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Acknowledgements

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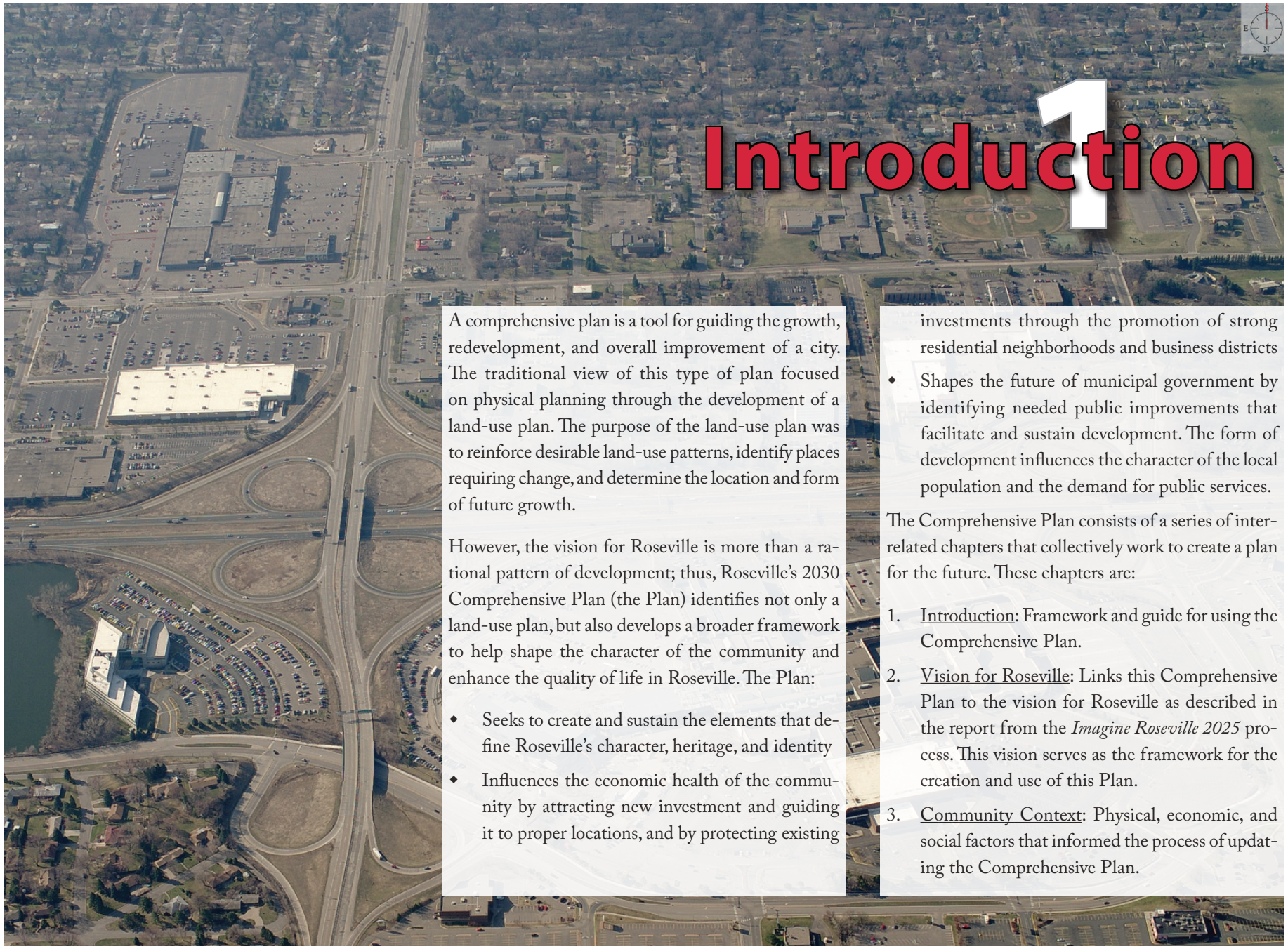


1 Introduction

A comprehensive plan is a tool for guiding the growth, redevelopment, and overall improvement of a city. The traditional view of this type of plan focused on physical planning through the development of a land-use plan. The purpose of the land-use plan was to reinforce desirable land-use patterns, identify places requiring change, and determine the location and form of future growth.

However, the vision for Roseville is more than a rational pattern of development; thus, Roseville's 2030 Comprehensive Plan (the Plan) identifies not only a land-use plan, but also develops a broader framework to help shape the character of the community and enhance the quality of life in Roseville. The Plan:

- Seeks to create and sustain the elements that define Roseville's character, heritage, and identity
- Influences the economic health of the community by attracting new investment and guiding it to proper locations, and by protecting existing investments through the promotion of strong residential neighborhoods and business districts
- Shapes the future of municipal government by identifying needed public improvements that facilitate and sustain development. The form of development influences the character of the local population and the demand for public services.

The Comprehensive Plan consists of a series of interrelated chapters that collectively work to create a plan for the future. These chapters are:

1. Introduction: Framework and guide for using the Comprehensive Plan.
2. Vision for Roseville: Links this Comprehensive Plan to the vision for Roseville as described in the report from the *Imagine Roseville 2025* process. This vision serves as the framework for the creation and use of this Plan.
3. Community Context: Physical, economic, and social factors that informed the process of updating the Comprehensive Plan.

