developing this Plan.

1-1



History of Grant

The early beginnings of Grant tell an important story about how the township evolved into the City that it is today. While some change is inevitable the City remains committed to respecting its history and past as a part of planning for its future. In 2010 the City Grant Heritage Committee with the support of the City of Grant prepared a book entitled, “Growing up in Grant: History of the City of Grant in Washington County.” A summary of the early years and transition to the modern day is provided in the following narrative which is summarized in the 2030 Comprehensive Plan.

“At the time of settlement by farmers in the 1850’s, the Grant area and Washington County were the home of Native Americans of the Ojibwe tribe. Farmers from the East Coast of the United States arrived in the 1850’s. The Town of Grant was officially organized October 20, 1858 as a Congressional Township containing the normal six-mile by six-mile area with the first three supervisors and a clerk. The Town was organized at the home of Thomas Ramsden as Greenfield Township, with Albion Masterman, James Rutherford and Joseph Crane as supervisors, and Jesse Soule as clerk. It originally covered the current cities of Grant, Mahtomedi, Willernie, Birchwood, and Dellwood, and two-thirds of East White Bear Lake. In 1864, after learning of another Greenfield Township in Hennepin County, the name was changed to Grant, in honor of Ulysses S. Grant. The western one-third of Grant Township became Lincoln Township in 1918, and eventually Lincoln was split into Mahtomedi, Willernie, Birchwood, and Pine Springs. Dellwood became a separate community in 1993. Grant remained a township until November of 1996 when it became a city. In the summer of 1996, the Town of Grant successfully applied to be incorporated as a city. The Minnesota Municipal Council approved its application in early September, 1996. The purpose of this change was made to protect the rural nature of Grant. A City Council with four Council Members and a Mayor took office after the November 1996 election.”

1-2



More details and historical information are documented in *Growing up in Grant*, which provides an invaluable record of not only historical farms and houses in the community, but early settlers and residents of Grant. The book was prepared by the Grant Heritage Preservation Committee that is no longer active, but performed some important work particularly related to documenting important structures with significance in the City. While no properties are identified on the State or National Historic Preservation listings, there are structures of significance identified by the City which are identified as the following:

- Historic homes on the Manning Avenue Corridor
 - Masterman home (current Axdahl property)
 - Rutherford home
 - Powell-Benson home
 - Ramsden home

Town Hall

Efforts to restore and maintain the Town Hall have been implemented over the past 10-years, including window restoration, painting, cleaning and other periodic improvements.

1-3

While much has changed, much remains the same. Many historical homes, farmsteads and other remnants of the township past remain in the community and will continue to help define the City through this planning period. Subsequent chapters of this Plan reference the City's historical agricultural roots, scenic views, rolling topography and rural character. While properties have transitioned from commercial agricultural uses to predominantly rural residential uses today, a strong nod and continuation of the City's history can be found today in the hobby farms and horse pastures that are interspersed throughout the City's landscape.



Market Snapshot (Regional and Local)

The purpose of the Comprehensive Plan is to plan for the City's anticipated growth and changes over the next 10-20 years (defined as the planning period). Part of the process to update this Plan is to establish and describe the current market context both regionally and locally, because current development trends can be an indicator of what demands may occur in the community during this planning period.

Regional Trends

Regionally, the Twin Cities Metropolitan Area is growing and is anticipated to add more population, households and employment over the next 20-years. The Metropolitan Council's ThriveMSP 2040 specifically projects that a significant portion of that growth will be absorbed in the urban core (St. Paul – Minneapolis) and the first ring suburbs as residents seek more accessible, centrally located housing. Regionally, multi-family housing has dominated new construction, with a slow resurgence of townhomes and other attached single-family housing in the last half of this decade. While ThriveMSP 2040 guides significant growth to areas of redevelopment, there remains projected growth in areas such as Grant for single-family low density residential development. Housing prices have steadily risen since the end of the Great Recession, with most housing values in the region recovering, and in many cases exceeding, pre-bust prices.

1-4

Local Trends

Locally, for the first time in nearly three decades the City has two neighborhoods planned for new housing. These two developments include 31 rural residential lots in White Oaks Savanna on the far eastern edge of the City, and The Gateway a 16-lot rural residential development on the western edge of the City near the Mahtomedi School Campus. Both of these new neighborhoods, in conjunction with the smaller minor subdivisions and lot splits results in the most active development environment in the community in more than a decade. It is anticipated that it will take a minimum of 3-5 years for the lots in these neighborhoods to be absorbed, but there are indications that there may be continued interest in these types of rural residential neighborhoods that are becoming synonymous with the City.



Planning Context

The planning context of this 2040 Comprehensive Plan Update is also an important consideration to understand how and why the subsequent chapters of this planning document were created. While the City's history, location in the region, and current market dynamics provide context to where and why certain characteristics are emphasized within this Plan, the Planning Context establishes the requirements of this planning effort that must be addressed and also describes who was involved at the local level in the creation of this Plan. The following sections will define the context of the following:

1. Regional context and requirements (Metropolitan Council)
2. Local context and objectives guiding Plan development

1-5



Regional context and requirements – Metropolitan Council

The Metropolitan Land Planning Act requires all cities and counties in the Twin Cities Metropolitan Area (seven-county) to adopt a Comprehensive Plan, and to update and amend their plans on a decennial basis for consistency with the regional systems. The Plan update may address a broad spectrum of issues important to the community, but at a minimum the Plan must be updated for conformance with the Metropolitan Council's regional system plans that include transportation (highways and transit), water resources (wastewater services), airports, parks and open space.

To clearly define how a City must establish conformance with the Metropolitan Council's requirements the Metropolitan Council issues a System Statement to each community in advance of the decennial Plan update period. Within the System Statement, the Metropolitan Council outlines and details the key areas of the City's Plan update that must be addressed for conformance with regional systems. The following information provides a summary of the System Statement requirements that were considered and planned for within subsequent sections of this Plan update.

- 1-6
- The City is fully designated as a Diversified Rural community per the Metropolitan Council. Residential land uses are required to maintain an average density not to exceed 4 dwelling units per 40 acres (or 1 Dwelling Unit per 10 Acres).
 - Regional Trails, including existing and planned, should be identified and planned for consistency with the Metropolitan Council's 2040 ThriveMSP regional plan.
 - Infrastructure plans, including roads, sanitary sewer, and water supply should demonstrate how such systems support the City's low-density, rural residential development patterns.
 - The Local Surface Water Management Plan must be updated for conformance with the Minnesota State Statutes and requirements of the Metropolitan Council.



Local Planning Context

The City has prepared this Comprehensive Plan update because it is a requirement of the Metropolitan Council. Since a full re-write of the Plan was completed for the 2030 Plan, this 2040 Plan process was structured as an update to conform with the requirements as established within the 2015 System Statement. Additionally, the City Council acknowledges the importance of this Plan as a demonstration of the continued commitment to efforts of past City Councils to prioritize protection of the City's agricultural uses, expansive open spaces, scenic views and rural residential lifestyles. The historical commitment of the City's former Town Boards, City Council and policy makers is a defining characteristic of the community and informed this Plan development process.

Engagement Process

An extensive public engagement process was not completed as part of this process since the 2040 Plan is essentially an update of the 2030 Plan. Much of this 2040 Plan is consistent and similar to the City's 2030 Plan, with minor adjustments to reflect current conditions in the community. The City's Planning Commission served as the working group for this process, reviewing draft materials and providing feedback through plan development. At the end of this process, the Planning Commission and City Council held a joint work session to review the full draft in preparation of the public hearing. While no formal open houses or engagement were held, the Public Hearing as well as 6-month adjacent/affected jurisdictional review periods provided opportunities for the public to review the 2040 Plan update and to comment prior to final adoption of this Plan.

1-7

Plan Development and Changes to 2030 Plan

The Chapters that follow are generally consistent with the City's 2030 Plan but have been restructured for ease of use. The 2030 Plan was oftentimes difficult to navigate for a user, and as a result 'sat on a shelf.' The intent of restructuring the Plan elements in this 2040 Comprehensive Plan update is to make the document more user friendly and actionable.

Besides restructuring the document, the most significant change is to the City's Future Land Use Plan contained in Chapter 3. While the policy, intent, and permitted uses are consistent with the 2030 Plan, the Future Land Use Plan renames and focuses the land uses in the community to transition from historically dominant agricultural uses to the existing and planned rural residential development pattern. While this change is primarily nomenclature, it is a deliberate effort to more clearly define and represent how the City's land uses are developed and used by residents today.



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CHAPTER 2:
Vision, Goals & Strategies





VISION, GOALS & STRATEGIES - 12-31-2019
City of Grant Comprehensive Plan 2040

INTRODUCTION

City of Grant Vision 2040

The City of Grant is a small predominantly rural residential community located less than 25 minutes from Downtown Saint Paul. The proximity of the City to the major metropolitan area, its accessibility to great schools, recreational opportunities, agricultural activities and open spaces make it a desirable place for residents to call home. But Grant is more than an accessible, rural residential community, it is a true reflection of the past where agricultural uses dot the landscape and rolling topography provides uninterrupted scenic views of the City's pastures and natural resources. While the Twin Cities Metropolitan Area has grown exponentially with more households and population, Grant has generally maintained a slow, methodical growth rate for the past decade. The small incremental changes have resulted in a few new rural residential and conservation-based subdivisions, new hobby farmsteads, agricultural and small businesses all of which have managed to maintain and further enhance the rural character of the community that so often is lost in such a close-in community. The rural character as it was defined during this planning process is less about an active commercial farmstead, and more about the opportunity for residents to engage in small hobby farms, horse boarding and training and large homesteads with scenic views and rolling topography. While these activities mark a subtle change in the community as it transitions from its dominant agricultural roots, the City remains committed to supporting its remaining farmers and farmsteads and encourages residents to participate in the City's agricultural resources and activities.

2-1

The vision that is provided below is a slight refinement from the 2030 Plan, demonstrating clear direction for the continued commitment to a rural residential development pattern. However, where the previous plan was silent on agricultural activities and small rural businesses, this Vision acknowledges that they are character defining activities and that the vision for 2040 includes a diverse rural development pattern.

Our Vision for Grant in 2040 is...

Grant is a rural residential community with abundant scenic views, recreational, and natural amenities. The City's residential, natural, and agricultural resources are protected and enhanced and the community demonstrates a continued commitment to its strong rural character for generations to come. Dotted the landscape are homesteads, active hobby farms, horse pastures and the occasional rural business creating a diverse rural land use pattern not typically found in such proximity to a major metropolitan area. Playing a small, but critical role, are the City's government and services which are planned to minimize expenditures while protecting a high-quality of life expected by Grant's residents and small businesses.



Goals & Strategies

The purpose of this Chapter is to refine, edit, remove and create a set of goal statements to guide the City through this planning period. The 2030 Plan included a set of goal statements for each chapter and topic area which were used as the starting place of this goal setting process. Ten years have lapsed since the last Comprehensive Plan was adopted, so like many plans, several of the goals and initiatives were accomplished in the last decade and it is therefore necessary to identify new goals and strategies to help guide the City for the next decade. This does not discount the hard work of previous City Councils, Town Boards and policy-makers but instead acknowledges those efforts and builds upon goal and strategy statements to ensure the continued commitment to a rural residential lifestyle for generations to come.

2-2

To help define the goals and strategies within this 2040 Plan, the City's Planning Commission worked through a Strengths, Weaknesses, Opportunities and Threats (SWOT) exercise which formed the foundation for the changes and updates in this Chapter. After the SWOT was compiled, the Planning Commissioners were asked to identify their top three responses in each category. As commissioners prioritized their responses, patterns, agreement and consensus began to emerge with respect to the top initiatives that should guide the City during this planning period.

The results of the SWOT and prioritization were then turned into goals statements using specific action-oriented words with a defined meaning. The draft goals statements became the basis for discussions of the Planning Commission moving forward addressing topics such as Land Use, Housing, Natural Resources, Transportation and Infrastructure.

The following goals and strategies are a culmination and synthesis of information collected through this process, and by incorporating still relevant and applicable goals and strategies from the 2030 Plan. It should be noted that each of the following Goal Statements includes a set of supporting Strategies that should be considered collectively, rather than individually. For purposes of this Plan, the following definitions are provided for the goals and strategies in subsequent sections of this Chapter:

Goal: A general statement of community aspirations and desired objectives indicating broad social, economic, or physical conditions to which the community officially agrees to try to achieve in various ways, one of which is the implementation of the Comprehensive Plan.

Strategy: An officially adopted course of action or position to implement the community goals.



In addition to defining a “Goal” and a “Strategy”, the definition of the action word contained within the statements must also hold a common definition that assigns various roles, commitments and responsibilities to the City. The Planning Commission worked through an exercise to match the appropriate commitment level with the goal statement to ensure that the goals and strategies contained in this Plan have a unified meaning and definition. A glossary of these terms is found in Appendix A of this Comprehensive Plan. The ‘action’ words used in the following goal and strategy statements are assigned the following commitment level:

No commitment of financial investment, staff resources and policy directives	May include financial investment, staff resources and policy directives	Commitment to financial investment (if needed), staff resources and policy directives
Continue Endorse Preserve Recognize Promote Work	Create Communicate Evaluate Encourage Enhance Explore Maintain Identify	Prevent Protect Provide Strengthen Support Sustain

2-3

The following goals and strategies are categorized by topic area, and generally correspond to the individual chapters that are contained within this Comprehensive Plan. Each chapter should support, build upon, and incorporate these goals and strategies into the Plan component and develop implementation steps that will help achieve the goals and strategies as identified. The intent of these statements is to provide a roadmap for development in the City; to be aspirational; and to create a framework for policy makers, staff, developers, landowners, and residents.

Community Character & Governance

Preserve and **protect** the City’s rural residential character and quiet quality of life.

Strategies:

Strengthen the City Zoning Ordinance and other regulatory controls to ensure permitted and conditionally permitted uses enhance and support rural residential uses.

Support uses and development that protects the night sky, minimizes traffic and maintains the City’s open space and scenic views.



Provide quality city services commensurate with low taxes and minimal regulations.

Strategies:

Sustain the City's existing policies, such as the road assessment policy, which provides residents with the power to affect change to their property, neighborhoods, and supporting infrastructure.

Identify opportunities to collaborate and cooperate with other agencies to gain efficiencies, reduce duplication and provide cost-effective materials and services to the City's residents.

Support the efforts of previous City Councils, Town Boards and policy-makers that developed policies consistent with low-taxes and minimal regulations and consider such efforts in any policy change considerations.

Continue to **support** the City's complaint-based process to enforce the City ordinances.

Support the continued staff-led process to evaluate and review the City's Conditional Use Permits according to the adopted policy.

Encourage policy-makers, staff, stakeholders and residents to engage in open communication about the City's vision, goals, and policies that guide the community.

Strategies:

Maintain the City's website in a form that is readable, accessible and current to keep residents and business owners informed of the City's activities.

Continue to publish the newsletter and provide updates regarding policy directives, current and future initiatives at the City.

Continue to provide information and updates in the City's newsletter, on its web page and using other resources to communicate to residents and business owners the City's responsibilities.

2-4



Create a respectful, calm and proactive atmosphere at the City offices and Town Hall.

Strategies:

Promote City meetings and events as key opportunities for residents to learn and be informed about the City, its staff and council activities.

Endorse the City Council and Planning Commission policies and manuals to ensure functioning, respectful meetings where everyone can be heard and the City's business can be completed.

Encourage the City's policy-makers and commission members to participate in the League of Minnesota Cities (LMC) training sessions, and other continuing educational opportunities provided by other similar agencies.

Identify opportunities to engage the City's residents in city events, meetings and initiatives.

2-5

Land Use

Preserve and **protect** agricultural land and facilities, agricultural lifestyles, and encourage hobby farms and commercial agricultural uses within the City.

Strategies:

Strengthen and evaluate the City's permitted and conditionally permitted uses to support new and traditional agricultural practices, including new technologies, practices and methodologies.

Identify opportunities to inform and communicate with all of Grant's residents the importance and commitment of the City to its farmers, hobby-farmers, and rural small-businesses as character defining uses in the community.

Endorse regional and state policies that further traditional agricultural activities, including programs such as Green Acres and Agricultural Preserves.



Strengthen the future land use designations to **maintain** the City's rural residential character.

Strategies:

Support the City's predominantly rural residential uses through appropriate land uses as defined within this Plan.

Recognize that the City's land uses are slowly changing and appropriately study and update the City's zoning ordinance frequently and expeditiously to match policies with demands.

Protect the City's municipal borders through the development of strong, clear land use policies to prevent hostile annexation.

Strategies:

2-6

Continue to enforce the City's density requirements to maintain a rural residential development pattern.

Support the actions of previous City Councils, Town Boards and policy-makers through continued correspondence and communication with adjacent jurisdictions regarding the City's intent to remain in-tact.

Explore and consider the use of open space development or conservation development methods for properties that are constrained by significant or high-quality natural resources.

Housing Goals

Support Washington County and other Regional programs, such as those offered by the Metropolitan Council, that meet the residential needs of a diverse and/or aging population.

Strategies:

Explore opportunities to develop ordinances that would support greater diversity within the City's housing stock such as Accessory Dwelling Units (ADU's) and other creative housing types.



Work with the City's aging residents to learn whether they intend to stay in the community, and if so, identify/explore what types of housing they might demand and where.

Sustain and enforce the City's Code to encourage maintenance of the existing housing within the City.

Strategies:

Support the City's complaint-based code enforcement process to ensure residents have a voice, and property owners are protected.

Work to update the City's Code periodically to address issues and concerns as brought forward by city officials, staff, and residents to make the City's ordinances and codes easier for the residents to comply with and understand.

2-7

Natural Resources & Recreation

Protect and **enhance** the natural resources in the community.

Strategies:

Continue to guide property for low-density rural residential uses that are low-intensity and protect important natural areas including, lakes, streams, wetlands and other natural features.

Work with the watershed districts, the DNR and other agencies to collaborate on important regional initiatives that will support the continued protection of key natural areas.

Strengthen the City's ordinances related to natural resources protection to maintain the City's connected network of green spaces including scenic views, lakes, wetlands, woodlands and pastures.

Endorse the continued enforcement of the City's ordinance related to shoreland setbacks, wetland setbacks and other policies that are intended to protect the city's natural features.



Identify and **explore** opportunities to provide non-motorized trail connections to existing and planned regional and state trails.

Strategies:

Endorse the plans for regional trail expansion as shown in this Plan.

Work collaboratively with other agencies, including Washington County, to provide trail connections and corridors through the City.

Explore opportunities to connect new developments to the regional trail system through existing roadways or planned connections.

Identify opportunities to improve lakes, wetlands and streams within the City.

Strategies:

2-8

Explore opportunities to collaborate with the watershed districts and the DNR on projects that will improve the City's lakes, wetlands and streams.

Maintain the City's ordinances and policies consistent with the watershed districts and DNR rules and regulations related to shoreland and wetland management.

Identify opportunities to update the City's review process to ensure compliance with the City, watershed district and DNR rules, regulations and policies.

Endorse the County's abandoned well sealing cost-share program as a strategy to support groundwater resource protection.

Transportation

Maintain a safe and adequate transportation network at reasonable cost to meet the safety, health, and welfare needs of the community.

Strategies:

Continue to support the City's road policy and review and revise such policy as needed.



Encourage residents to participate in larger road reconstruction processes that can provide benefits due to improved efficiency, costs savings and reduced construction impacts.

Endorse the City's complaint-based process regarding roadway maintenance and management to aid in identification of specific issues that may need to be prioritized.

Continue to update and review the City's 5-year road pavement management schedule to ensure each of the City's roadways are evaluated and maintained on a regular schedule.

Infrastructure

Sustain rural residential development consistent with the diversified rural community designation through the use of private on-site sewer and water supply services.

Strategies:

Protect current densities through appropriate zoning and subdivision ordinances and land use permit processes.

Explore opportunities to collaborate with Washington County to permit and encourage the use of innovative and green technologies in individual wastewater treatment systems.

Support Washington County as the permitting authority for all Individual Septic Treatment System installations in the City.

Explore ways to protect the quantity and quality of the City's water supply.

Strategies:

Work collaboratively with other agencies including the DNR, Minnesota Department of Health, adjacent municipalities, and Washington County to maintain the City's water supply for current and future generations.



Continue to require all homesites to have adequate lot area to support and maintain private wells and individual sewage treatment systems.

Protect groundwater and surface water bodies from erosion and other contaminants.