4. Land Use: Goals, policies, and plans to guide the use of land in Roseville.
5. Transportation: Summary of the Transportation Plan for Roseville.
6. Housing and Neighborhoods: Public plans and programs to meet the housing needs of Roseville residents.
7. Economic Development and Redevelopment: Public objectives and strategies to sustain a healthy local economy, including stimulation of private investment, expansion of the tax base, the creation of jobs, and the redevelopment of property.
8. Environmental Protection: Plans, programs, and tools to protect and enhance Roseville's natural environment.
9. Parks, Open Space, and Recreation: Plans and programs to maintain and enhance Roseville's system of parks, trails, recreational facilities, and open space.
10. Utilities: Summary of Roseville's plans for sanitary -sewer, water-supply, and surface-water management.
11. Implementation: Tools and strategies that Roseville will use to implement the plans and achieve the vision contained in the Comprehensive Plan.

Roseville's 2030 Comprehensive Plan was prepared in accordance with the Metropolitan Land Planning Act (Minnesota Statutes §473.851-473.871) and the policies of the Metropolitan Council. Every community in the seven-county jurisdiction of the Metropolitan Council receives a "system statement." Prepared by the Metropolitan Council, this document informs each community how it is affected by the Council's policy plans for four regional systems – transportation, aviation, water resources (including wastewater collection and treatment), and regional parks and open space. System statements include forecasts of population, households and employment. Roseville's 2030 Comprehensive Plan conforms to the system statement released by the Metropolitan Council on February 14, 2006.

Sustainability and the Comprehensive Plan

Roseville is committed to the preservation and enhancement of its environment, and to the principle that each generation of residents must meet the needs of the present without compromising the ability of future residents to meet their own needs. This approach to *sustainability* is a thread that is woven throughout the Plan. Every chapter addresses some aspect of sustainability. In this way, using the Comprehensive Plan in a manner consistent with the vision for Roseville will work to improve sustainability. Through the Comprehensive Plan, the community will continue to explore ways to enhance the physical, social, and economic environment.

Previous Planning

The 2030 Comprehensive Plan is part of an ongoing process of community planning in Roseville.

Roseville was incorporated as a municipality in May 1948, and had a population of 4,650 people. The City's first comprehensive plan was adopted in 1956 (population 17,000).

Some of the principal outcomes of the **1956 Comprehensive Plan** were:

- Concentration of major industrial development in the western part of the city.
- Concentration of commercial activity into regional and neighborhood shopping nodes that limited the growth and negative influence of "strip commercial" development.
- Creation of a complete municipal park system including Central Park and smaller neighborhood parks and playgrounds.
- Establishment of the orderly development of single-family residential subdivisions.

The City prepared its second comprehensive plan in 1969 (population 34,439). Some of the major features of the **1969 Comprehensive Plan** were:

- Establishment of a regional shopping center in the northwest corner of the intersection of State Highway 36 and Snelling Avenue.
- Development of a civic center, including city hall, fire station, ice arena, and public works facility.
- Development of the City's park system.
- Continuation of the orderly development of residential land uses.

The next (third) comprehensive planning process occurred ten years later (population 35,820). Some of the major features of the **1979 Comprehensive Plan** were:

- Redevelopment of the area between Fairview Avenue and Interstate 35W from industrial usage to a commercial area.
- Development of multi-family housing south of Highway 36 between Snelling and Cleveland Avenue and in the northeast corner of the city along Rice Street.
- Continuation of the orderly development of residential land uses.

The **1994 Comprehensive Plan** was the fourth comprehensive planning program. From 1994 to 2008, the City undertook periodic updates to the Comprehensive Plan to keep the document current and relevant.

Imagine Roseville 2025

In 2006, the City engaged in a community-based process titled *Imagine Roseville 2025* to "take a thoughtful look at Roseville's future." Beginning in May 2006, the process involved the community in creating a vision for Roseville, setting goals and strategies to achieve the identified vision, and culminating in a final report, which was adopted by the City Council in January 2007.

Imagine Roseville 2025 lays the foundation for the 2030 Comprehensive Plan. Chapter 2 of this Plan includes the vision statement from the final report. Additional elements of the *Imagine Roseville 2025* report have influenced plans, goals, and policies throughout this Plan.

2008 Update

The 2008 update of Roseville's Comprehensive Plan addresses the statutory requirements of the Metropolitan Land Planning Act. This Act requires cities to update their comprehensive plans to bring them into conformance with regional plans within three years of receiving their system statements from the Metropolitan Council.

For Roseville, the 2008 update provided the opportunity to review and enhance the format and contents of its Comprehensive Plan. By 2007, the existing adopted Comprehensive Plan, including all adopted appendices, had grown into a document of more than 2,000 pages. That size and structure made the Plan difficult to use for both policy makers and the public. With the 2008 update, the 2030 Comprehensive Plan is now a more concise and usable document.

In August 2007, the City retained Hoisington Koegler Group Inc. (HKGi) to assist with the Comprehensive Plan update. WSB & Associates, Inc. worked with HKGi and the City to address the Transportation chapter of the Plan. City staff prepared the Housing and Neighborhood, Environmental Protection, and Utilities chapters. HKGi was responsible for all other aspects of the planning process.

The City Council appointed a 13-member Comprehensive Plan Steering Committee to work with consultants and staff in updating the Plan. The kick-off meeting of the Comprehensive Plan Steering Committee was on October 10, 2007. The Steering Committee met monthly through September 2008. To ensure timely completion of the updated Plan, the Steering Committee met twice in the months of June and July.

Comprehensive Plan Steering Committee

The members of the Comprehensive Plan Steering Committee for the 2008 Comprehensive Plan update were:

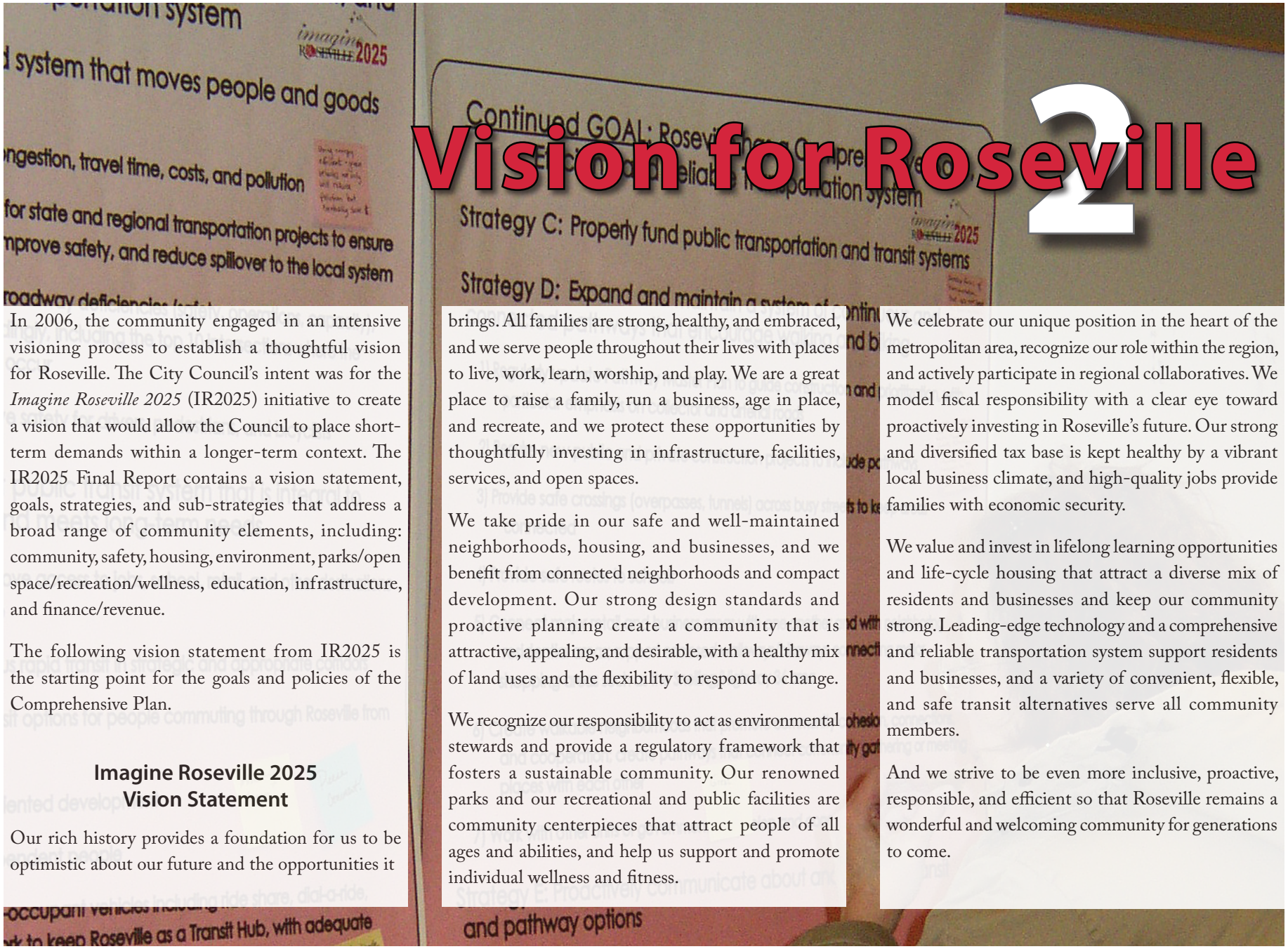
- Mary Bakeman (Planning Commissioner)
- Steve Burwell (Imagine Roseville 2025 Steering Committee Member)
- Jim Debenedet (Public Works, Environment, and Transportation Commissioner)
- Jim Doherty (Planning Commissioner)
- John Goedeke (Public-at-large)
- Gary Grefenberg (Public-at-large)
- Amy Ihlan (Council Member)
- Jeff Johnson (Parks and Recreation Commissioner)
- Tammy Pust (HRA/Council Member)
- Dan Roe (Council Member)
- Al Sands (Public-at-large)
- Karen Schaffer (Public-at-large)
- Stuart Shwiff (Public-at-large)

Bob Willmus (Parks and Recreation Commissioner) and Jeanne Kelsey (HRA Board Member) were original members of the committee. Bob was appointed to the City Council and Jeanne was hired as Housing Program Coordinator for the City of Roseville.