Strategies:

Sustain current processes and methods for permitting of site work to ensure proper permits have been obtained before site work and/or grading commences.

Work with the City Engineer to update and revise processes and procedures as necessary to ensure proper permitting is obtained for all projects in the City.



CHAPTER 3: Land Use & Housing





LAND USE & HOUSING - 12-31-2019
City of Grant Comprehensive Plan 2040

INTRODUCTION

The City of Grant's land uses include a mix of single-family rural residential homesteads, hobby farms, active agriculture uses, pastures and open spaces. Located northeast of the downtown Minneapolis-St. Paul central business districts, the proximity of the City to both downtowns makes it a highly desirable location for residents looking for a home to get away from the intensity of the major metropolitan area. The City has evolved from a primarily commercial agricultural community into a predominantly rural residential land use pattern containing large lots sprinkled with pastures, horse stables, hobby farms and rural commercial uses. The City's rural and agrarian roots are still present today even though the City's commercial agricultural uses no longer dominate the landscape. Within a short distance from nearly every County Road through town you will find yourself traveling down a gravel road where horses, llamas and rural residential estates dot the rolling hills. The community is now defined by its open spaces, expansive scenic views and rural residential uses. The following sections of this Chapter provide an introduction and summary of the Metropolitan Council's 2015 System Statement which establishes the community's designations within the larger metropolitan area, and provides projections for the City's population, household, and employment growth through 2040. In addition to the community context, the City's Existing Land Uses and Future Land Uses are described to provide a clear guide and vision for residents, business owners, potential developers, stakeholders and policy-makers. Since rural residential uses dominate the City's development patterns it is most appropriate to address existing and projected housing needs within this Chapter because the land use is inextricably linked to the City's housing stock. Finally, this Chapter addresses special resources including aggregate, prime farmland and solar resources.

3-1



COMMUNITY CONTEXT (FORECASTS & COMMUNITY DESIGNATION)

The City of Grant is located in west-central Washington County which is the most eastern county in the 7-County Metropolitan Area. The location of the City in the region makes it a highly desirable residential community due to its accessibility to major job centers, exceptional schools, high-quality natural resources, open spaces and recreational opportunities. Essentially, the City is just far enough away from the urban core to keep it a rural residential oasis. The Metropolitan Council's ThriveMSP 2040 designates the entire City of Grant as Diversified Rural (See Map 3-1. Community Designation) which guides development at no more than 4 dwelling units per 40 acres (4 DU/40 AC). ThriveMSP 2040 defines Diversified Rural communities as:

“Diversified Rural communities are home to a variety of farm and non-farm land uses including very large-lot residential, clustered housing, hobby farms and agricultural uses. Located adjacent to the Emerging Suburban Edge of the Urban Service Area, Diversified Rural designation protects rural land for rural lifestyles today and potential urbanized levels of development sometime after 2040...”

3-2

The Metropolitan Council provides guidance for land use planning in communities designated as Diversified Rural. Some of the guidelines most applicable to the City of Grant are:

- Plan for growth not to exceed forecasts and in patterns that do not exceed 4 units per 40 acres
- Manage land uses to prevent the premature demand for extension of urban service so that existing service levels (such as on-site wastewater management, gravel, and other local roads) will meet service needs

In addition, the Metropolitan Council provides guidance in this 2040 planning process for “Building in Resilience” into a City’s Comprehensive Plan. A community such as Grant is in the position to capitalize on this theme because of the low-intensity land use pattern, and the Special Resource Protection initiatives. The following summary guidance is provided:

- Identify local measures that would result in reductions in water use, energy consumption, and emission of greenhouse gases.
- Ensure that local comprehensive plans and ordinances protect and enable the development of solar resources...and consider the use of other alternative energy sources as part of the planning process.

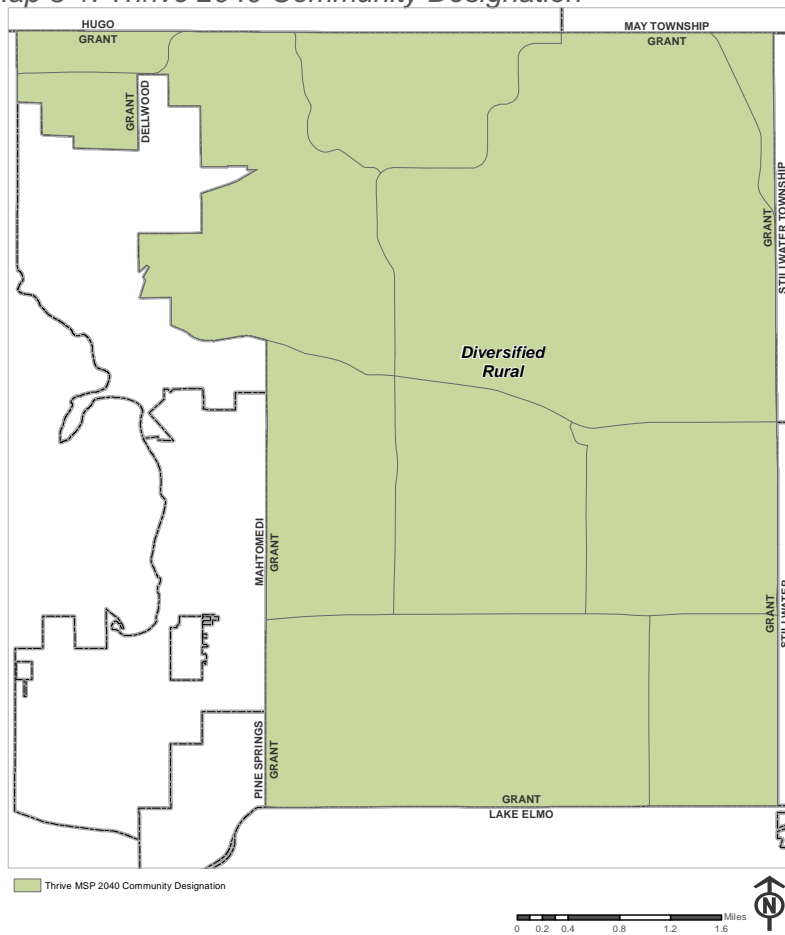


In addition to specific land use planning direction, the Metropolitan Council also provides the following guidance related to *housing*:

- Promote housing options to give people in all life stages and of all economic means viable choices for safe, stable and affordable homes.
- Promote a balanced housing supply and a mix of housing affordability to ensure long-term community vitality.
- Identify and analyze local markets, location, condition, and availability of affordable units, both publicly subsidized and naturally occurring, to inform the housing element of the local comprehensive plan.

Though not all guidance provided by the Metropolitan Council is applicable, as demonstrated in the above policy directives, there are many ways that the City can tailor the approach to incorporate these policies into this Plan based on its current and planned development patterns.

Map 3-1. Thrive 2040 Community Designation



FORECASTS

In addition to the policy guidance, the Metropolitan Council provides population, household and employment forecasts that are required to serve as the foundation to each component of this 2040 Plan update. Table 3-1 are the forecasts as provided by the Metropolitan Council in the 2015 System Statement for Grant.

Table 3-1. Thrive 2040 City of Grant Forecasts

	2010	2020	2030	2040
Population	4,094	4,185	4,080	4,260
Households	1,463	1,510	1,610	1,700
Employment	449	580	700	840

Source: 2015 System Statement, City of Grant

Since the City does not have any sewerer households, the Metropolitan Council has determined that the City of Grant does not have a share of the region's need for low and moderate income housing. This is due to low-density, and low-intensity land uses that are required to be maintained given the City's community designation.

3-4



LAND USE

2040 City of Grant Land Use Goals

- **Preserve** and **protect** agricultural land and facilities, agricultural lifestyles, and encourage hobby farms and commercial agricultural uses within the City.
- **Strengthen** the future land use designations to **maintain** the City's rural residential character.
- **Protect** the City's municipal borders through the development of strong, clear land use policies to prevent hostile annexation.

The following sections describe the City's Existing Land Use patterns and the Future Land Use Plan. The purpose of this section is to describe how the current land uses are projected to change, or what aspects of the City's land use and neighborhood patterns are intended to stay the same. As described in greater detail in subsequent sections, the City's land uses today are generally expected to remain in-tact with minimal changes incorporated to respond to the challenges the City has faced over the past decade. The following sections describe the existing land use pattern, present the future land use plan, and summarize the special resources that are correlated directly to the City's land use patterns.

3-5

EXISTING LAND USE

The City's existing land use pattern is shown on Map 3-2, which demonstrates a low-density and low-intensity land use pattern throughout the community. The Existing Land Use map is derived from the Metropolitan Council's generalized land use information that was compiled in 2016. As demonstrated in both Table 3-2 and Map 3-2, nearly 48% of the City is shown as 'undeveloped' which is misleading because many of the areas designated as 'undeveloped' are used for accessory uses such as hobby farms, horse pastures and/or are a part of the residential estate. However, it is worth noting that in the past many of these areas would have traditionally been used for commercial agricultural production, but given current ownership patterns and market dynamics most of the City's commercial agricultural uses are no longer active. Finally, since 2016 the City has approved a rural-residential plat on approximately 300-acres, and approximately half the acreage will be developed with rural residential uses and will no longer be in agricultural production. This change is reflected in the Future Land Use Plan and is shown on Map 3-3.



Table 3-2. Generalized Existing Land Use

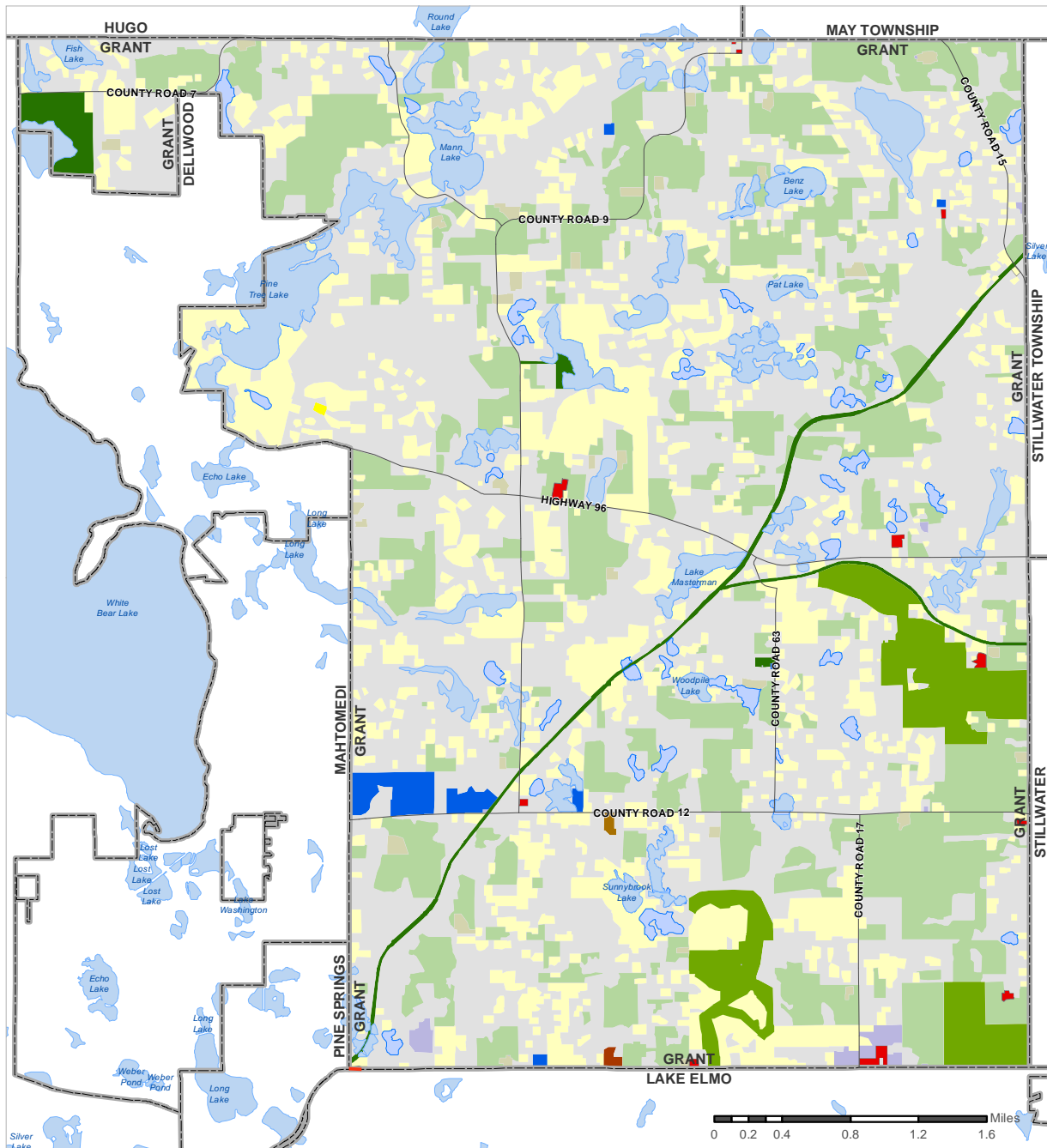
Existing Land Use	Acres	% of Land Area
Agricultural	3,667.8	21.6%
Farmstead	111.6	0.7%
Single-Family Detached	3,120.3	18.4%
Single-Family Attached	2.6	< 0.1%
Seasonal/Vacation	1.0	< 0.1%
Manufactured Housing Park	4.9	< 0.1%
Institutional	105.9	0.6%
Office	6.7	< 0.1%
Industrial and Utility	52.5	0.3%
Retail and Other Commercial	29.1	0.2%
Golf Course	585.6	3.4%
Park, Recreational or Preserve	242.8	1.4%
Open Water	910.1	5.4%
Undeveloped	8,119.1	47.8%
Major Highway (ROW)	21.0	0.1%
TOTAL	16,980.9	100%

Source: Metropolitan Council, SHC

3-6



Map 3-2. Generalized Existing Land Use



3-7



FUTURE LAND USE

The City's Future Land Use Plan is based on the existing land use and development patterns in the community, which are anticipated to remain consistent through this planning period. Through this Plan update process, the City determined that it was important to describe its land uses consistent with the rural residential uses that now dominate the landscape. As described in the introductory chapter of this Plan, the City's history is deeply rooted in agricultural uses and therefore agricultural uses will always be welcome and supported in the community regardless of the land use designation of a particular property. However, it is important to recognize that the dominant land use in the community today, and what is projected to continue through this planning period, are rural residential uses sprinkled with intermittent hobby farms, horse boarding operations, and rural commercial activities. Given that the land use pattern has evolved the City has re-defined its land use designations in this Plan transitioning from pure Agricultural designations to land use designations that are more descriptive of the rural residential and diverse rural uses encouraged through this Plan. As the City's uses transitioned from commercial agricultural uses the land use designations were never adjusted to reflect the actual or planned rural residential uses in the community. The mismatch between the designation and the uses contemplated results in confusion by residents, developers, stakeholders and policy-makers when determining what types of uses are most compatible within the community's land use and zoning. The benefit of re-naming and re-guiding the City's land use designations to incorporate rural residential uses is that it provides a clearer, more specific description of the vision for the City's land uses.

3-8

The transition from Agricultural A-1 and Agricultural A-2 contained in the 2030 Plan, to Rural Residential/Agricultural (RR-AG) in this Plan directly responds to the current and planned land use and development pattern. By appropriately describing the types of uses contemplated within a land use designation the City will be able to more accurately consider changes to its zoning and use tables to implement this Plan. This pressure is not unique to the City but is likely to continue given the City's proximity to the metropolitan area. For example, over the past decade the City has experienced more demand and inquiry for Conditional Use Permits that allow businesses to be operated from residential properties as an accessory use. The large parcel sizes and low-intensity uses are a natural fit for home occupations in the rural residential areas, but evaluating how and if each use is consistent with the City's vision and goals for its neighborhoods is an important consideration. One of the objectives in redefining the City's land use designations is that it more appropriately emphasizes the importance of the City's residential uses and character and establishes the intended long-term use of properties in the community. The revised Future Land Use plan intentionally guides uses generally and will allow for site-



specific standards to be achieved through supporting zoning districts. Whether a specific use is permitted or conditionally permitted, will be determined based on the site-level characteristics such as existing and adjacent land use patterns and the road network. For example, many of the City's local roadways are rural section, and a fair amount of its mileage remains gravel contributing to the City's continued desire to zone the land for uses that are less intense. (See Transportation Chapter for more discussion regarding the roadways)

While the City's rural residential land use designations are re-defined, the City's General Business use is unchanged. The 2030 Plan identified a corridor of land along Highway 36 where the City's existing principal business uses are located. The City values its existing businesses and is dedicated to preserving the existing General Business patterns along the corridor and will support the exploration of new or expanded uses within this designation to ensure the viability of this land use designation in its current configuration. The following sections include the definitions of the City's Future Land Use designations, the corresponding table that details the acreage of land guided for each use, and the Future Land Use Map.

Future Land Use Definitions

Agricultural Preserve (AP): Land in this designation is currently enrolled in the Agricultural Preserve program, and the City is required to provide a land use designation that identifies these lands specifically to comply with the statutory requirements. These properties are enrolled for a minimum of seven (7) years at which time the contract may either be terminated, or a property may re-enroll. If a property owner elects not to renew the AP contract for an enrolled property, then the property will be re-guided to RR/AG. If a property owner decides to apply for enrollment in the AP program, the City will support such enrollment through a Comprehensive Plan amendment to re-guide the property to this land use designation. (1 DU/40 Acres)

3-9

Rural Residential/Agricultural (RR-AG): The Rural Residential/Agricultural (RR/AG) land use designation guides land for principal rural residential and agricultural uses. Active and/or commercial farming or agricultural activities are permitted in this land use designation. This land use designation also guides land that is most appropriate for large-lot single-family residential uses and are encouraged to develop at no more than 4 dwelling units per 40 acres. While some non-residential principal uses are conditionally permitted in this land use designation, most non-residential uses are required to be accessory to a principal residential use. Uses such as hobby farms, horse boarding and training facilities, and other rural accessory uses are encouraged in this land use designation. (4 DU/40 Acres)



Rural Residential (RR): The Rural Residential land use designation primarily identifies neighborhoods that were developed with residential lots in the 1960s and 1970s that are smaller than 5-acres. No new land has been designated as rural residential as part of this Plan update. If any land is designated as Rural Residential, and is developable, then such property is encouraged to develop at no more than one dwelling unit per 10 acres (1 DU/10 Acres).

Park/Trail (P/T): The Park/Trail land use designation identifies land that is publicly owned and managed as either a park or trail in the City. This Plan identifies two trail corridors that are owned by the Minnesota DNR (MnDNR), including the Gateway State Trail that bisects the city east-west. Besides the regional and state trails, the City does not manage any park or trail land.

Right-of-Way (ROW): The Right-of-way land use designation identifies the City’s roadways that are owned by the City, County or State. The ROW designation does not identify private roadways, trails or shoulders that are managed by individual homeowners or homeowners’ associations.