A special thanks is extended to the Steering Committee for its insights and commitment to this planning process.

The Planning Commission held a non-required public hearing on the draft 2030 Comprehensive Plan and recommended that the City Council release the document for local government review. The City Council approved release of the draft document for local government review on October 13, 2008. The Planning Commission conducted the required public hearing on the proposed 2030 Comprehensive Plan on January 7, 2009, and passed a resolution recommending the Plan to the City Council. The City Council granted preliminary approval the Plan subject to Metropolitan Council approval on January 26, 2009, and forwarded it to the Metropolitan Council for agency review. The Plan was submitted to the Metropolitan Council and on August 25, 2009, the Plan received the Council's approval. The City Council adopted the 2030 Comprehensive Plan on October 26, 2009.

2 Vision for Roseville



In 2006, the community engaged in an intensive visioning process to establish a thoughtful vision for Roseville. The City Council's intent was for the *Imagine Roseville 2025* (IR2025) initiative to create a vision that would allow the Council to place short-term demands within a longer-term context. The IR2025 Final Report contains a vision statement, goals, strategies, and sub-strategies that address a broad range of community elements, including: community, safety, housing, environment, parks/open space/recreation/wellness, education, infrastructure, and finance/revenue.

The following vision statement from IR2025 is the starting point for the goals and policies of the Comprehensive Plan.

Imagine Roseville 2025 Vision Statement

Our rich history provides a foundation for us to be optimistic about our future and the opportunities it brings. All families are strong, healthy, and embraced, and we serve people throughout their lives with places to live, work, learn, worship, and play. We are a great place to raise a family, run a business, age in place, and recreate, and we protect these opportunities by thoughtfully investing in infrastructure, facilities, services, and open spaces.

We take pride in our safe and well-maintained neighborhoods, housing, and businesses, and we benefit from connected neighborhoods and compact development. Our strong design standards and proactive planning create a community that is attractive, appealing, and desirable, with a healthy mix of land uses and the flexibility to respond to change.

We recognize our responsibility to act as environmental stewards and provide a regulatory framework that fosters a sustainable community. Our renowned parks and our recreational and public facilities are community centerpieces that attract people of all ages and abilities, and help us support and promote individual wellness and fitness.

We celebrate our unique position in the heart of the metropolitan area, recognize our role within the region, and actively participate in regional collaboratives. We model fiscal responsibility with a clear eye toward proactively investing in Roseville's future. Our strong and diversified tax base is kept healthy by a vibrant local business climate, and high-quality jobs provide families with economic security.

We value and invest in lifelong learning opportunities and life-cycle housing that attract a diverse mix of residents and businesses and keep our community strong. Leading-edge technology and a comprehensive and reliable transportation system support residents and businesses, and a variety of convenient, flexible, and safe transit alternatives serve all community members.

And we strive to be even more inclusive, proactive, responsible, and efficient so that Roseville remains a wonderful and welcoming community for generations to come.

Other Elements of IR2025

The IR2025 Report contained a set of goals and strategies for achieving this community vision. These goals and strategies play an important role in shaping the plans, goals, and policies contained in the Comprehensive Plan. As a reference, the following list presents the goals included in the IR2025 Final Report.

Community

- Roseville is a welcoming community that appreciates differences and fosters diversity.
- Roseville is a desirable place to live, work, and play.
- Roseville has a strong and inclusive sense of community.
- Roseville residents are invested in their community.

Safety

- Roseville is a safe community.

Housing

- Roseville's housing meets community needs.

Environment

- Roseville is an environmentally healthy community.

Parks, Open Space, Recreation, Wellness

- Roseville has world-renowned parks, open space, and multigenerational recreation programs and facilities.
- Roseville supports the health and wellness of community members.

Education

- Roseville supports high-quality, lifelong learning.

Infrastructure

- Roseville has a comprehensive, safe, efficient, and reliable transportation system.
- Roseville has well-maintained, efficient, and cost-effective public infrastructure.

Technology

- Roseville has technology that gives us a competitive advantage.

Finance and Revenue

- Roseville has a growing, diverse, and stable revenue base.
- Roseville responsibly funds programs, services, and infrastructure to meet long-term needs.

3 Community Context

Planning for the future does not start on a clean slate. The future will be built on the foundation of Roseville as it exists today. Roseville has evolved over time, shaped by a variety of forces, which will continue to shape the community into the future. A clear understanding of these influences provides the context for planning decisions.

It is impossible to plan for the future without a careful examination of the physical, demographic, social, and economic characteristics of the community. What characteristics exist today and are likely to be the same in 2030? How is the community changing and how might these trends influence the future? Do these characteristics point to potential public responses through the Comprehensive Plan? The Community Context chapter provides information needed to answer these questions.

Use of Census Data

Much of the demographic data in this chapter comes from the 2000 Census. While Roseville has changed since the Census, it remains the best available information about the characteristics of population and housing. Where possible, the Census statistics are supplemented with more current data.

Location

Roseville lies in Ramsey County in the center of the seven-county Twin Cities Metropolitan Area. Roseville enjoys the benefits of a unique location in the region (see Figure 3.1).

- Roseville is approximately nine miles from downtown Saint Paul and seven miles from downtown Minneapolis.
- Minneapolis-St. Paul International Airport is 17 miles from Roseville.
- Roseville is served by two major regional highways (Interstate 35W and State Highway 36).

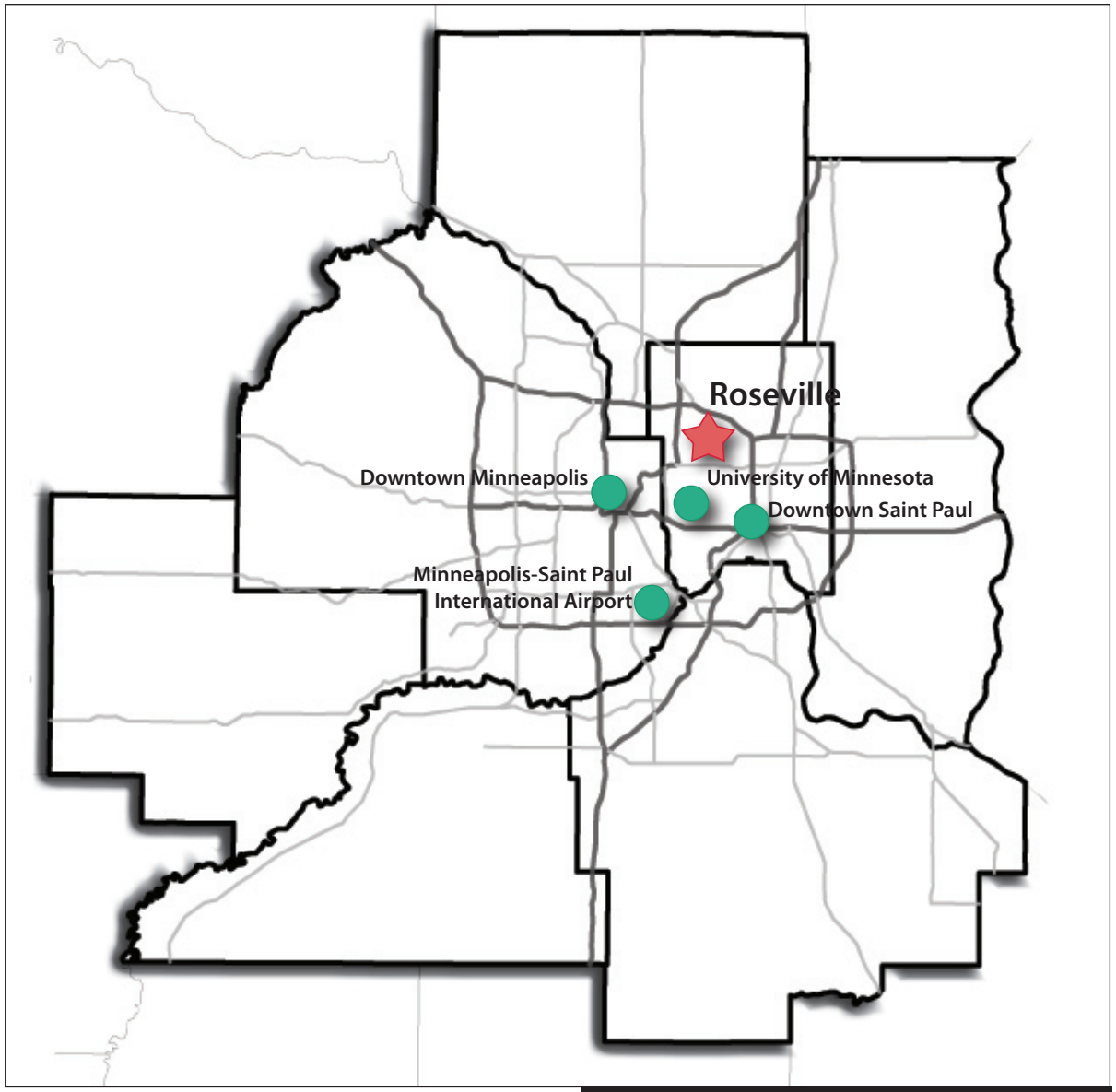
This location gives Roseville residents convenient access to employment centers and amenities throughout the Twin Cities. Roseville's location also provides local businesses with excellent access to customers, employees, and markets.

Physical Characteristics

Roseville's physical setting forms the foundation of the Comprehensive Plan. Existing land-use patterns influence the type and location of future development. Housing is the largest land-use and a defining characteristic.