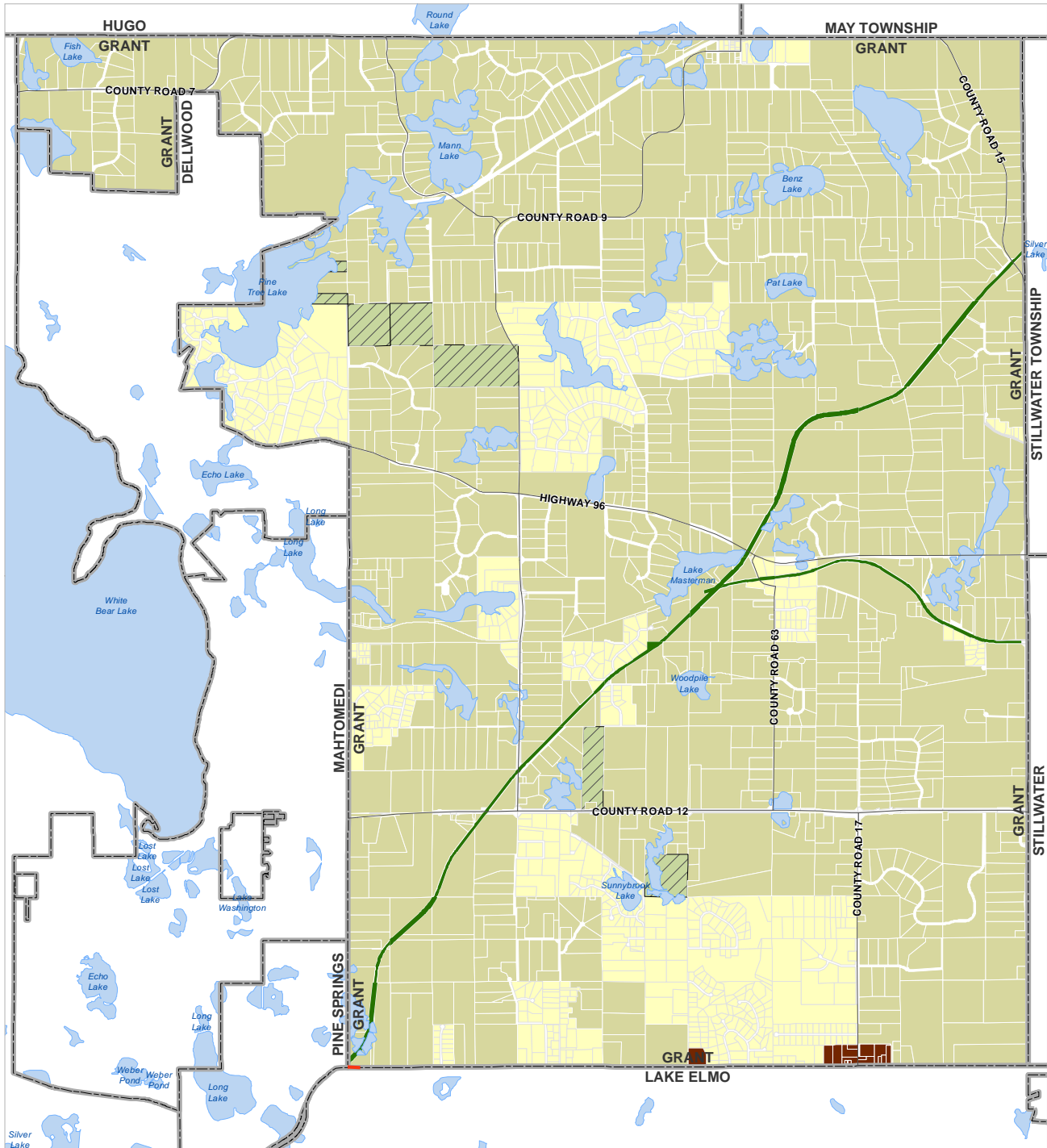
3-10

Table 3-3: Future Land Use Acreage by Decade

Future Land Use	Density	2020 Acres	% of Land Area	2030 Acres	% of Land Area	2040 Acres	% of Land Area
Agricultural Preserve (AP)	1 DU/40AC	276.6	1.6%	276.6	1.6%	276.6	1.6%
Rural Residential/ AG (RR/AG)	4 DU/40 AC	13,490.8	79.4%	13,490.8	79.4%	13,490.8	79.4%
Rural Residential (RR)	1 DU/10 AC	2,459.6	14.5%	2,459.6	14.5%	2,459.6	14.5%
General Business (GB)	NA	39.6	0.2%	39.6	0.2%	39.6	0.2%
Park/Trail (P/T)	NA	122.2	0.7%	122.2	0.7%	122.2	0.7%
Right-of-Way (ROW)	NA	592.1	3.5%	592.1	3.5%	592.1	3.5%
TOTAL		16,980.9	100%	16,980.9	100%	16,980.9	100%



Map 3-3: Future Land Use



3-11

Future Land Use

Land Use Designation and Density

- Rural Residential (RR): 1 DU/10 AC
- General Business (GB)
- Agricultural Preserve (AP): 1 DU/40 AC
- Park/Trail (P/T)
- Right-of-Way (ROW)
- Rural Residential/Ag (RR/AG): 4 DU/40 AC



Density and Staging

All residential land uses in the City are required to be developed with a maximum density of 4 Dwelling Units per 40 Acres, or one (1) Dwelling Unit per 10 Acres. Given the City's development patterns, there is no way to project or stage where a subdivision may occur in the future, as any contiguous land area exceeding 20-acres is potentially subdividable. However, the City maintains the maximum density of one (1) dwelling unit per 10 acres through its official controls including its zoning and subdivision ordinances. The City does not have nor currently use a Flexible Development Ordinance.

Staging

The Mahtomedi School Campus receives urban services through an agreement with the City of Mahtomedi. There is no additional land planned for municipal services and no extension of the MUSA is included in this Plan. The Mahtomedi School Campus Property is guided RR/AG, and the school campus is a permitted use with a Conditional Use Permit (CUP). The CUP includes the condition that all municipal services be provided by the City of Mahtomedi.

3-12

SPECIAL RESOURCE PROTECTION

Historic Sites

References to the City and the historic sites are provided in Chapter 1: Community Context. There are no state or nationally registered properties located in the City of Grant.

Solar Access

The City of Grant recently adopted a solar energy system ordinance that either permits or conditionally permits the installation of residential-scale solar arrays in the community when such installations are accessory to a principal residential use. The City recently studied the community solar energy system uses (also known as community solar gardens) and determined that such uses as a principal use were industrial in character and therefore did not fit into the City's rural residential areas. However, the City did acknowledge the potential of permitting larger scale solar installations in its General Business land use designation, and expressed willingness to explore how such uses could be incorporated into the City's ordinances.

With respect to the rural residential areas, the City is supportive of solar installations, and diligently worked to create an ordinance that would make the permitting process reasonable in terms of fee and process time for its residents. The following solar potential map and calculations demonstrate that residents could benefit if they choose to install a solar energy system because the City has extensive former agricultural lands and open spaces that could effectively support residential solar energy systems.

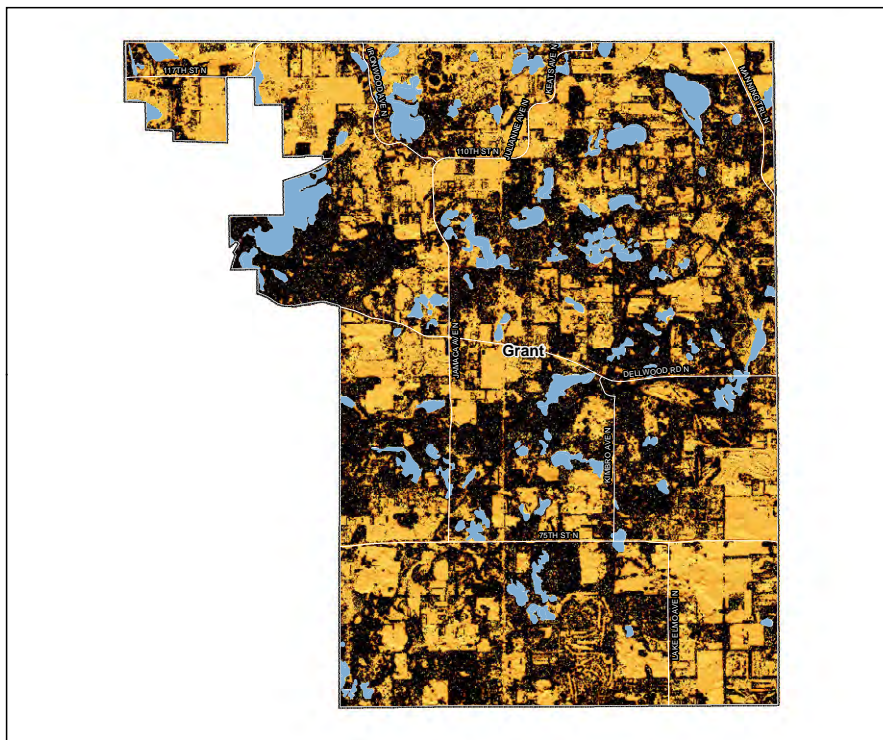


Table 3-4. Solar Resource Calculation

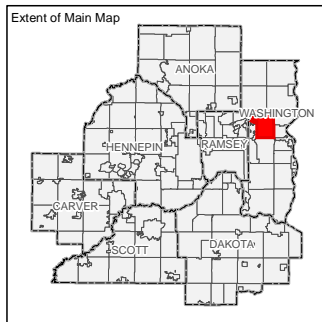
Gross Potential (Mwh/yr)	Rooftop Potential (Mwh/yr)	Gross Generation Potential (Mwh/yr)*	Rooftop Generation Potential (Mwh/yr)*
37,087,990	345,612	3,708,799	34,561

*In general, a conservative assumption for panel generation is to use 10% efficiency for conversion of total insolation into electric generation. These solar resource calculations provide an approximation of each community's solar resource. For most communities, the rooftop generation potential is equivalent to between 30% and 60% of the community's total electric energy consumption. The rooftop generation potential does not consider ownership, financial barriers, or building-specific structural limitations.

Map 3-4. Gross Solar Potential



12/13/2016



Gross Solar Potential (Watt-hours per Year)

High : 1275386
Low : 900001

- Solar Potential under 900,000 watt-hours per year
- County Boundaries
- City and Township Boundaries
- Wetlands and Open Water Features

Source: University of Minnesota U-Spatial Statewide Solar Raster.

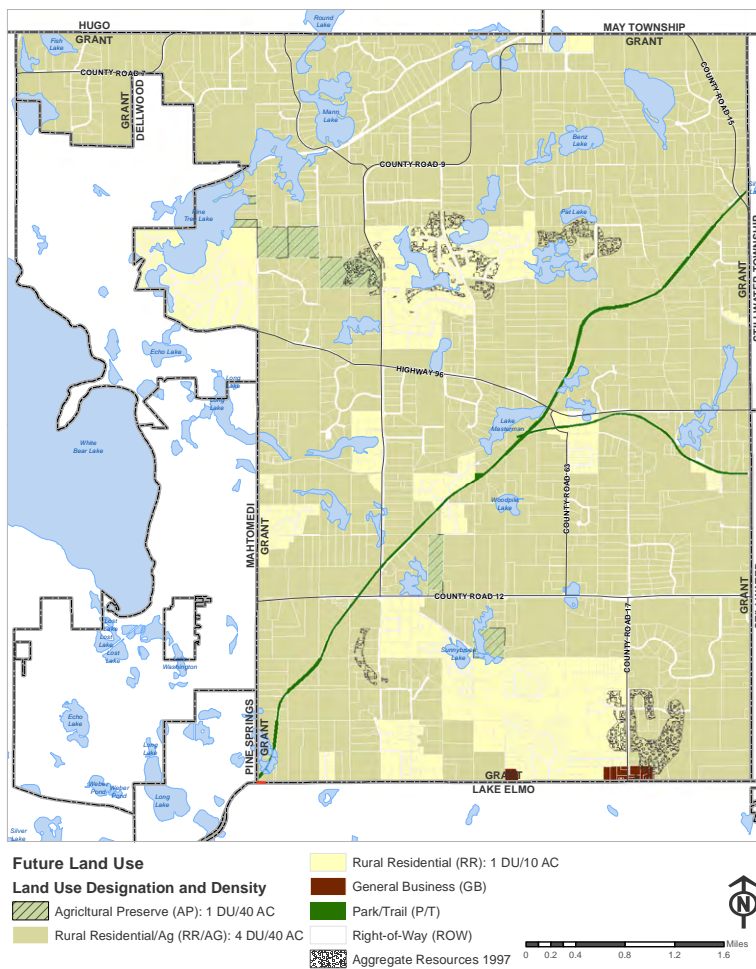


Aggregate Resources

Map 3-5 provides an overlay of the 1997 Aggregate Inventory over the City's 2040 Future Land Use Plan. As demonstrated on the Map, many of the aggregate deposit areas are on lands that were developed in the 1960s and 1970 with rural residential uses and smaller lots sizes. These areas are not likely to be extracted, however there is one large area in the southeast corner of the City that is designated as Rural Residential/Agricultural. This land use designation would support extraction with a Conditional Use Permit and requires that the properties be developed at no greater than 4 dwelling units per 40 acres. However, it should be noted that most of the area identified with aggregate resource potential contains smaller rural residential lots with average sizes of 2.0 - 2.5 acres, making aggregate extraction unlikely.

Map 3-5. Aggregate Resources with Future Land Use

3-14



Agricultural Preserves

As of the 2014 records, the City has approximately 277-acres of land enrolled in the Agricultural Preserves program which is designated on Map 3-3 Future Land Use Plan. The City is supportive of active agricultural use in the City, and therefore will support future land owner requests to enroll in the program.



HOUSING

2040 City of Grant Housing Goals

- **Support** Washington County and other Regional programs, such as those offered by the Metropolitan Council, that meet the residential needs of a diverse and/or aging population.
- **Sustain** and enforce the City’s Code to encourage maintenance of the existing housing within the City.

As described in the Existing and Future Land use sections of this Chapter, the City of Grant has slowly evolved from an agricultural community to a predominantly rural residential community. While the majority of residents do not farm for commercial purposes, the City’s rural residential character is still defined by hobby farms, horse boarding and training facilities, and other small-scale agricultural activities. Because this combination of uses – rural residential and small-scale agricultural uses – is such a defining characteristic of the City it is important to understand the existing housing stock and what future demands may emerge as more residents are drawn to the City’s unique rural quality of life.

3-15

EXISTING HOUSING

The following Tables summarize the City’s Existing Housing Assessment as provided by the Metropolitan Council. For purposes of the information contained in the following Tables, the City’s Total Housing units as reported by the 2016 Housing Stock Estimates is **1,530**, and the total Households in the community is **1,482**.

*Table 3-5. Existing Housing Assessment: Affordability**

Units affordable to households with income at or below 30%	Units affordable to households with income 31% to 50% of AMI	Units affordable to households with income 51% to 80% of AMI
31	2	67

Source: Metropolitan Council staff estimates for 2016 based on 2016 and 2017 MetroGIS Regional Parcel Dataset (ownership units), 2010-2014 Comprehensive Housing Affordability Strategy data from HUD (rental units and household income), and the Council’s 2016 Manufactured Housing Parks Survey (manufactured homes). Counts from these datasets were adjusted to better match the Council’s estimates of housing units and households in 2016 as well as more current tenure, affordability, and income data from the American Community Survey, home value data from the Federal Housing Finance Agency, and rents from HousingLink’s Twin Cities Rental Revue Data.



Table 3-6. Tenure

Ownership Units	Rental Units
1,466	64

Source: US Census Bureau, 2012-2016 American Community Survey five-year estimates; counts adjusted to better match the Council's 2016 housing stock estimates.

Based on the 2013-2017 ACS, the number of rental units has diminished further, which is unsurprising given the high home-ownership rates and dominance of single-family housing types in the community that are not as likely to be rented as multi-family housing types. Based on current estimates, the number of renter-occupied units is 23, while the owner-occupied units is estimated at 1,500.

Table 3-7. Housing Type

Single-family units	Multi-family units	Manufactured homes	Other Housing Units
1,499	14	17	0

Source: Metropolitan Council, 2016 housing stock estimates. Single-family units include single-family detached homes and townhomes. Multifamily units include units in duplex, triplex, and quadplex buildings as well as those in buildings with five or more units.

3-16

Table 3-8. Public Subsidized Units

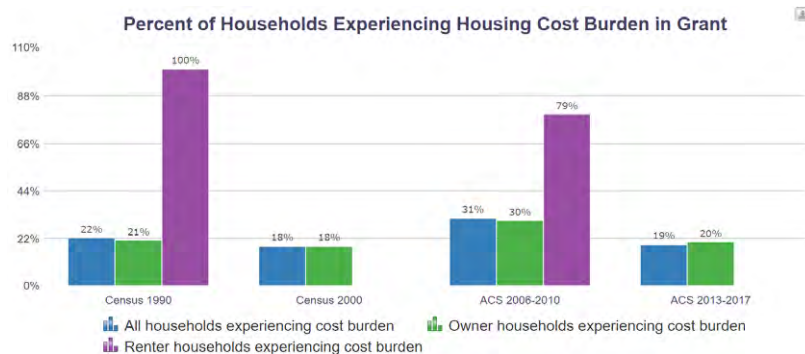
All publicly subsidized units	Publicly subsidized senior units	Publicly subsidized units for people with disabilities	Publicly subsidized units: All others
0	0	0	0

Source: HousingLink Streams data (covers projects whose financing closed by December 2016)

Table 3-9. Housing Cost-Burdened Households

Income at or below 30% of AMI	Income 31% to 50% of AMI	Income 51% to 80% of AMI
24	19	123

Source: Housing cost burden refers to households whose housing costs are at least 30% of their income. Source: US Department of Housing and Urban Development, 2010-2014 Comprehensive Housing Affordability Strategy (CHAS) data, with counts adjusted to better match Metropolitan Council 2016 household estimates.

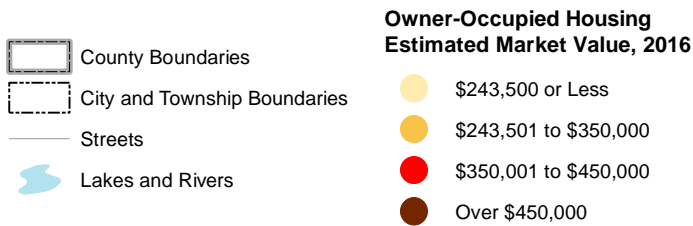
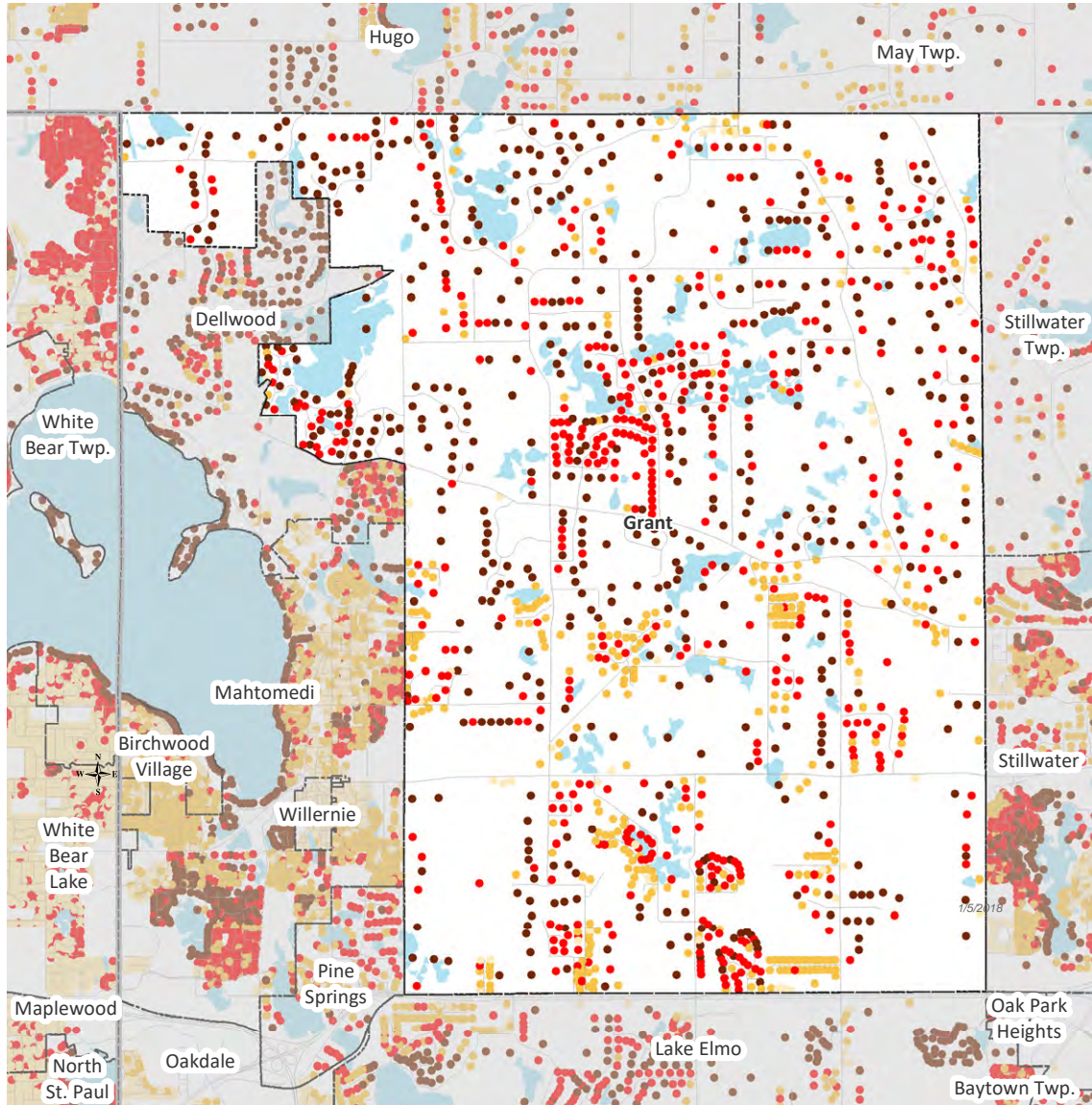


Source: U.S. Census Bureau Decennial Census and American Community Survey. Households experience housing cost burden when their housing costs are 30% or more of their gross income. For renters, housing costs include rent and utilities; for owners, housing costs include mortgage principal and interest, property taxes, property insurance, utilities, and other fees. Use caution when comparing 1990 and 2000 data (which include only some households) to American Community Survey data (which include all households). See the metadata for more information.



As shown on Map 3-6, nearly all of the City's housing stock exceeds \$243,500. This is consistent with the dominant single-family, large lot development pattern in the community.

Map 3-6. Owner-Occupied Housing by Estimated Market Value



1 in = 0.96 miles

Source: MetroGIS Regional Parcel Dataset, 2016 estimated market values for taxes payable in 2017.

Note: Estimated Market Value includes only homesteaded units with a building on the parcel.



In addition to the Metropolitan Council’s existing housing assessment, the City has identified a few additional characteristics that help inform what future housing needs in the City may develop over this planning period.

Age of Structures

As shown in Table 3-10 more than 55% of the City’s housing stock is at least 40-years old. This is an important consideration for several reasons including the potential for deferred maintenance, and/or structural obsolescence. If proper improvements are not made to existing homes they can become extremely expensive to repair and require major reconstruction. Additionally, if homes have not been kept modern (as in not remodeled, etc.) they can become less marketable also affecting property values. While the City’s average housing prices and median household incomes demonstrate that most residents are likely in the position to maintain their homes, this does not represent all residents and all structures.

Table 3-10. Age of Structures

YEAR STRUCTURE BUILT	Number of Units	% of Units
Built 2014 or later	13	0.8%
Built 2010 to 2013	30	1.9%
Built 2000 to 2009	205	12.9%
Built 1990 to 1999	171	10.8%
Built 1980 to 1989	276	17.4%
Built 1970 to 1979	404	25.5%
Built 1960 to 1969	207	13.1%
Built 1950 to 1959	53	3.3%
Built 1940 to 1949	26	1.6%
Built 1939 or earlier	200	12.6%
Total Housing Units (+/- 100)	1,585	

Source: ACS 2013-2017

3-18



Age of Residents

Another key demographic characteristic that directly affects the City's housing stock and potential future housing needs is the age of its residents. Many communities are experiencing sharp declines in families as the baby boomer population ages and their children leave home. In Grant, this trend is occurring at a faster rate than nearby communities and the County as a whole which is correlated heavily with the age of the housing stock (Table 3-10) and the predominantly single-family detached housing stock. These three characteristics are inextricably related, which is demonstrated in Figure 3-12 Household Type, which demonstrates that over 54% of the City's residents are families without children. 10-20 years ago, that percentage was significantly lower when the household type was dominated by married families with children.

Age of Residents and Housing Stock Homogeneity

While the City's character is heavily defined by the single-family residential neighborhoods and lots, the homogeneity of the housing stock provides few options for young people (those just starting out and at the early part of their earning years) and seniors that may be interested in downsizing. As demonstrated by Table 3-11 and 3-12 the City of Grant's population is aging and the baby boomer population makes up a large percentage of the community's population. As the boomers become empty-nesters many may look for housing options other than large single-family homes, and in the case of Grant, the large acreages associated with those homes. For those that would like to continue to live in the City, there are few options and those that choose to move end up being forced to relocate to neighboring cities to find other housing options. With respect to the younger cohorts, often they are priced out of the City as average home values far surpass the definition of 'affordability.' As shown in Table 3-13. Estimated Owner-occupied Housing Value in Grant, the City's housing values are more than \$200,000 that the Minneapolis-St. Paul MSA, and \$180,000 more than Washington County. Much of this disparity is due to the large lots and single-family homes, but it certainly creates a barrier to entry particularly for those in their early earning years (post-high school or college graduate age).

3-19



Table 3-11. Population by Age and Gender in Grant

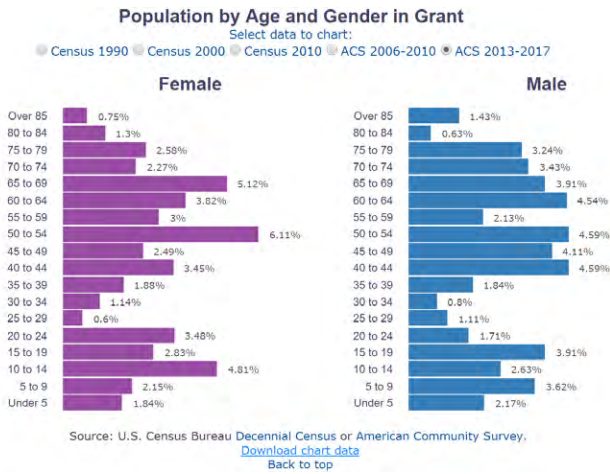
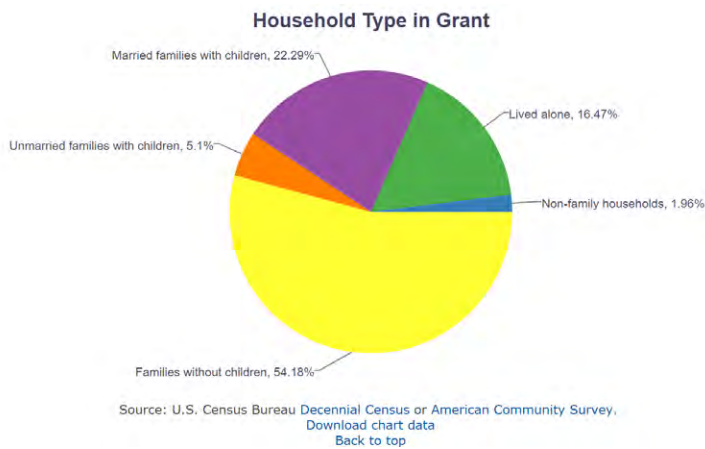
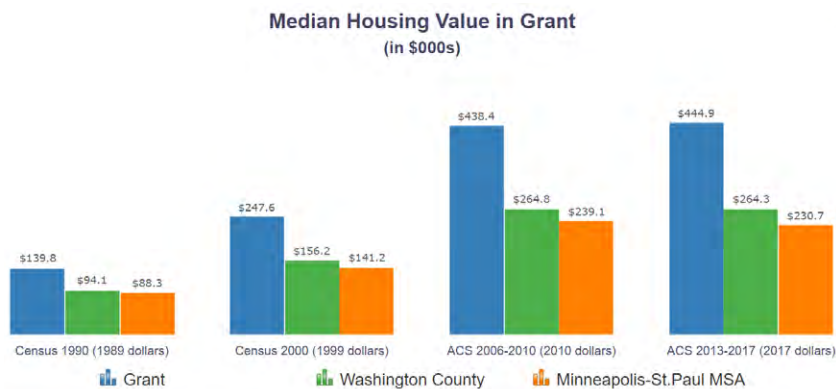


Table 3-12. Household Type in Grant



3-20

Table 3-13. Median Housing Value in Grant



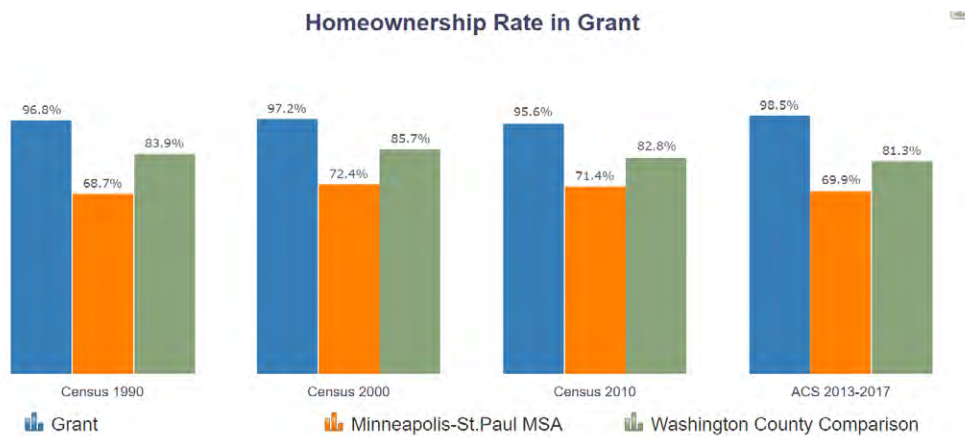
3 from historical communities cannot be combined in this chart. For years when aggregation would be necessary, only the data for the community with the higher value is shown. To obtain all data for these years, contact us.

Source: U.S. Census Bureau Decennial Census and American Community Survey.



It is important for the community to attract young people and their families, because it helps complete the lifecycle of housing – as their earning power increases, they are able to move into the home that the senior may be selling so that they in turn can downsize. This natural progression of the housing lifecycle can only work if there is enough product diversity, which currently is lacking in the community. While the City is planned to stay the same with continued dominant large lots and rural residential uses, there is an opportunity to think about how the City could incorporate innovative policies and ordinances that may provide additional housing options while continuing to protect the City’s rural residential character.

Table 3-14. Homeownership Rate in Grant



Source: U.S. Census Bureau Decennial Census and American Community Survey.
[Download chart data](#)
[Back to top](#)

PROJECTED HOUSING NEED

The Future Land Use Plan projects that the existing rural residential development pattern will continue through this planning period. Large-lot, rural residential and agricultural uses will continue to promote and support single-family residential uses. As identified in previous sections, the City residents are relatively homogeneous with respect to age and family type. Exploration of tools such as Accessory Dwelling Units, and other accessory uses, could provide options to young adults and seniors that may wish to stay in the community, but are uninterested in maintaining a large lot. The City will review and explore its ordinances for opportunities to provide additional options in the community.



PROJECTED HOUSING - IMPLEMENTATION PLAN

The City of Grant was not given an Affordable Housing Allocation in its 2015 System Statement. Because the City is developed with low-density, rural residential uses and similar development patterns are expected over the next planning period it is infeasible to develop affordable housing given land and construction costs. Even though affordable housing is not identified as a projected housing need in this Plan, the City has identified the potential need for a more diverse housing stock. While this is challenging given the need to maintain large lot sizes to effectively and safely support individual septic systems and private wells, the City has expressed interest in exploring how greater rural residential diversity could be incorporated into the current development patterns. The following implementation strategies address the City's Project Housing Needs as described previously:

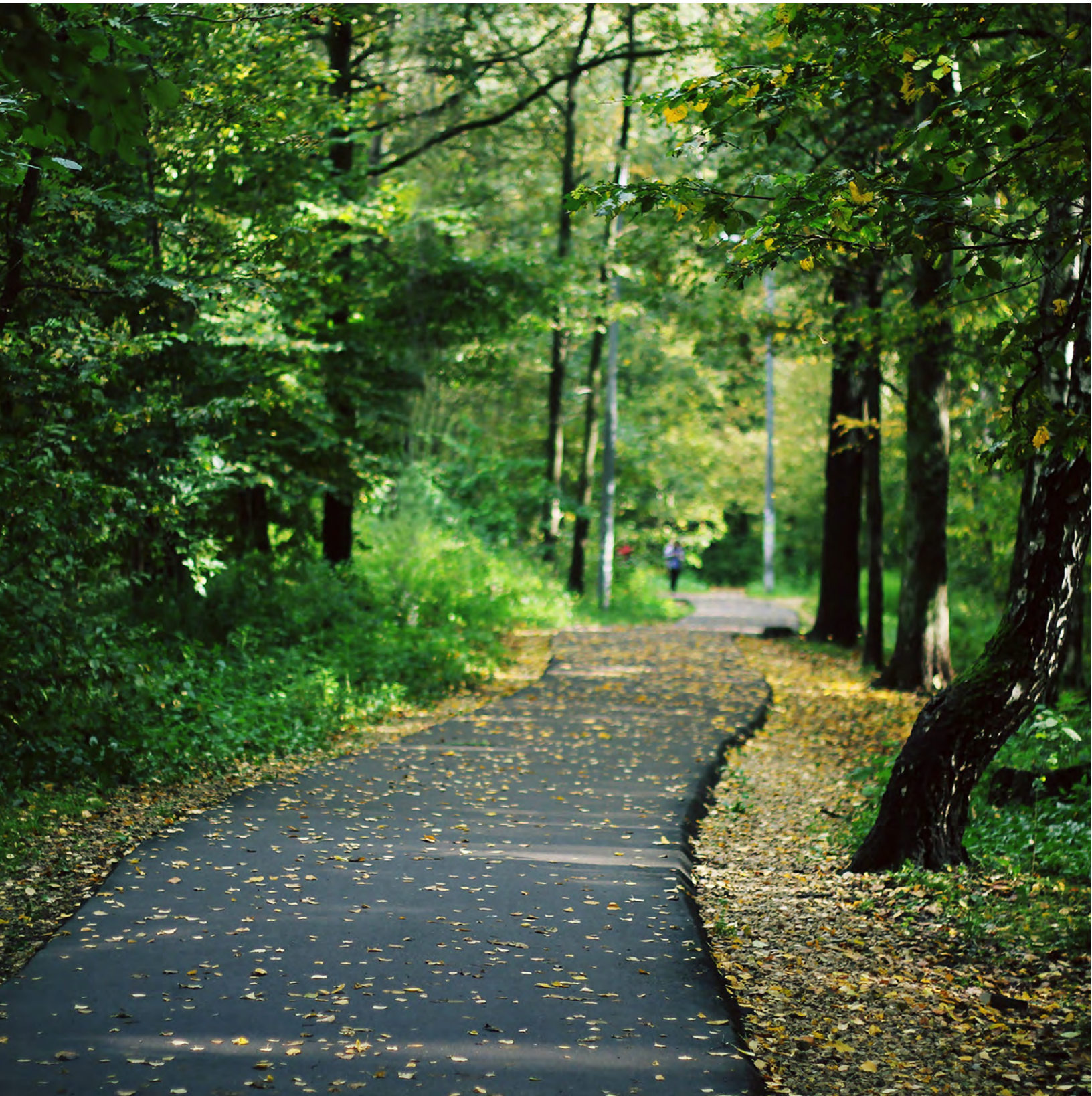
- The City will explore options to incorporate living quarters within the City's existing accessory structures and accessory uses ordinance. This will require study by the City's Planning Commission and City Council to determine appropriate land use designations and zoning districts which may support such uses. Additionally, the City will research whether units would be owner or renter-occupied. The intent of exploring such ordinance modifications is to provide housing diversity through smaller units and less property maintenance which may support and benefit young adults and seniors that want to live in the community.
- It is important for the City to support and maintain the City's existing housing stock including its manufactured housing, and other aging single-family housing stock. Oftentimes the aging single-family housing is the most affordable housing in the community which offers at least some housing diversity in the City. Maintaining and managing the quality of this housing stock is important, and while the City does not have direct resources available to assist homeowners, it will work cooperatively with Washington County and its Community Development Agency (CDA) on low-interest loans and fix-up funds that are available to residents.
- In addition to the fix-up funds, the County's CDA offers a Septic System Loan Program that can assist residents with a failing septic system. In partnership with Washington County Public Health and Environment the CDA processes loans to rural residents to update their non-compliant septic systems. Grants are also available for income-qualified households.

3-22



CHAPTER 4: Natural Resources & Recreation





NATURAL RESOURCES & RECREATION - 12-31-2019
City of Grant Comprehensive Plan 2040

INTRODUCTION

The City of Grant is a community with abundant natural features, scenic views, a rich agricultural history and rural character. Most residents enjoy large lots, rolling topography, wetland areas and expansive open spaces that all contribute to the rural character of Grant. As a predominantly rural residential community, the City remains committed to maintaining a little natural retreat for each resident through low-intensity land uses and protection of its natural resources and open spaces. The City is focused on maintaining this approach to land use instilling the responsibility of stewardship in each homeowner to ensure the continued protection of the City's important natural features and open spaces. Though much of the City's natural areas including woodlands, lakes, wetlands and streams are contained on private property, the community's values, policies and ordinances are tailored to help its residents protect these resources.

The following chapter describes the City's existing natural resources and recreational opportunities and planned improvements over this planning period. Most residents recognize that natural resources, open spaces, and agricultural lands define the character of the City and are committed to the continued stewardship of these systems to ensure they are available for future generations. Regardless of whether these systems are public or private, the residents of Grant all benefit from the continued prioritization of these systems. The purpose of this chapter is to highlight the natural systems, not to redefine or focus on their ownership. Instead, the intent is to continue to support and enhance a rich tradition of stewardship of the natural systems, promote agricultural activities and protect open spaces so that Grant continues to be defined by its open spaces, scenic views, natural resources and rural character into the future.

4-1

Natural Resource & Recreation Goal

- **Protect** and **enhance** the natural resources of the community and the natural environment.



EXISTING NATURAL RESOURCES

The natural resources systems of any community provide the framework for opportunities and constraints of land use development and community growth. Communities that work within and understand these opportunities and constraints are more successful in balancing residential growth and protecting critical natural and cultural resources into perpetuity.

Grant is a patchwork of geological diversity set on rolling glacial relief. The underlying soils are highly mixed, dominated by glacial till and ice contact soils. These soils are the foundation for a variety of vegetation, including mixed hardwood forest and remnants of prairie. There are many wetlands, streams, and lakes in Grant adding to the natural diversity of the community and the necessity to plan for long-term protection of fragile natural resources.

Soil characteristics, underlying geologic formations, existing vegetative patterns, surface water, and wetland areas are some of the determinants of where and what type of land use development should occur, and more importantly, where this development should be located. The following sections will discuss and inventory each of the significant natural resources within the City of Grant that shape the existing rural character of the community, indicate the most appropriate locations for agricultural and other land uses, provide recreation and scenic opportunities for the residents of Grant, and maintain important ecological functions, such as water resources and wildlife habitat. Additional detail regarding the City's surface water resources is contained in the Surface Water Management Plan found in Appendix B.

4-2

Topography

The total relief in Grant is approximately 180 feet. The highest point at 1,080 above sea level is located in the southwestern portion of Grant. The lowest point at 900 feet above sea level being on the east boundary where Brown's Creek runs into Stillwater Township. Slopes within Grant, while varied generally do not exceed 15%. The dominant slope class is from 0 to 6% with significant areas also ranging from 6 to 12%. Only one portion of the City southeast of Duluth Junction contains slopes in excess of 15%.

Geology

The bedrock formations on which the City of Grant rests are sedimentary rocks formed during the Early Paleozoic age (525 to 400 million years ago) and consist of sandstone and dolostone. These formations provide the basis for groundwater movement and location, as well as provide the foundation for the overlying topography. Much of the bedrock within Grant is buried



beneath 50 to 200 feet of glacial sediments consisting of glacial tills and ice contact stratified deposits. These deposits are a direct result of the advance and retreat of the Superior Lobe Ice Sheet during the Late Wisconsin Glacial Event, 10,000 to 35,000 years ago. Moraine landscape formations are evident in the southern portion of the City and characterized by highly mixed unstratified soil deposits. Ice contact lake formations are characterized by flat surfaces bounded by steeper terrain along its margin demarcating the extent of the ice wall.