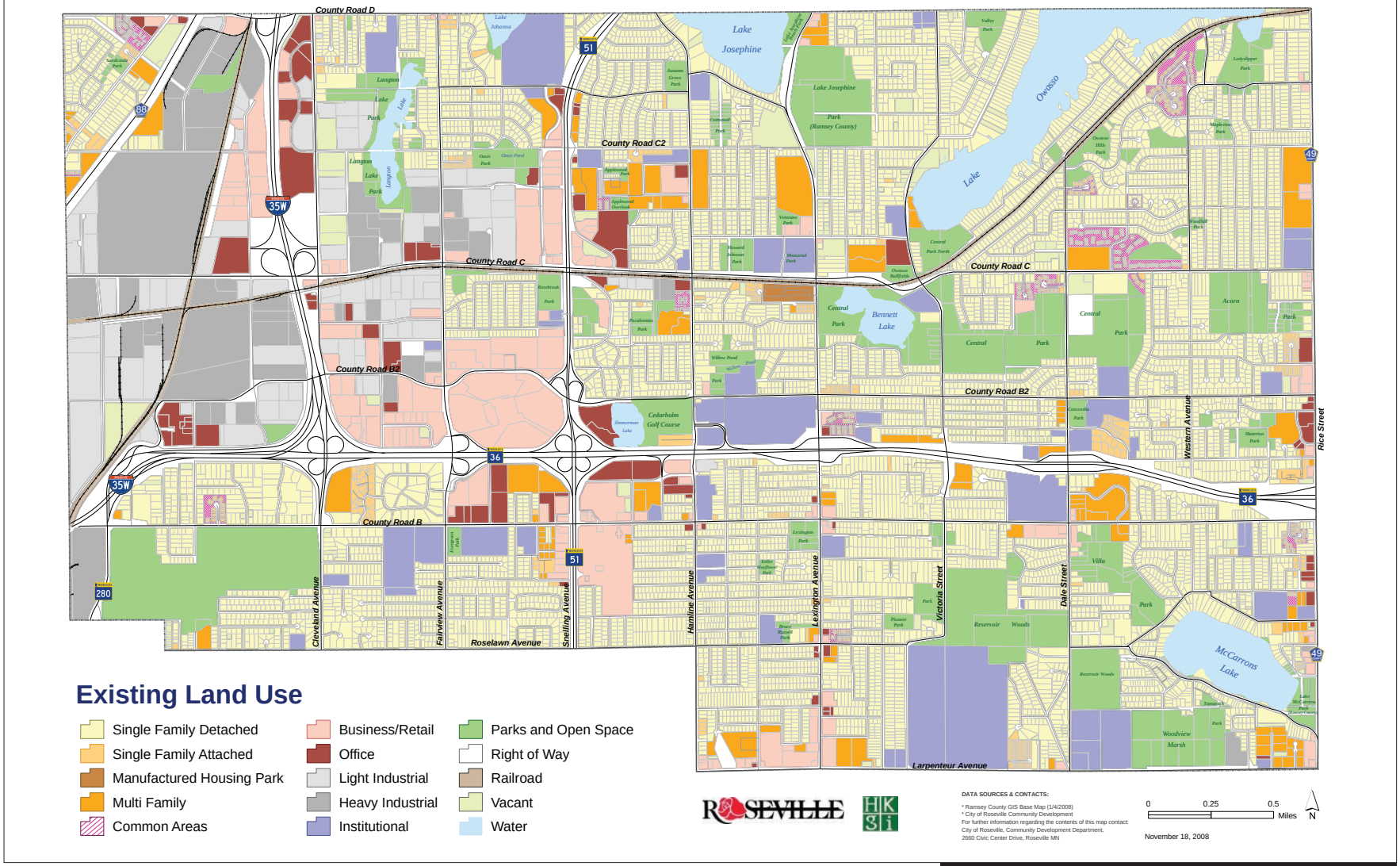
Existing Land Use

Roseville contains 7,105 acres. The map in Figure 3.2 is a snapshot of land use in 2008. The table in Figure 3.3 contains the estimated area in each land-use category. The purpose of this map is not to precisely specify the use of each parcel, but to illustrate the overall pattern



Regional Setting

Figure 3.1



Existing Land Use (2008)

Figure 3.2

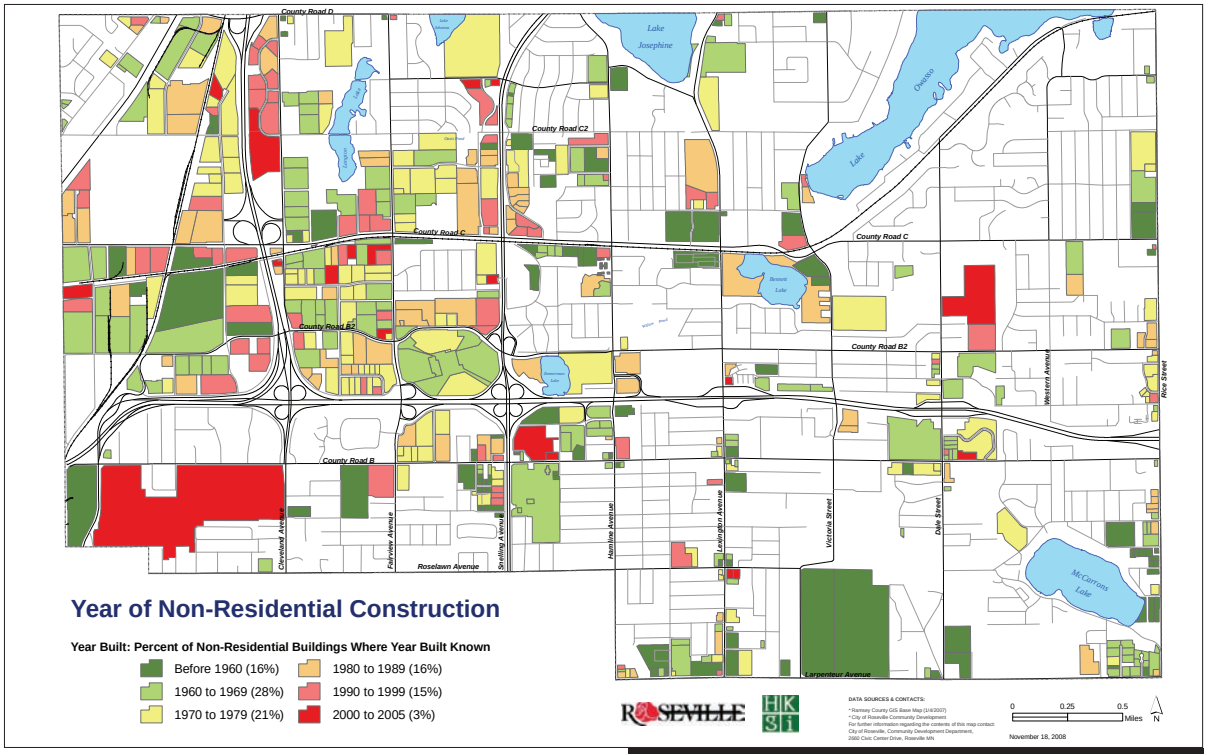
of development. Some key aspects of the existing land-use pattern are:

- Low-density residential is the dominant land use. This form of housing occupies more than 34% of Roseville's total land area.
- Roadways have been an important factor in shaping the development pattern of Roseville.
- Business (commercial and industrial) uses are primarily concentrated in the western third of Roseville, along the I-35W and Highway 36

Land Use Category	Acres	% Total
Single-Family Detached	2,925	33.0%
Single-Family Attached	126	1.4%
Manufactured Home Park	9	0.1%
Multifamily	279	3.1%
Common Areas	59	0.7%
Business/Retail	486	5.5%
Office	192	2.2%
Light Industrial	396	4.5%
Heavy Industrial	471	5.3%
Institutional	510	5.8%
Parks and Open Space	1,089	12.3%
Right of Way	1,810	20.4%
Railroad	96	1.1%
Vacant	33	0.4%
Vacant Developable	129	1.5%
Water	251	2.8%
Total	**8,861**	**100%**

Existing Land Use (2008)

Figure 3.3



Year Built - Non-Residential

Figure 3.4

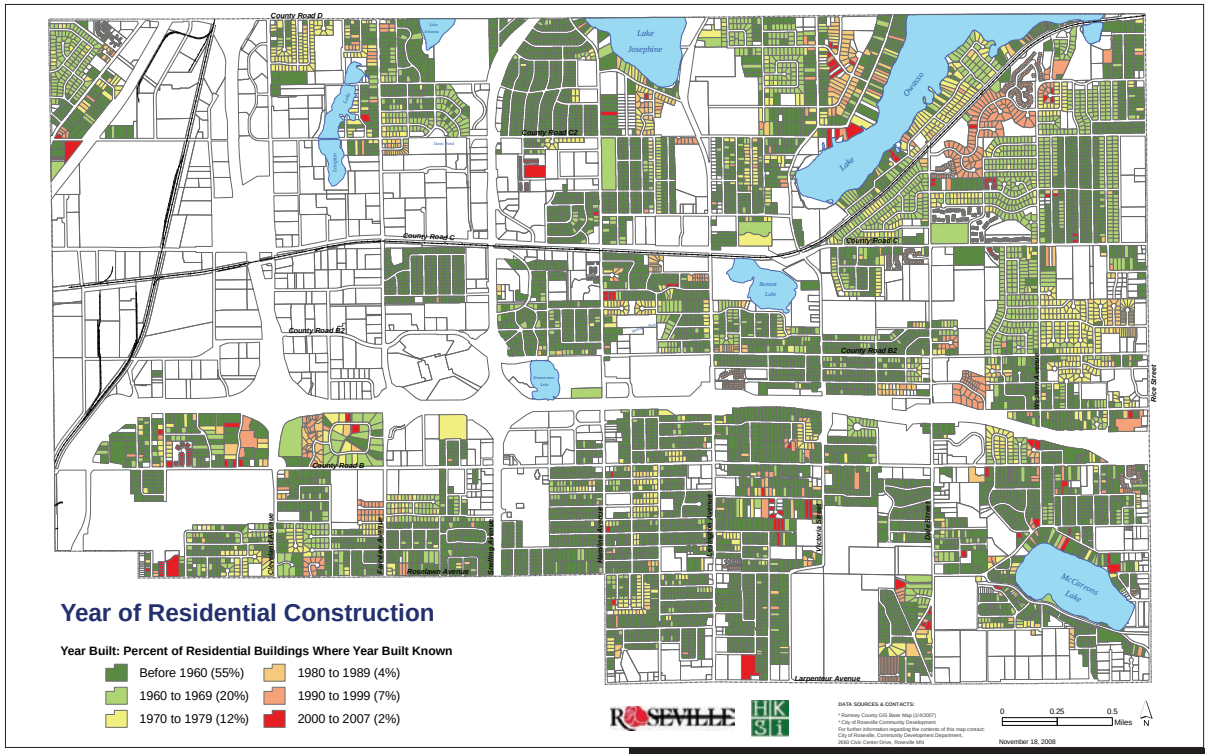
corridors. Commercial areas can also be found along major street corridors (e.g. Rice Street and Snelling Avenue) and at major street intersections.