Together the study of surface and bedrock geology provides insight into the location and susceptibility of groundwater to contamination. While bedrock formations are buried beneath 50 to 200 feet of glacial sediments much of this soil is composed of sand and gravel deposits that provide little resistance to the downward movement of pollutants. For these reasons much of Grant is classified as being moderately or high-moderately susceptible to groundwater contamination by the Minnesota Geological Survey. This suggests that contaminants may reach groundwater supplies and land use development should be cognizant of these risks. However, at the present time, groundwater quality is considered good to excellent (Brown's Creek Watershed District Third Generation Management Plan, 11-7.3). For more detailed information about the geology of Grant see the "Geologic Atlas of Washington County, Minnesota." (University of Minnesota - Minnesota Geological Survey)

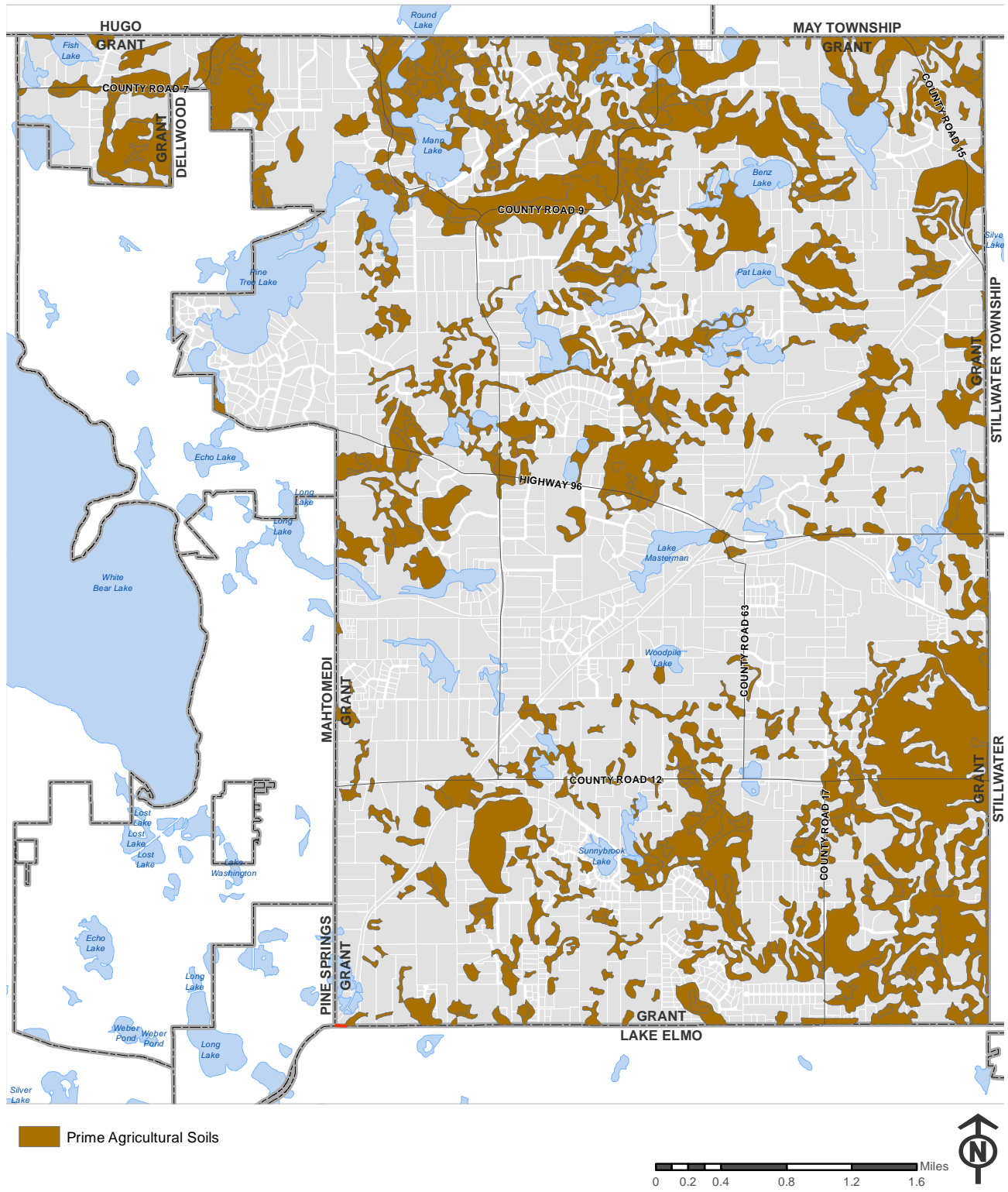
Soils

Soil characteristics can be used as a key attribute to guide the type and location of development, and are particularly important in a community such as Grant that is developed with individual and/or private infrastructure. Three features addressed in this section include soil suitability for on-site septic systems, basements, and agricultural uses. Some of the land within Grant poses severe to moderate limitations on the construction of on-site septic systems although the City's large lot size requirements help to mitigate this problem. Great care should be undertaken when constructing these facilities to ensure that the future supply of groundwater is not contaminated.

The City of Grant is a community founded on agricultural land uses. Prime agricultural soils found in the community are identified on the Prime Agricultural Soils Map (Figure 4-1). There are areas of the City that are identified as containing prime agricultural soils; particularly, there are concentrated areas located in the southeastern corner along Manning Avenue and in the northern portions of the City - north of 105th Street. The intermittent quality of the soils adds to the City's success in supporting smaller agricultural production such as hobby farms and pastures.



Map 4-1. Prime Agricultural Soils



4-4



Aggregate Resources

The Metropolitan Council requires communities to identify aggregate resources within local boundaries and plan for the extraction of aggregate prior to urbanization when possible. Grant does have several small areas of aggregate-rich land but has no active mining operations. The Aggregate Resources Map (See Figure in chapter 3) shows sand, gravel and limestone, and dolomite resources that may be available for 1997, 2020, and 2040. There has been no projected change from 1997 to 2040 since urbanization is not anticipated during that time and environmental constraints did not impact the resource. However, as noted in Chapter 3, much of the identified aggregate resource is developed with rural residential lots and is unlikely to be extracted given current development patterns.

Solar Access Protection

A 1978 amendment to the Metropolitan Land Planning Act requires all local governments in the Metropolitan Area include “an element for protection and development of access to direct sunlight for solar energy systems” in their comprehensive plans. There are two kinds of solar energy systems: passive and active. In a passive energy system, the building structure itself collects and stores solar energy at the point of use. In an active solar energy system, solar energy is collected at one location (for example a roof) and then transferred to the point of use or storage by mechanical power. All solar energy systems, both passive and active, need to have direct sunlight fall on their collectors to function properly. Structures, trees or other objects that come between the sun and the solar collector will shade the collector and reduce its efficiency. Protecting solar access means the adjacent structures or vegetation are prevented from shading solar collectors (or the probable location of future collectors). The City’s large lots ensure that most individual homesteads have the opportunity to capitalize on this important resource, while not impacting a neighbor’s ability to the same.

4-5

Land Cover and County Biological Survey Data

In 2005, approximately 30% of the land area in the City was forested, categorized by woodland or urban with vegetative cover (Source: Minnesota Land Cover Classification System [MLCCS]). Grant is part of the Eastern Broadleaf Forest Province which comprises some 12 million acres, stretching from New York to Arkansas to Minnesota. This region is dominated by Southern Mesic Oak-Basswood Oak forest communities, with Northern Red, White and Bur Oak species present. A map illustrating the current land cover in Grant can be found in the LSWMP in Appendix B. Limited areas of prairie and other natural communities remain interspersed throughout the City. Much of the original savanna is currently under cultivation or in pasture or lawns. Some patches of conifer-bog and stands of maple-basswood exist.



The Minnesota County Biological Survey has identified and mapped the remaining high-quality natural communities that remain in Grant. The areas include a variety of wetland types along Brown’s Creek, several significant Oak Forest communities, Emergent Wetlands, Shrub Wetland, Mixed Hardwood Swamps, and two smaller Dry Prairie communities. The Watershed Districts within Grant have also identified significant natural areas within Grant. The areas identified are consistent with the natural areas identified by the Minnesota County Biological Survey. The largest number of these are within the Brown’s Creek Watershed. The natural areas generally follow the Gateway Trail or are located around lakes and larger wetland complexes.

The DNR has identified a wide conservation corridor that connects natural areas in Grant with similar areas in neighboring communities. The corridor is a broad area along the Gateway Trail and Brown’s Creek. The Corridor is identified as the “Gateway Trail Regional Corridor”, and represents a contiguous area of natural communities, lakes and wetlands, and connections with existing trails and recreation areas. If desired, communities can use this information for planning purposes and to help guide development.

Water Resources

4-6

Water and Wetland Resources

The City of Grant is located within four watersheds, and land within these areas is managed by Watershed Districts: the Rice Creek Watershed District (RCWD), the Valley Branch Watershed District (VBWD), the Brown’s Creek Watershed District (BCWD), and the Carnelian-Marine St. Croix Watershed District (CMSCWD). Appendix B includes maps of the watershed boundaries. Most of Grant drains to the east and south to the St. Croix River through the Brown’s Creek Watershed. The western portion of the community drains to the north and west to the Mississippi River as part of the Rice Creek Watershed. The southern portion of the community drains south-southeast through the Valley Branch Watershed.

Many lakes, ponds, wetlands and streams are scattered throughout the City of Grant. These water resources are extremely valuable to the City and are important for their water holding and cleansing capacities. They are highly productive of fish and wildlife. The full Local Surface Water Management Plan (Appendix B) provides greater detail on the City’s water resources and describes the City’s goals and policies related to these resources.

Groundwater Resources

All homes and businesses in Grant, with two exceptions, are served by individual wells and septic systems. The Indian Hills Golf Club and surrounding neighborhood all share a



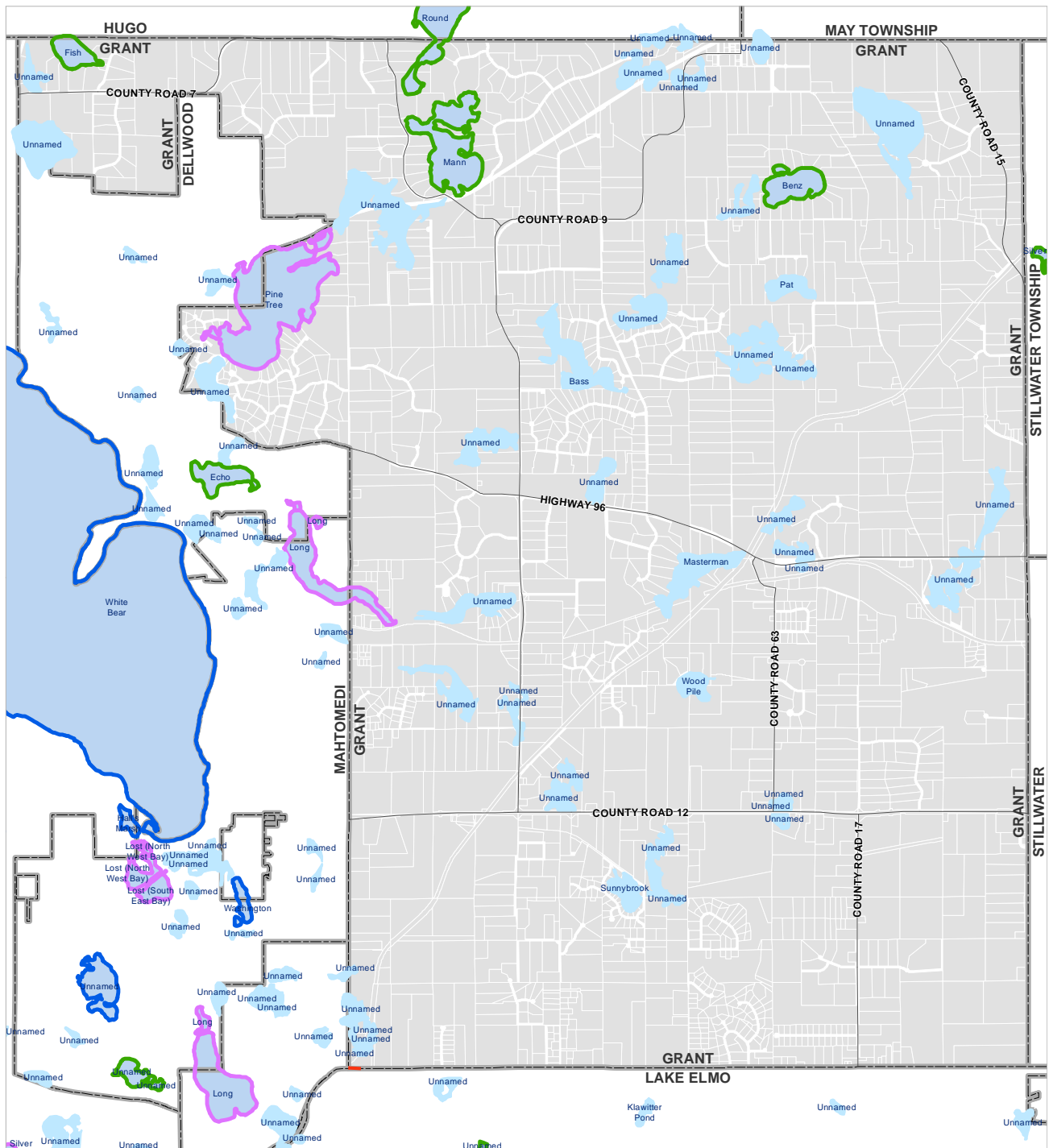
community water system which has one major well. The second exception is the Mahtomedi School Campus which obtains its water from the Mahtomedi municipal water supply. Because nearly the entire community is served by individual wells, it is of utmost importance to protect groundwater supplies from contamination. This can best be done by carefully controlled land use. Proper maintenance of septic systems is important, as is controlling commercial type uses that may use hazardous chemicals that could be introduced into the soil and subsequently contaminate the groundwater.

Washington County adopted its most recent groundwater plan, the Washington County Groundwater Plan 2014-2024, on September 23, 2014. The overall goal of the plan is to manage the quality and quantity of groundwater in Washington County to protect the health of groundwater resources and ensure sufficient supplies of clean water to support human uses and natural ecosystems. The City of Grant will continue to cooperate with the County, managing Watershed Districts and the Minnesota DNR in implementing the county and district groundwater plans through land use management that protects groundwater resources.

To help communities properly manage the health of the groundwater, the Metropolitan Council maps where regional surface water and groundwater interact. This mapping can be found in the full LSWMP contained in Appendix B.



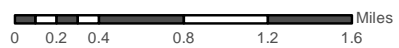
Map 4-2. Shoreland Classification



4-8

Public Water Basins with DNR Shoreland Class

- No DNR Shoreland Class assigned
- General Development
- General Development / Natural Environment
- Natural Environment
- Recreational Development
- Recreational Development / General Development



Floodplain and Shoreland Management

The City has the FEMA floodplain maps that inventory the flood hazard areas in the City available at the City offices for any property owner to review. Historically, some houses were built on what is now categorized as a 100-year flood plain, but current ordinances would prohibit any further building in these areas. The City has adopted and enforces a Floodplain Management Ordinance (2002-Ordinance 94), which should be updated as part of the implementation process to this Plan. The City recognizes the importance of establishing standards and ordinances that are consistent with the shoreland classifications determined by the MnDNR. While this issue is discussed in more detail in the LSWMP, the City addresses this within the Implementation chapter of this Plan. After Plan adoption, the City will work with the MnDNR to update its shoreland ordinance and to support the shoreland classifications as shown in Figure 4-2.



Wildlife Habitat

The Minnesota County Biological Survey identifies rare species and natural communities within Grant. In addition to these areas, many opportunities for locally-important wildlife habitat exist. The County Biological Survey for Washington County identifies the headwaters of Brown's Creek as nesting habitat for the Louisiana Waterthrush, a species of special concern in Minnesota. The diversity of natural communities, which includes areas of forest, prairie, lakes, and a variety of wetlands, provides suitable habitat for avian and mammalian species. These species consist of interior forest birds such as the scarlet tanager, open field species such as the meadowlark and intermediate species such as the eastern bluebird. In addition, the many lakes provide habitat for egrets and great blue herons as well as a variety of waterfowl. Grant is also home to a large population of white tail deer that find the edge of the forest and field as appropriate habitat. Finally, the City's proximity to the St. Croix River also establishes Grant as an important connection to the migratory flyway and natural corridor presented by the river.

EXISTING & PLANNED RECREATION

4-10

Most of Grant's recreational uses are found on private property. While this remains the City's preferred approach to recreation in the community, the City of Grant does own four tracts of land designated as public park or otherwise assigned for public recreation. These include the Town Hall property (11 acres), Hubman-Mugg Park (also known as Bass Lake Park - 25.4 acres), Lot 6 of Block 2 of Woodland Acres Plat 2 (2 acres), and the 50-foot Mann Lake Access. Other than the Town Hall site which includes a ball field, all designated public recreation land is undeveloped. There are also no regional parks located in the City.

Outside of City ownership, the Schuneman Wildlife Preserve is owned and operated by the Izaak Walton League of America, maintaining wetlands and wildlife habitat of approximately 102 acres in the northwest corner of the City. For more active recreation, excellent facilities at the Mahtomedi School Campus, including ball diamonds, tennis courts, and a track and football field, are available for use by Grant residents. Other semi-public facilities include the Indian Hills, Sawmill, Logger's Trail, and Applewood Hills Golf Courses.

Trails

In addition to recreation areas, Grant has public and private trails in various states of completeness. Map 4-3 shows existing and proposed regional trails within Grant. Included in the existing system are:

- The Country View Bike Trail which traverses along Washington County Highway 12



- The Department of Natural Resources (DNR) Gateway State Trail (Munger State Trail) which bisects the City from southwest to northeast along the east side of County Road 9 (Jamaca Avenue) from County Road 12 to Highway 96.
- The DNR Brown's Creek State Trail that traverses from the Gateway Trail to downtown Stillwater through the City of Grant following an abandoned railroad grade.

In addition to the existing regional trails, two new regional trails are proposed, and a search corridor has been identified. A regional trail known as Lake Links is planned west from the Gateway Trail through Grant toward Dellwood and around the north side of White Bear Lake. Another regional trail corridor is identified to follow the existing Country View Bike Trail along County Highway 12. Finally, the Central Greenway is under regional trail search corridor for an appropriate alignment on the east side of Grant. In addition, Figure 4-4 shows the Regional Bicycle Transportation Network (RBTN).

Grant has the highest density of horses in Washington County with more than one-fifth of the total horses in the County according to the Washington County Soil and Water Conservation District. Therefore, some City and County roads have horse trails within the shoulder area. Some of these horse trails are marked with equestrian signs to identify the trail and warn motorists. In addition to the public trails there are also numerous private trails within Grant.

4-11

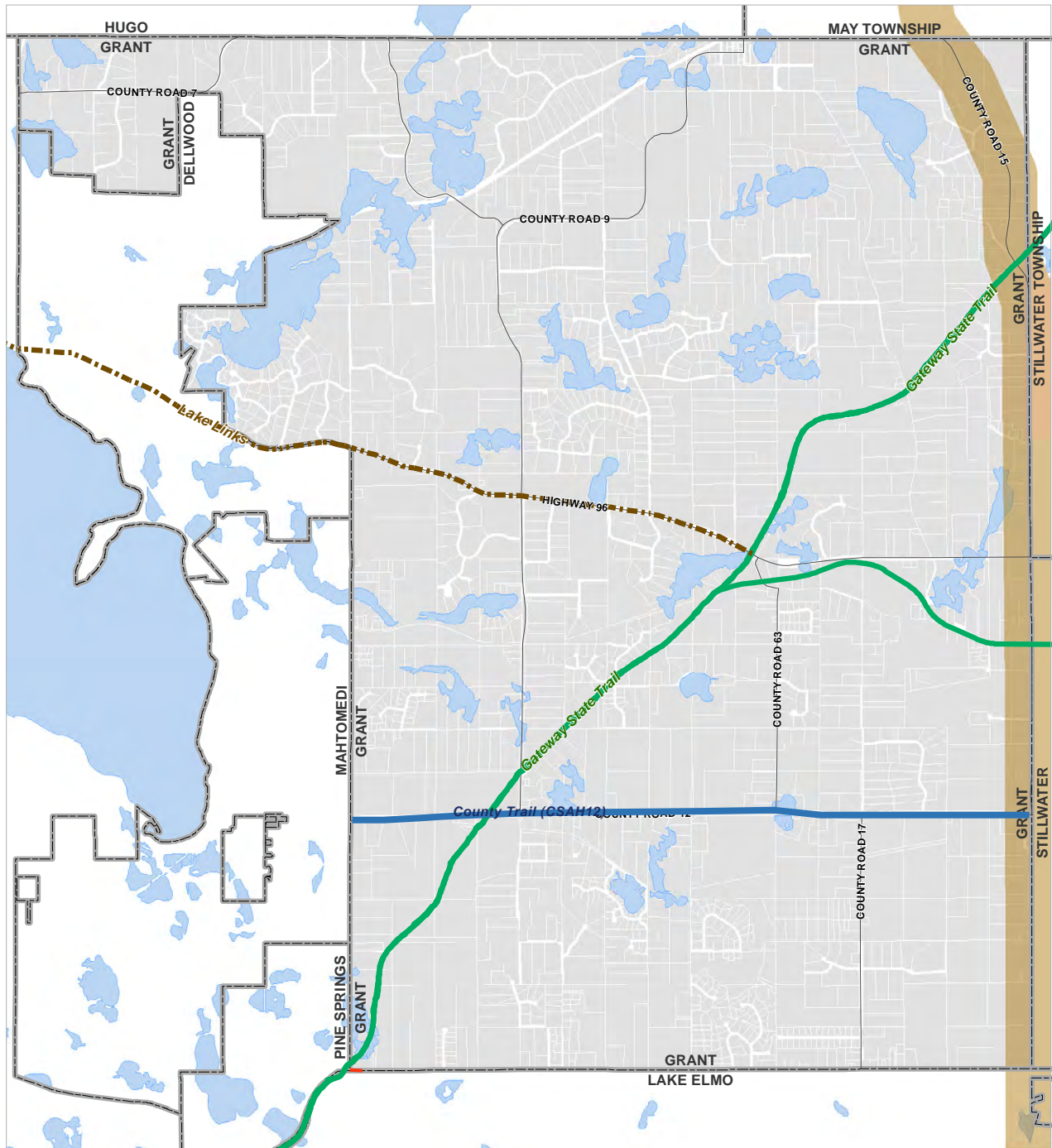
Existing public non-motorized trail easements include:

- Hubman Estates Equestrian Trail: This 20-foot easement extends north from 105th St. N. along Inwood Ave., east between Parcels 4 and 3a, and north along the east boundary of Parcel 3a to Ironwood Ave.
- Grant Estates: This 8-foot easement extends south from 107th St. N. for 530 feet.
- Gateway Trail: This is the State trail and includes a designated horse trail which runs adjacent to the paved trail corridor.
- Brown's Creek Estates: This 20-foot-wide non-motorized trail easement runs from Manning Trail North to Lennox Avenue North adjacent to the East and south boundaries of the plat.

The current Subdivision Ordinance does not require the dedication of parks/trails or require payment of fees in lieu of parkland dedication. It should be noted that developers have not been encouraged to dedicate land in new developments for trail use, so the current horse trail system is disjointed.



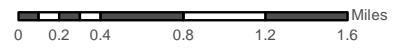
Map 4-3. Regional Parks and Trail Search Corridors



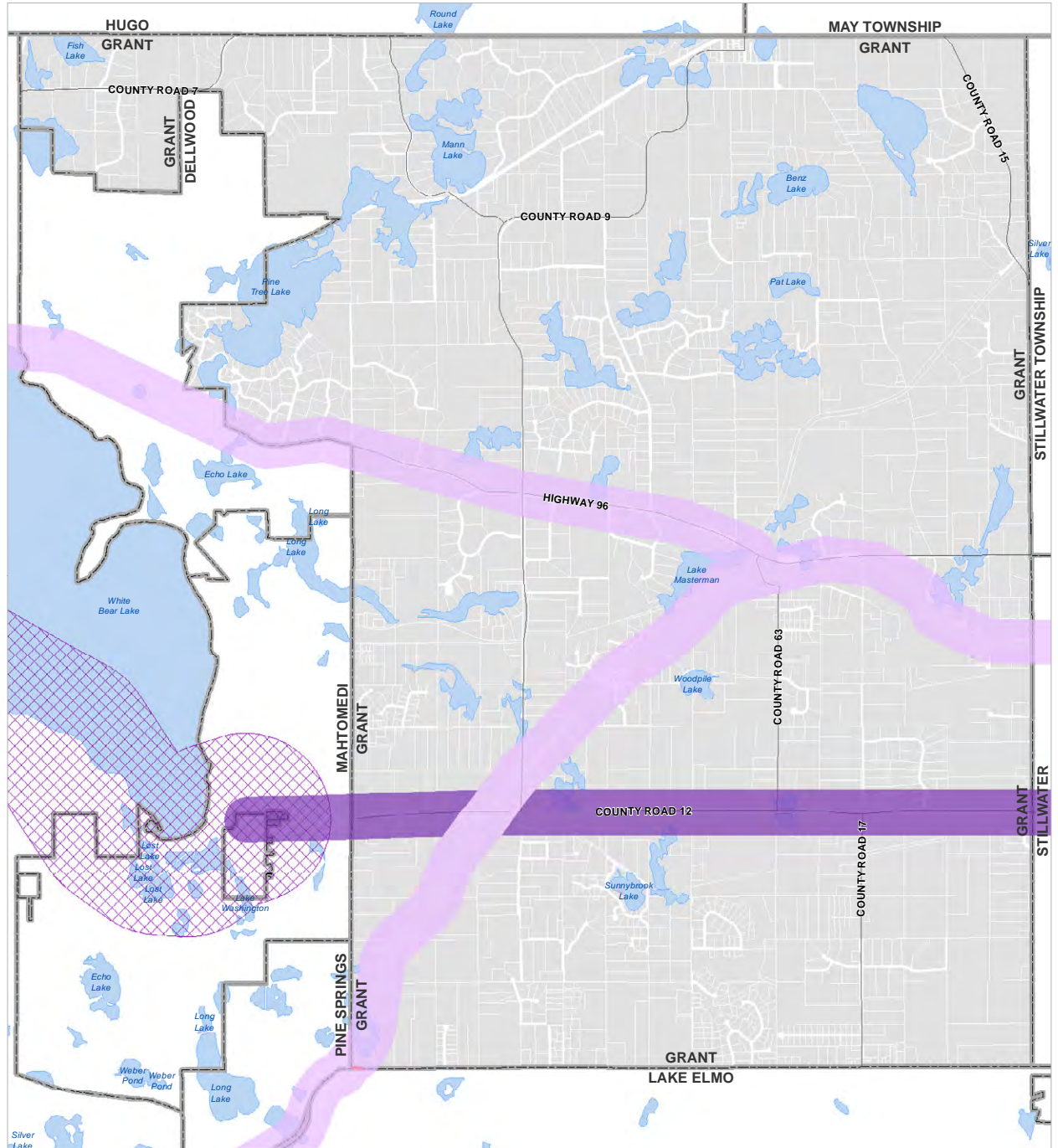
4-12

Regional Trails

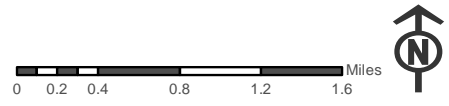
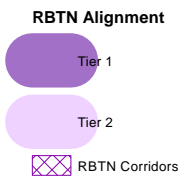
- - - - - Alternate
 - Existing
 - - - - - Planned
 - Minnesota State Trails
 - County Trail (CSAH12)
- Regional Trail Search Corridor



Map 4-4. Regional Bicycle Transportation Network (RBTN)



4-13



CHAPTER 5: Transportation





TRANSPORTATION - 12-31-2019
City of Grant Comprehensive Plan 2040

INTRODUCTION

The purpose of this Chapter is to define and describe the City's transportation system and how it supports the movement of people, goods, and services into and out of Grant. This planning effort provides the opportunity to evaluate the system for improvements and maintenance to support Grant's residents and businesses today and into the future. Since the City's population, households and employment are expected to grow modestly, most of the information contained in the 2030 Plan remains accurate. However, even with modest growth there are impacts to the City's transportation system and this Chapter identifies ways to ensure that the City's transportation infrastructure supports the City's residents and businesses through this planning period.

The following sections of this Chapter describe existing and planned roadways, traffic projections, and potential right-of-way needs, as well as describes existing and planned improvements to the bikeway systems. Finally, heavy freight, rail and air systems are all addressed with varying levels of detail based on the role of the system today and the anticipated role in the future.

5-1

This Chapter will function as a guide to:

- Identify the City's existing and proposed transportation network;
- Identify major investments to meet transportation needs; and
- Support the City's land use goals and objectives as detailed within this Plan.

ROADWAY SYSTEM

The City's roadways play a significant role in the transportation system providing residents access within and through the community as well as the greater region. A combination of State, County, and local roads serve Grant (Figure 5-1). Ideally, roads are designed to perform a designated function and are located to best serve the type of travel needed. Generally the City's top priority is the maintenance and management of its existing roadway system since there are no new major roads planned as part of this Plan. The majority of residents and business owners continue to heavily rely on personal vehicles and the roadway system to move goods and people and access services in the community. The following sections identify and describe the existing roadway system and describe future growth and planned improvement, where applicable.



Functional Classification

Functional classification is a tool used in transportation planning and traffic engineering to categorize streets by the type of transportation service they provide and the roadway’s relationship to surrounding land uses. Functional classification describes the role each roadway performs before determining street widths, speed limits, intersection control or other design features and ensures that non-transportation factors such as land use, development, and redevelopment are taken into account in the planning and design of streets and highways. The four functional classifications assigned by the Metropolitan Council that describe roads in Grant are principal arterial, minor arterial (A Minor/B Minor), collector, and local.

Principal arterial routes are roadways intended to connect metropolitan areas, major industrial centers, etc., that are the highest traffic volume roadways such as interstates. Trunk Highway (TH) 36 is the only principal arterial highway in Grant spanning the southern border of the City.

Minor arterials connect the urban service area to cities and towns inside and outside the region. The emphasis of minor arterials is on mobility as opposed to access in the urban area. “A” minor arterial routes in the City of Grant include: TH 96, Washington County Road (CR) 12, and CR 9 (from CR 12 to TH 96), CR 17, CR 7, and CR 15. “B” minor arterial routes are CR 9 (from TH 96 to CR 7).

Collector roadways provide connections between neighborhoods and regional business centers. Collector routes in Grant include Ironwood Avenue and Kimbro Avenue.

Local roads provide land access by connecting blocks and land parcels. All roads in Grant other than those listed above are assigned as local roadways.

Table 5-1 lists the Functional Classifications of the primary roadway network in Grant.

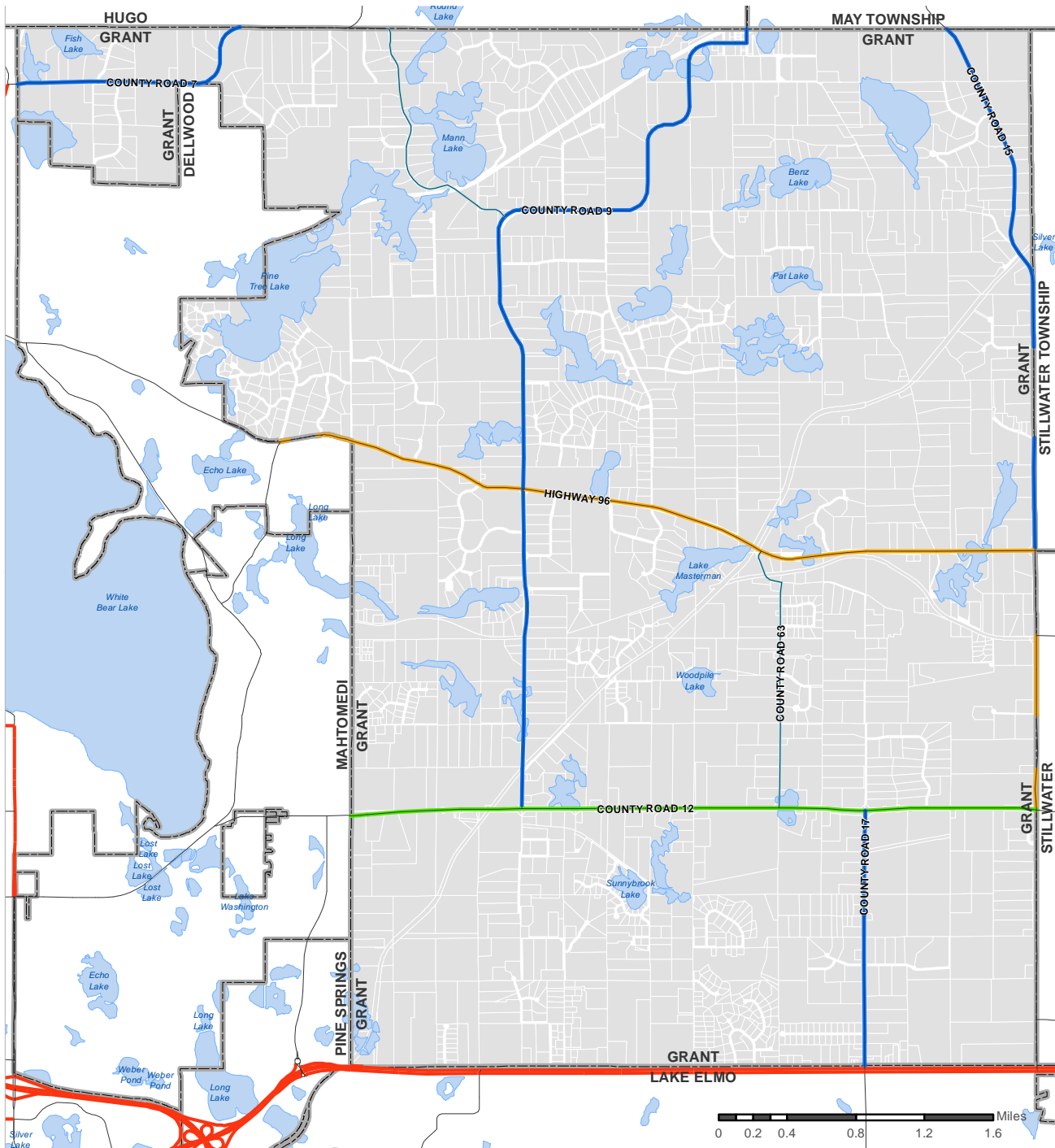
Table 5-1. Functional Classification of Major Roadways in Grant

FUNCTIONAL CLASSIFICATION	MANAGING JURISDICTION	LANES
<i>Principal Arterials</i>		
TH 36	State	4/6
<i>Minor Arterials</i>		
TH 96	State	2
CR 12	County	2/3
CR 9 (from CR 12 to TH 96)	County	2/3
CR 17	County	2
CR 7	County	2
CR 15	County	2/3
<i>Collectors</i>		
Ironwood Avenue	City	2
Kimbro Avenue	City	2

5-2



Map 5-1. Existing Roadways (w/ Functional Class)



5-3

- Functional Classification of Roads**
- A-Minor Expander
 - A-Minor Connector
 - Principal Arterial
 - Major Collector
 - A-Minor Reliever
 - Minor Collector
- Existing & Planned**

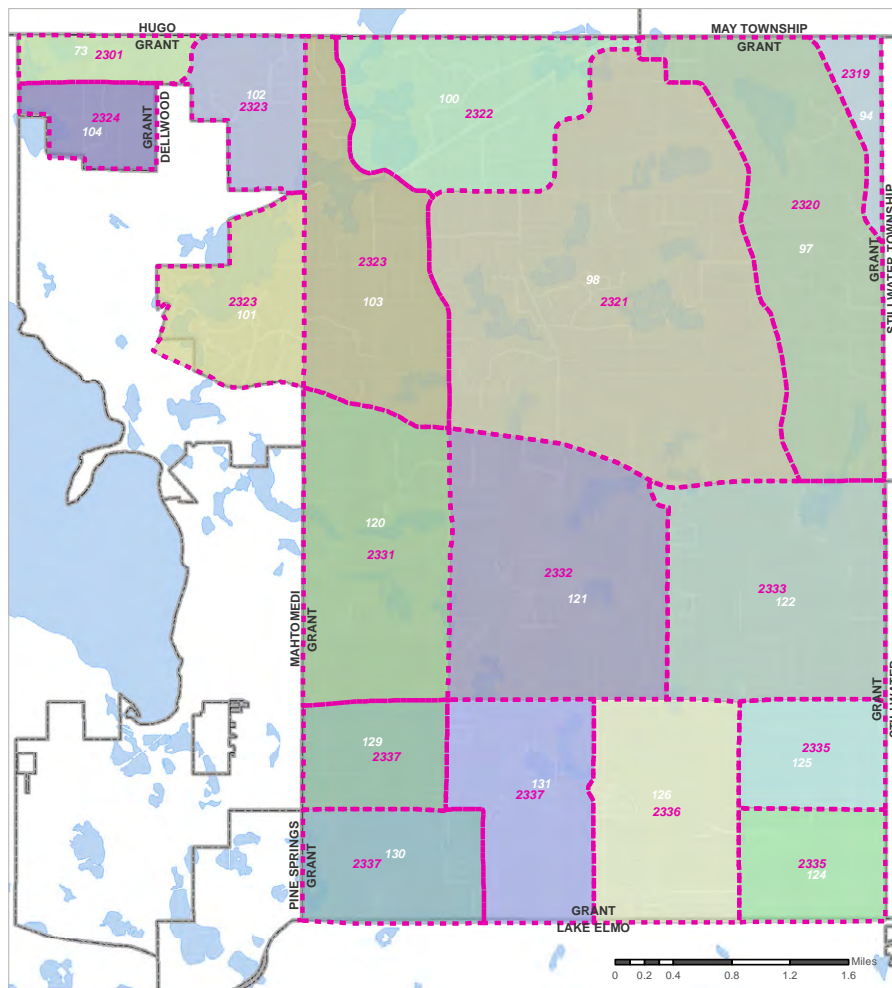


For purposes of regional transportation planning, the Metropolitan Council divides the region into Traffic Analysis Zones (TAZs). Map 5-2 shows the Metropolitan Council's TAZ boundaries and Washington County's further subdivision of these zones. Regional population, households, and employment forecasts are allocated to the TAZs as a means of forecasting traffic volumes. These forecasts are consistent with the 2040 traffic volumes shown on Map 5-3. Because Grant is not anticipating considerable growth, the trips generated within the TAZs are not expected to change significantly during this planning period.

Given the City's limited growth, most roadway improvements will be associated with the development of new local roadways to support new neighborhoods and the maintenance and management of the existing system.

Map 5-2. Transportation Analysis Zones (TAZ) in Grant

5-4



TAZ
 Metro Council TAZ
 Washington County TAZ



Table 5-2. Population, Households, & Employment Growth by TAZ

TAZ	Population			Households			Employment		
	2020	2030	2040	2020	2030	2040	2020	2030	2040
2301	63	69	50	21	23	25	0	0	0
2319	66	56	66	23	28	33	0	0	0
2320	309	309	309	103	103	103	10	10	10
2321	870	910	940	310	330	350	60	80	90
2322	138	138	138	46	46	46	25	25	30
2323	510	520	530	180	200	210	30	40	50
2324	567	585	600	189	195	200	0	0	0
2331	320	320	330	120	120	130	130	160	220
2332	350	350	360	130	140	150	30	30	40
2333	370	380	380	140	150	150	50	60	70
2335	80	80	80	30	40	40	100	120	130
2336	380	380	380	150	160	170	60	80	90
2337	633	450	450	211	225	225	70	80	90

Traffic Volumes

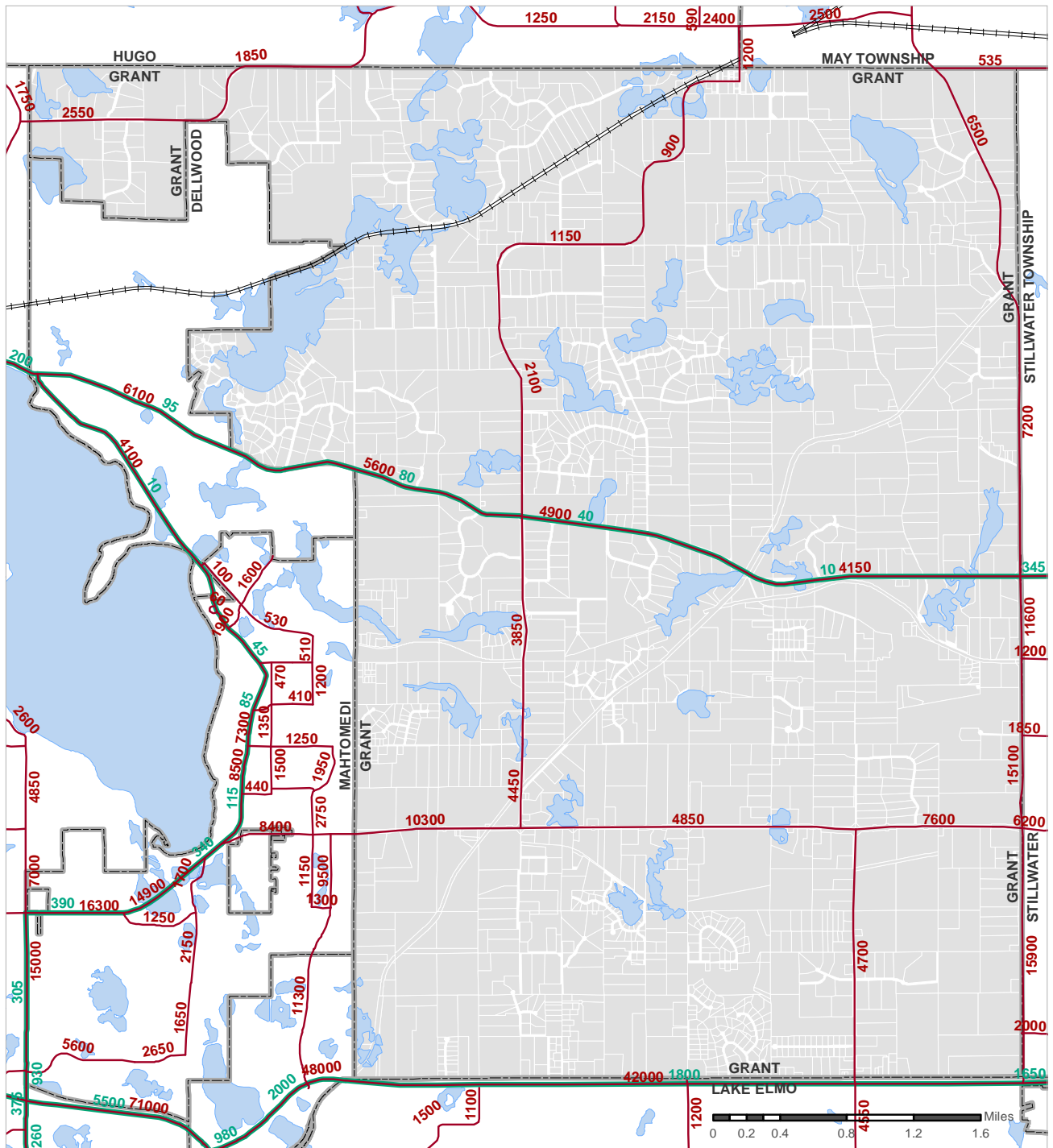
Grant is a rural community that limits development density to 1 unit per 10 acres. Traffic volume increases will be primarily from household growth, increased trip generation, and through traffic from adjacent municipalities. Even though through traffic will be generated by the growth and development of surrounding communities, Grant cannot predict or control such development and instead must accommodate and monitor such increases to help plan associated improvements and maintenance as needed.

Traffic volumes throughout the City are expected to increase, with most significant changes anticipated along minor arterials and collectors. Some roads are projected to increase substantially, such as CSAH 12 near the Mahtomedi School Campus which could see nearly a 40% increase in traffic volume during this planning period. This forecast is substantiated by traffic data taken by the City that shows an increase in traffic volumes along collector roads.

Grant will work with Washington County and MnDOT as needed to help assure appropriate roadway facilities for through traffic and will continue to monitor such increases through this planning period. Half of the local roads in Grant are gravel surfaced and the other half are paved, and the City's current ordinances require all new roads to be paved. It has been the City's policy to work with resident requests to pave existing gravel roads if a majority of the residents agree to contribute to the project. The City's process for funding paving projects is through State Statute 429, and is implemented through the City's road policy.



Map 5-3. Existing Traffic Volumes (2016)



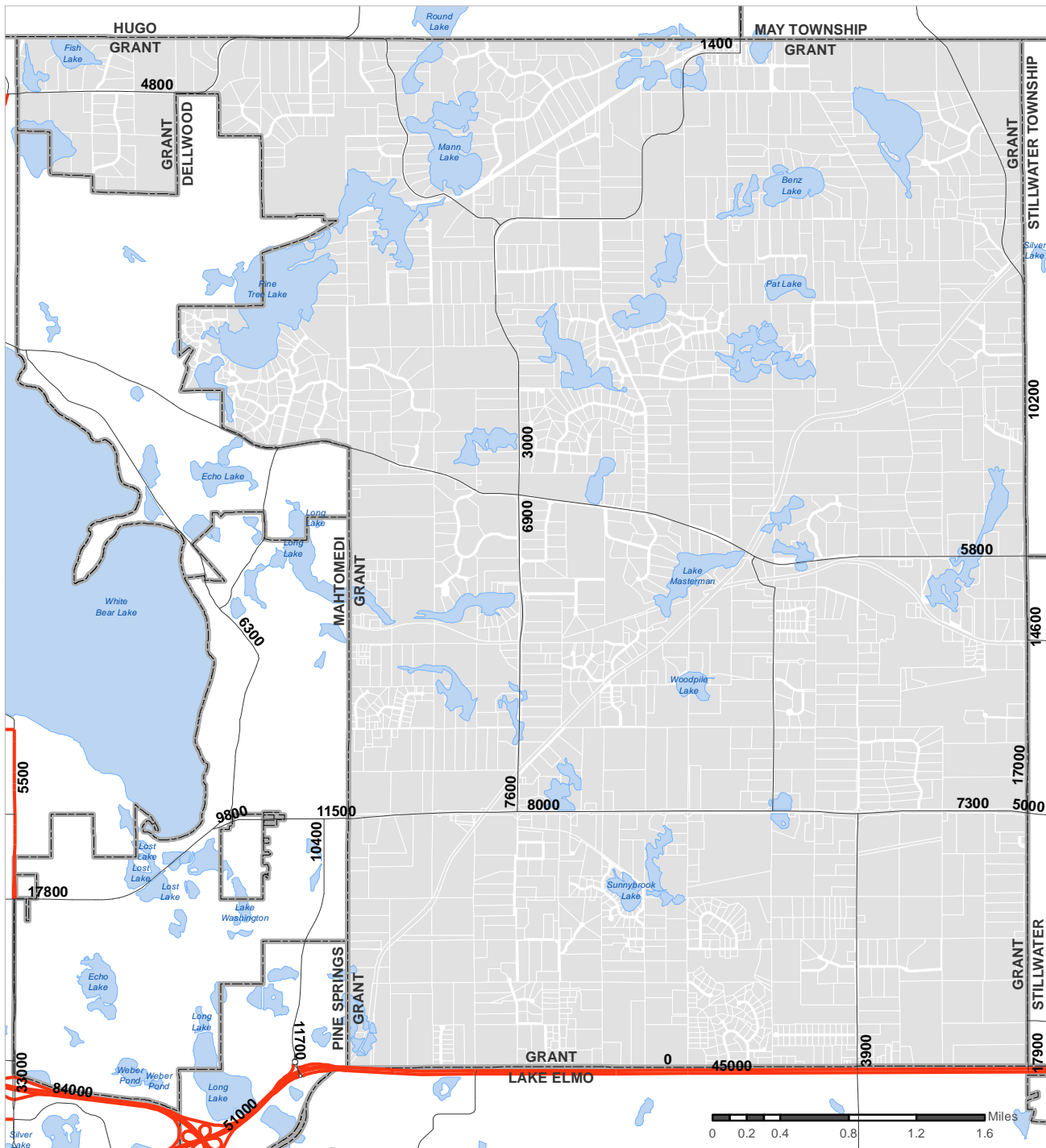
5-6

Legend

- AADT 2016 Traffic Volumes
- HCAADT 2016 Traffic Volumes



Map 5-4. Forecasted Traffic Volumes (2040)



5-7

2040 Traffic Volumes (Washington County)



Access Management

The City encourages the alignment of new roadway access points with existing intersections, the provision of adequate spacing to separate and reduce conflicts, and the consideration of site distance limitations. The Subdivision Ordinance regulates access management in its Design Standards and other considerations regarding roadway and driveway access are contained in the City’s Zoning Ordinance. The City also adopts and incorporates by reference Washington County’s Access Spacing guidelines related to all proposed accesses onto County roadways.

Table 5-3. Access Management Guidelines

Functional Classification	Full-Movement Intersection	Partial Movement Intersection	Private Driveways	Signal or Roundabout Spacing
Principal Arterial	1/2 Mile	1/4 Mile	Variable	1/2 Mile
Minor Arterial	1/4 Mile	1/4 Mile	Variable	1/4 Mile
Collector	1/8 Mile	N/A	Variable	1/8 Mile

Source: Table 6, Chapter 4 Washington County 2040 Comprehensive Plan

5-8

Corridor Studies

Since the 2030 Plan was adopted, the City has participated on two initiatives related to major roadway or corridor improvements that will affect residents and business owners in Grant if the associated planned improvements come to fruition. The following summary of these two initiatives is provided:

Trunk Highway (TH) 36

TH 36 has been identified as a Medium Priority Interregional Corridor under the State of Minnesota’s IRC Study. The TH 36 Corridor Management Plan was published in May 2001 detailing the study of TH 36, from I-694 to the Wisconsin border. This includes the segment along the border of the City of Grant. The City continues to work with adjacent municipalities and MnDOT as plans are further developed and individual segments and improvements are brought closer to fruition.

County Road 12 (CSAH 12)

Washington County continues to work through the plans for reconstruction of the CSAH 12 corridor through the City of Grant. The City continues to work with the County and adjacent jurisdictions through plan development, and will participate in discussions and planning efforts as the project nears construction. More detail regarding this corridor study is contained in Washington County’s 2040 Comprehensive Plan.



OTHER TRANSPORTATION

Public Transit

Grant is not in the Metropolitan Transit Taxing Jurisdiction, and there are no plans for new transit service in the City. Grant is in Transit Market Area V which is described as communities with very low population and employment densities and such places tend to be primarily rural residential communities with agricultural uses. General public dial-a-ride service may be appropriate, but due to the very low-intensity land uses these areas are not well-suited for fixed-route transit service. Rural dial-a-ride service is provided by Human Services Inc., and an existing park and pool lot is available at TH 36 and CR 15 for those interested in carpooling to regional and subregional job centers.

Aviation

There are no public aviation facilities in Grant. The City of Grant promotes the protection of airspace navigations and electronic communication. Current City ordinances prohibit any structures, including antennas, over 200 feet in height. Proposed, new structure construction will require a Conditional Use Permit, where the applicant will be required to submit a “Notice of Proposed Construction or Alteration”

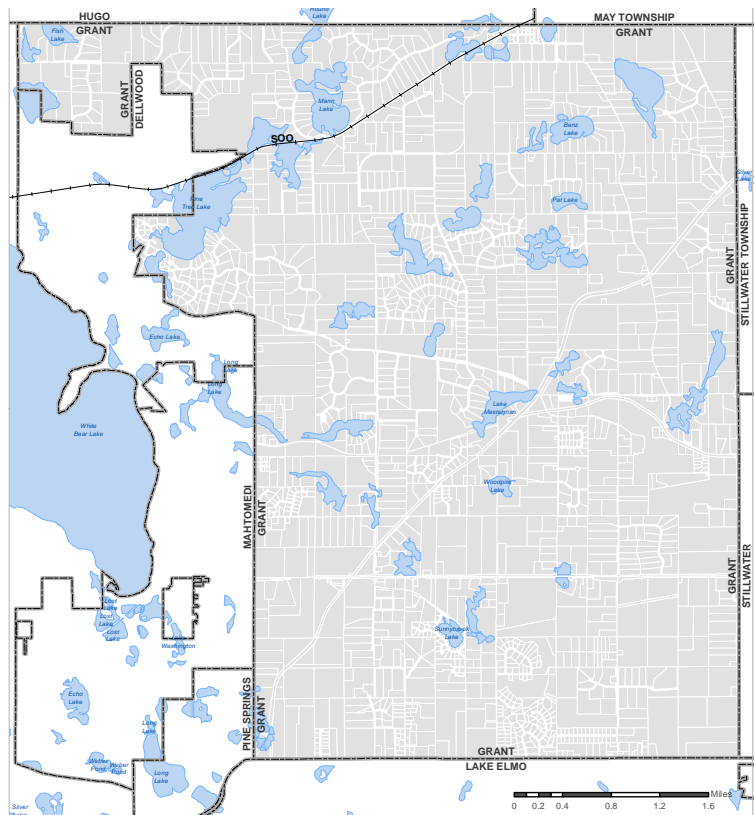
to the Federal Aviation Administration (CFR – Part 77, Form 7460-1).

Railroads

The Canadian Pacific Rail Line (formerly known as the Soo Line) in northern Grant is the only major railroad in the City. It is classified as a Class One Rail Lin and is shown on Map 5-5 crossing the northwest quadrant of the community.

Trails

Walking, bicycling, horseback riding, snowmobiling, etc., are primarily recreational activities in Grant and are addressed in Chapter 4.



CHAPTER 6: Infrastructure & Utilities





INFRASTRUCTURE & UTILITIES- 12-31-2019
City of Grant Comprehensive Plan 2040

INTRODUCTION

The purpose of this chapter is to describe how the City's infrastructure and utilities are managed and administered within the community. As a rural residential community the majority of services and utilities are maintained by individual homeowners, homeowner associations and other private entities such as the limited business located on Highway 36. Even though utilities are primarily managed by individual private owners the City still must monitor these systems through proper ordinances, permitting and other policies to ensure compliance with local, county and state rules. The following chapter provides an overview of the City's Water Supply, Wastewater and Surface Water management policies that support this 2040 Comprehensive Plan.

Infrastructure & Utilities

- The City will continue to plan for land uses and lot sizes that will support private utilities including subsurface sewage treatment systems (SSTS) and private wells.
- The City will support and collaborate with agencies with permitting authority to ensure private systems and wells comply with state rules and regulations.



WATER SUPPLY

Nearly the entire City of Grant is served by individual/private wells, with only two exceptions in the entire community. The Mahtomedi School Campus is located in the City of Grant, and the City of Mahtomedi provides municipal water to the facilities, and there is a semi-public water supply located in the Indian Hills Subdivision that serves only properties within that neighborhood which is governed by a Homeowners Association. The City of Grant has an inter-community connection agreement for both water and wastewater services to serve the Mahtomedi School Campus, and the agreement is provided as an appendix to this Plan. Beyond the two noted exceptions, the City has no plans to construct or permit water supply systems that serve more than an individual property. The City's current permitting process requires all residential and commercial property owners to obtain individual well permits from the Minnesota Department of Health (MDH) prior to the installation of any new well. This process will continue to be implemented as part of new development, or any new wells requested in the City.

2 Surface Water and Groundwater Interaction

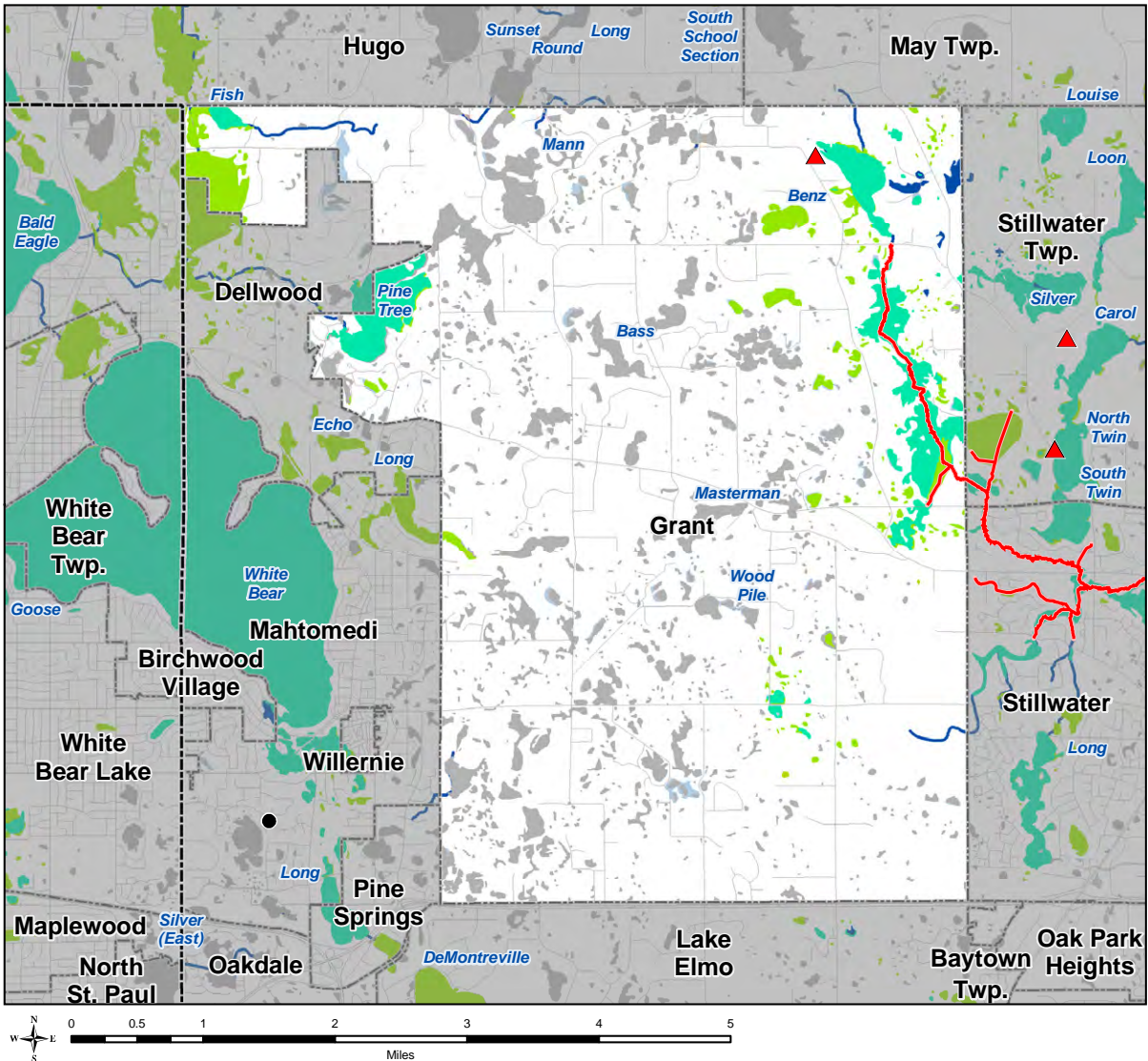
As shown on Map 6-1, the City has an extensive network of surface water features including wetlands, streams and lakes. A more thorough analysis of surface water systems is provided in the Local Surface Water Management Plan contained in Appendix B, so the purpose of this map is to show which surface waters interact with the groundwater and therefore may impact the water supply of the community and the greater region. As shown, the wetlands and lakes in the northeastern edge of the community are identified as surface water features that receive and discharge groundwater, as well as some intermittent waterbodies and wetlands in the southeastern and northwestern quadrants that are identified as recharge aquifers. It is important to understand the relationship between the City's ordinances and regulations related to shoreland management, wetland protection, and other policies to maintain water quality particularly near surface water features that are connected to the regional groundwater system.

Water Supply System Interconnections and Management Areas

While the City does not have a municipal water supply that serves the majority of the residents, there are the two exceptions as previously noted. Map 6-2 demonstrates that the entire City is within the DNR's North and East Metro Groundwater Management Area. Though there are no municipal water supplies, there are higher volume users such as golf courses and businesses. Further, the southeast quadrant and west-central portion of the City are in areas designated with Moderate to Highly Vulnerable Drinking Water Supply Management Areas by the MDH.



Map 6-1. Surface and Groundwater Interactions



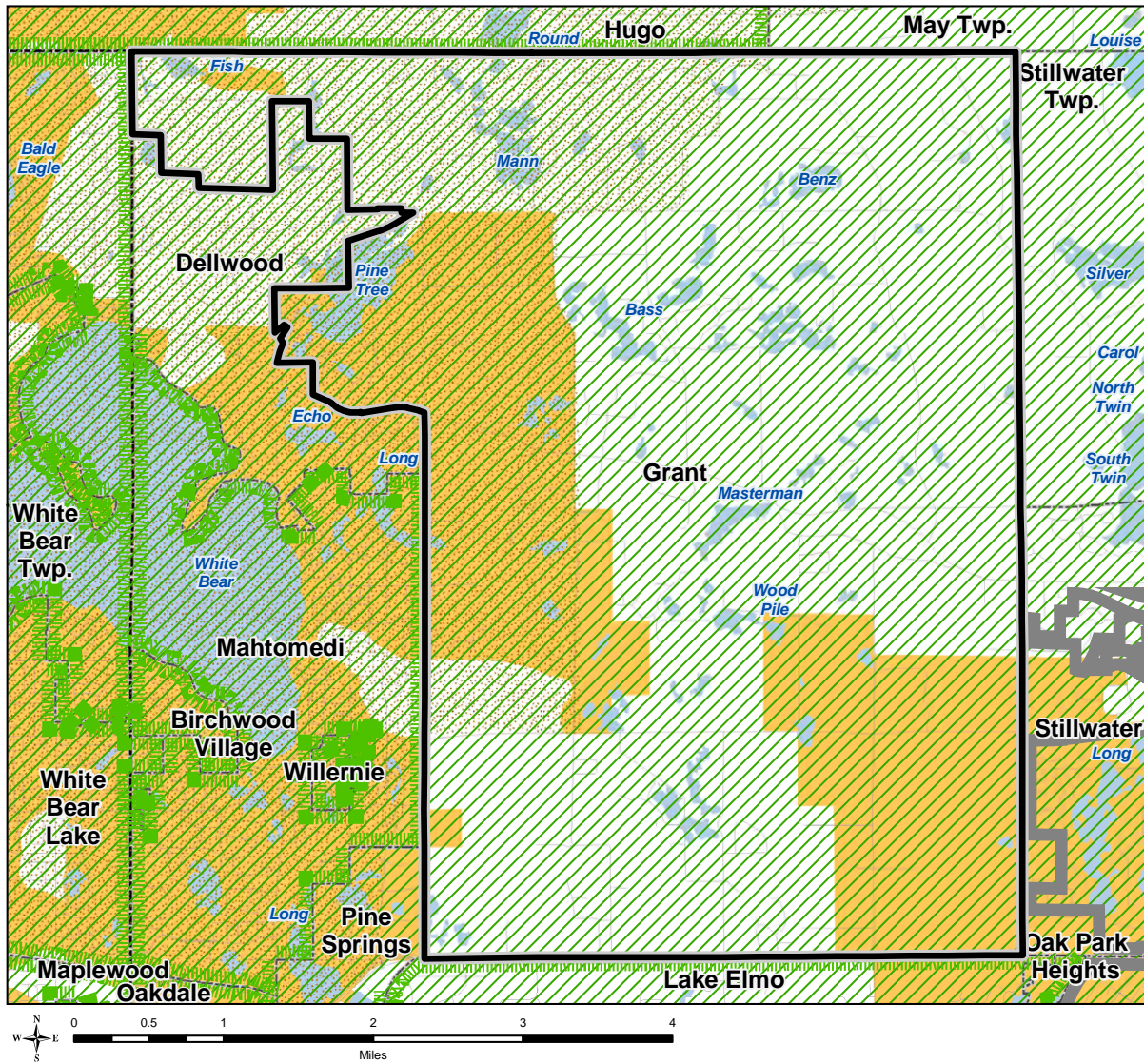
3











- | Karst Features (DNR) | Surface water type (regional screening by Met Council) |
|----------------------|--|
| ▲ Spring | Disconnected from the regional groundwater system |
| ● Sinkhole | Recharges aquifers |
| ● Calcareous Fens | Receives and discharges groundwater |
| | Supported by upwelling groundwater |
| | Trout Streams (DNR) |
| | County Boundaries |
| | City and Township Boundaries |
| | NCompass Street Centerlines |
| | Other Open Water Features |

Source: Metropolitan Council



Map 6-2. Municipal Public Water Supply System Interconnections and Management Areas



-  Special Well and Boring Construction Areas (MDH)
-  The community's most recent local water supply plan reports that the public water supply system has no interconnections
-  The community's most recent local water supply plan reports that the public water supply system has one or more interconnections
-  North and East Metro Groundwater Management Area (DNR)
-  Drinking Water Supply Management Area for Minneapolis/St. Paul
-  Moderate to Highly Vulnerable Drinking Water Supply Management Areas (MDH)
-  County Boundaries
-  City and Township Boundaries
-  Open Water Features
-  NCompass Street Centerlines

Source: Metropolitan Council



WASTEWATER

All of Grant’s residents and businesses are served by subsurface sewage treatment systems, and no portions of the City are located in the Metropolitan Urban Service Area (MUSA). As referenced in the Water Supply section, the Mahtomedi School Campus is served by an inter-community connection agreement with the City of Mahtomedi to provide sanitary sewer service to the campus. For purposes of this Plan, there are no areas planned for sewer or urban services in this Planning Period. The following projections are as presented within the City’s 2015 System Statement received from the Metropolitan Council.

Table 6-1 Forecasts

Forecast Year	Forecast Component	Population	Households	Employment
2010	Unsewered	4,094	1,463	449
2020	Unsewered	4,080	1,510	580
2030	Unsewered	4,160	1,610	700
2040	Unsewered	4,260	1,700	840

Source: Metropolitan Council, 2015 System Statement

The City has adopted and incorporated Washington County’s ordinance regarding Subsurface Sewage Treatment System by reference. The City contracts directly with Washington County Environmental Services to permit, maintain and manage all systems within the community. The City defers all maintenance, management and permitting to Washington County and keeps a copy of their ordinance on file in the City’s Offices. A copy of the City’s Ordinance repealing Article IV of Chapter 12, adopting the County’s regulations and ordinance are provided in Appendix D, and the County’s ordinance is also provided.

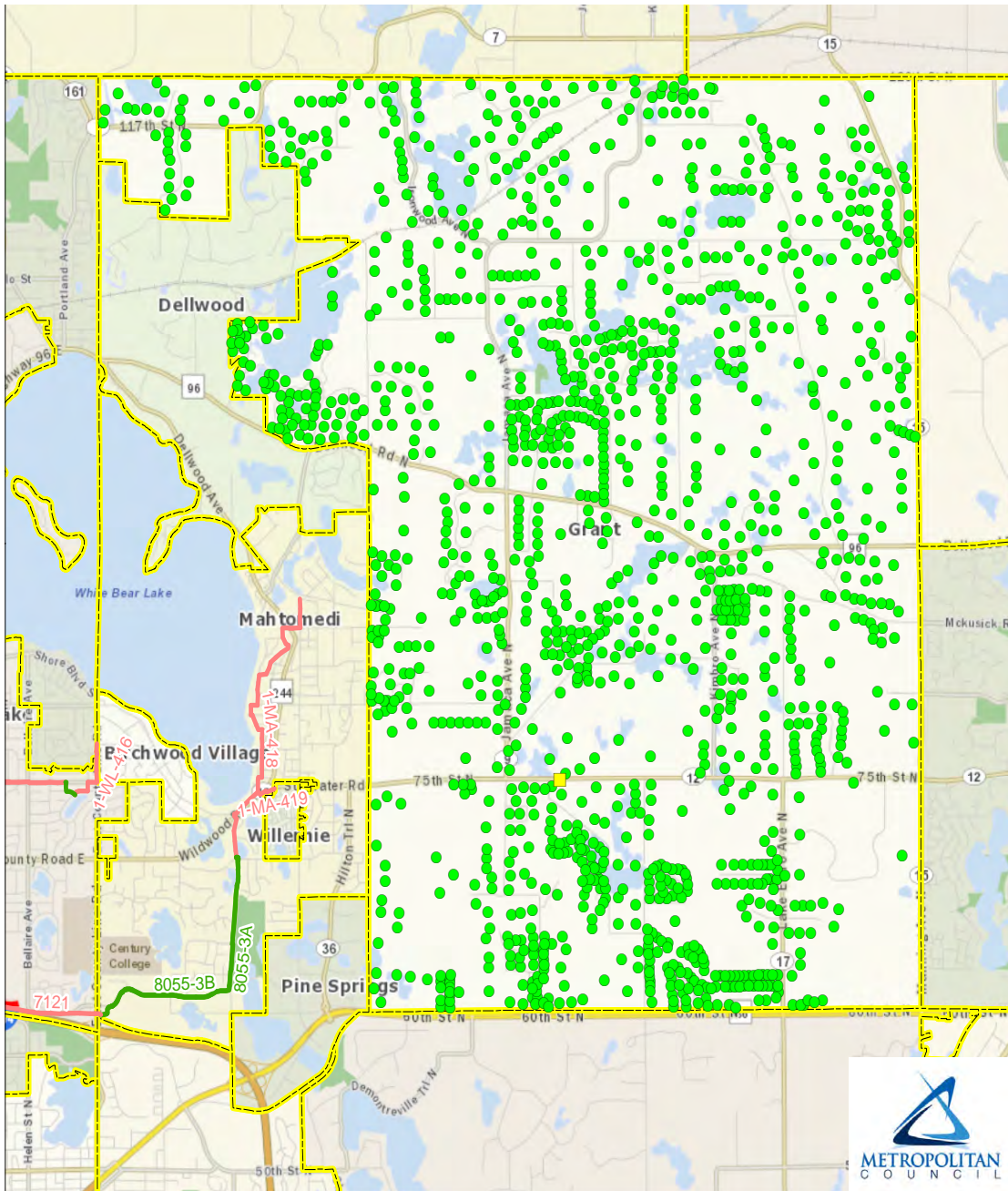
The City’s current land use regulations and zoning does not permit the use of community drainfields or community systems. All properties are required to be served with an Subsurface Sewage System as permitted by Washington County Environmental Services. Subsurface Sewage Treatment Systems are shown on Map 6-3.

The City of Grant specifically prohibits sewage, sewage tank effluent, or seepage from a soil treatment system from being discharged into any well, boring, or other excavation in the ground. Footing or roof drainage and chemically treated hot tub and pool water may not enter any part of the system. Additionally, products containing hazardous waste and hazardous substances must not be discharged to a system.



Map 6-3. Septic System Map

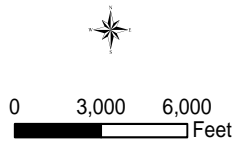
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**Subsurface Sewage Treatment System (SSTS)
City of Grant**

Source Data: SSTS data from Washington County,
and MCES.
Map created by MCES.

- Individual Sewer Treatment Systems (ISTS) (Approx. 1,431 Systems)
- Private Wastewater Treatment (Approx. 1 Systems)
- Gravity Interceptor
- Forcemain Interceptor
- City & Township Boundaries



Substances not intended for use in household cleaning, including solvents, pesticides, flammables, photo finishing chemicals, and dry-cleaning chemicals must not be discharged to the system. Uncontaminated clear water waste from geothermal heat pump installations shall not be introduced into individual sewage treatment systems. Such waste may be discharged to the ground surface or to a body of water; however, in no case shall surface discharge be permitted where such discharge encroaches on adjoining property or a public way. Where subsurface disposal is provided, such installation shall be separated from the required sewage treatment site and shall be designed and sized as prescribed for a standard soil treatment system. Unless specifically permitted by the Minnesota Pollution Control Agency, sewage, sewage tank effluent, or seepage from a soil treatment system shall not be discharged to the ground surface or to surface water.

The City requires evaluation of existing sewage treatment systems to be both adequate and conforming when additions, enlargements, improvements, or remodeling involve fifty (50) percent or more of the structure, or when alterations, such as bedrooms or bathrooms, affect water use. If the sewage treatment system is found to be “not adequate and conforming” it will require a new treatment system to be installed to meet the regulations.

7

When sewage treatment systems or their individual parts are abandoned, all solids and liquids shall be removed and disposed of, chambers removed or filled with soil material, and access for future discharge to the system shall be permanently denied. Enforcement measures are as implemented by Washington County.

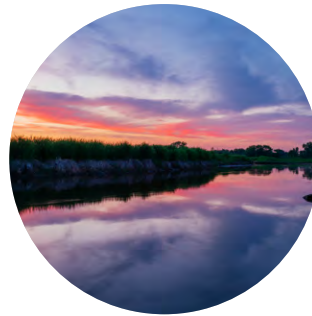
The City supports Washington County’s established objectives to maintain high public health standards, protect the water quality of the four Watershed Districts that make up the City of Grant. These objectives, together with the City’s planned low density and low-intensity uses, reduce the need for high cost waste treatment services being expanded into the City.

SURFACE WATER MANAGEMENT PLAN

As referenced within previous sections of this Chapter, the City has prepared a full updated to their Surface Water Management Plan which is provided in its entirety within Appendix B. Where appropriate, throughout this chapter, and others contained in this Plan the LSWMP has been referenced so as not to duplicate information, maps or other relevant content.



CHAPTER 7: Implementation





IMPLEMENTATION - 12-31-2019
City of Grant Comprehensive Plan 2040

INTRODUCTION

An important component of this Comprehensive Plan Update process is to identify implementation strategies and priorities that will bring this Plan to fruition. This chapter provides a set of implementation strategies that are specific to the Chapters goals and strategies of each component contained within this Plan.

Guided by the priorities identified by the City Council and Planning Commission the following implementation chapter was developed. This Chapter does not identify every planning or policy effort needed to implement this Comprehensive Plan, but instead is intended to provide a roadmap of major initiatives that may require time, resources, and additional study to make sure the City prioritizes certain efforts through this planning period.

Public Programs and Fiscal Devices

7-1

The City of Grant manages and plans for its systems through its annual budgeting process. The City does not have a Capital Improvement Plan. Instead it manages its roadways, which is the City's only major infrastructure asset, through a 5-year rotating cycle established within the Pavement Management Program which is attached as Appendix C. The City remains committed to a conservative approach to managing its systems and services placing much of the responsibility in the hands of local residents and business owners. This policy and perspective is reinforced through the City's budgeting and planning efforts, and is reflected in the implementation plan identified in subsequent sections of this Chapter.

Implementation Strategies

The following strategies are organized by Plan Chapter. In some cases there may be an implementation strategy identified that would assist with implementation of more than one component of this Plan, for example some implementation strategies may apply to both transportation and land use. In those cases, the implementation strategy is listed with the Plan Chapter that the implementation strategy most directly supports.



Chapter 3: Land Use & Housing

The following implementation steps and strategies are identified to support the City's Future Land Use Plan and the corresponding goals and strategies identified within Chapter 2 of this Plan.

1. The City will review and revise, as necessary, current zoning district regulations for consistency with the agricultural, rural residential and general business land use designations identified within this Plan. The review, and any changes, will be completed within nine (9) months of adoption of this Plan. (City's adopted Zoning Map and current zoning districts can be found on page 7-4)
2. The City will continue to work collaboratively with Washington County Environmental Services during the pre-development review process to ensure all newly created lots have sufficient area to support an individual septic system.
3. The City will review all permitted, conditionally permitted and not permitted uses for its A1 and A2 Zoning Districts as shown on the City's current Zoning Map (see Map 7-1).
4. The City will continue to explore opportunities to incorporate standards that may support increased housing diversity, such as ordinance policies and revisions addressing Accessory Uses including Accessory Dwelling Units.
5. The City will work collaboratively with the County and its CDA to support the CDA's Home Improvement and Septic programs as available tools to maintain the City's existing housing stock.

7-2

Chapter 4: Natural Resources & Recreation

The following implementation steps and strategies are identified to support the City's Natural Resources and Recreation Chapter and the corresponding goals and strategies identified within Chapter 2 of this Plan.

1. The Shoreland Management Ordinance contained in Chapter 12 of the City Code will be updated and revised to incorporate current regulations and standards of the Minnesota Department of Natural Resources (MnDNR).
2. The City is open to participating on a task force or working group with the County and/or the Metropolitan Council on the regional trail search corridors as needed, and as plans are brought closer to fruition.



Chapter 5: Transportation

The following implementation steps and strategies are identified to support the City's Transportation Chapter and the corresponding goals and strategies identified within Chapter 2 of this Plan.

1. The City will continue to work cooperatively with surrounding Cities, Washington County, the Minnesota Department of Transportation, and other government agencies in development of a transportation network consistent with the goals and strategies of this Plan.
2. The City will continue to work with MnDOT and Washington County on the TH 36 access and connectivity plan to provide safe and adequate service to residents and business owners of Grant.
3. The City will require developers to provide roadways, and appropriate right-of-way consistent with the goals and strategies of this Plan for local roadways, and future maintenance and management plans.
4. The City will continue to support improvements that will maintain the rural character the City's local roadways.
5. The City will continue to maintain and manage its roadways through its Pavement Management Program.
6. The City will continue to facilitate the special road assessment policy of the City to encourage the planned and programmatic rehabilitation and reconstruction of local roadways as needed.

7-3

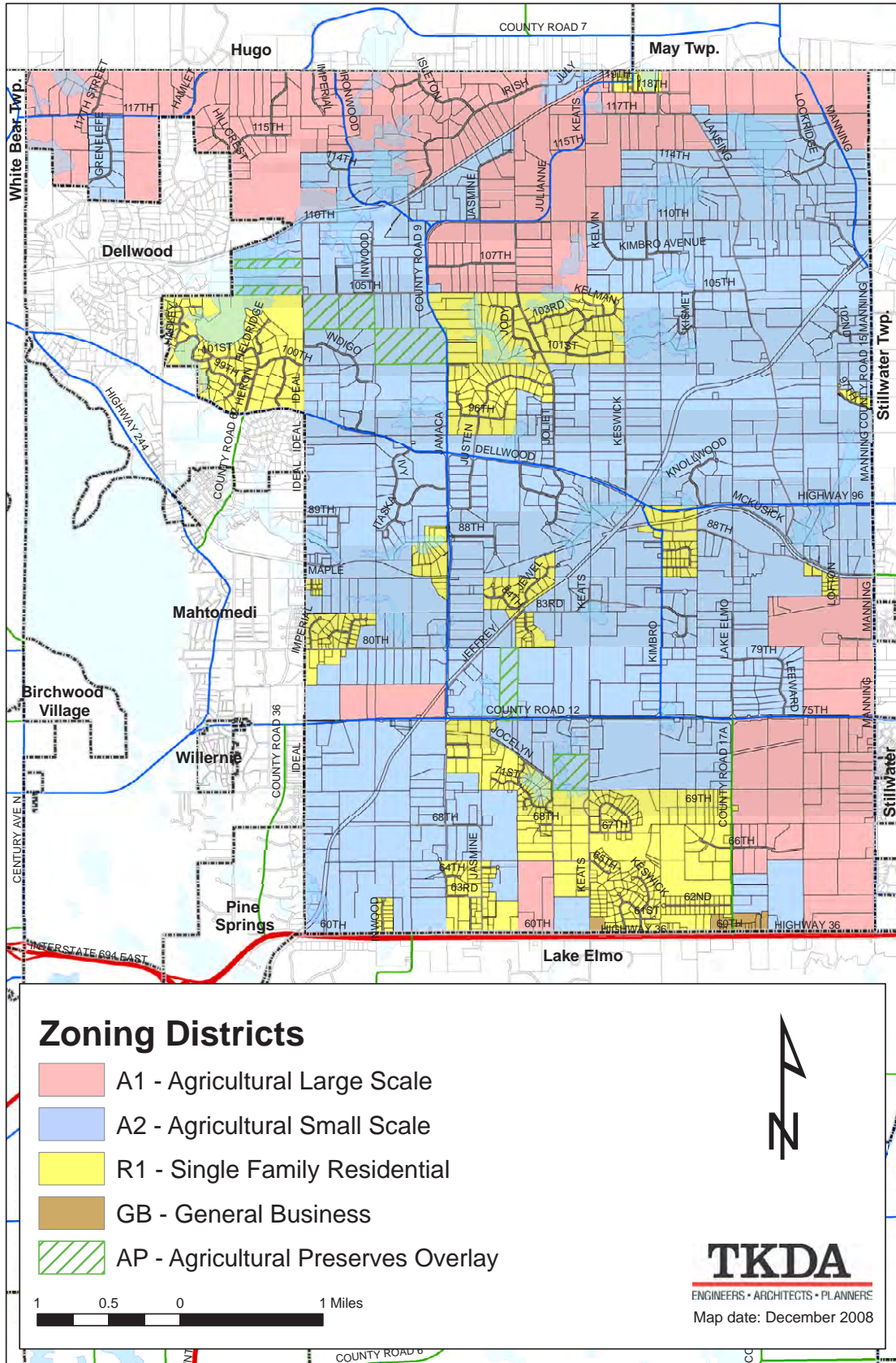
Chapter 6: Infrastructure & Utilities

The following implementation steps and strategies are identified to support the City's Infrastructure and Utilities Chapter and the corresponding goals and strategies identified within Chapter 2 of this Plan.

1. Support the routine inspection and ongoing maintenance of ISTS within the City. Work with the County to ensure ordinances, inspection and maintenance activities are performed consistent with applicable State and County requirements.
2. Continue to work with Washington County on the City's ISTS permitting processes and maintain the City's policy to work directly with the County in support of Minnesota Rules 7080.
3. Continue to work with the Minnesota Department of Health and the MnDNR on all well permitting processes and procedures to ensure new wells are constructed with proper permits and compliance with state standards.



Map 7-1: Existing Zoning and Zoning Districts



7-4