- Lakes, parks, and open spaces are defining characteristics of Roseville.

These and other physical characteristics will influence the future growth and development of Roseville and are discussed throughout the Comprehensive Plan.

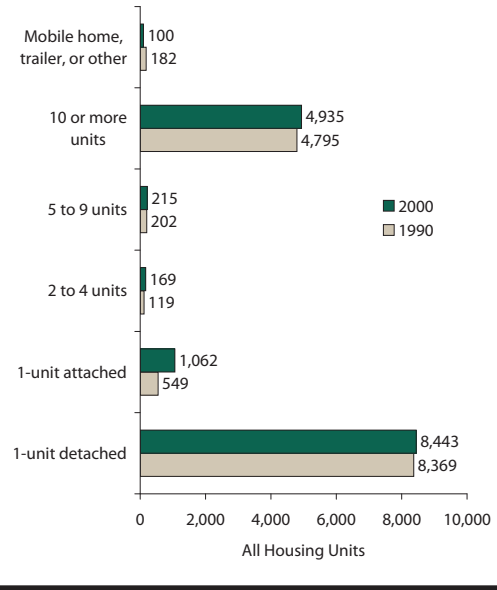
- Major street corridors are an important factor in organizing land uses (Transportation: Chapter 5).
- The ability to provide sanitary sewer and water services influences the capacity for land to support current and future development. Storm-water management systems are required to support development, but also become defining physical features (Utilities: Chapter 10).
- Parks (Chapter 8) influence the form and location of development and the quality of life in Roseville.
- Public objectives for Economic Development and Redevelopment (Chapter 7) influence the use of land for commercial and industrial purposes. As existing land uses grow older, the need for reinvestment and the opportunity for redevelopment will increase.

Each chapter of the Comprehensive Plan describes some aspect of the existing context that shapes plans for the future of Roseville.



Year Built - Residential

Figure 3.5



Changes in Housing 1990-2000

Figure 3.6

Age of the Built Environment

Roseville is an established and mature community. More than half of all nonresidential development was built before 1980 (see Figure 3.4) and more than 55% of existing housing was built prior to 1960 (see Figure 3.5).

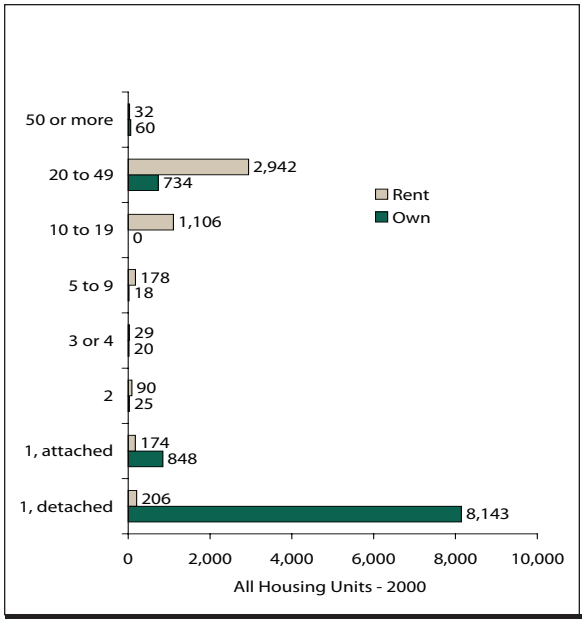
The age of buildings is one factor to guide other investigations into the condition of the built environment. Older buildings require additional maintenance and capital replacement. However, data about building condition was not available for use in updating the Comprehensive Plan. These maps also show the time pattern of development in Roseville.

Housing

Housing is a critical part of the context of planning for the future of Roseville. It is the single largest form of built land use. Housing shapes the form and character of the community and influences those who live in Roseville today and will live here in the future. The plan for public action to address special housing needs can be found in the Housing chapter (Chapter 7) of the Comprehensive Plan.

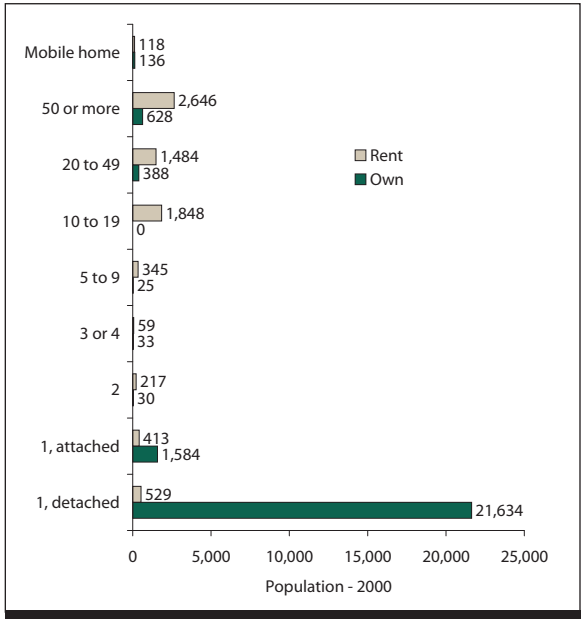
Figure 3.6 shows the growth in Roseville's housing stock from 1990 to 2000. The Census reported 708 new housing units over that decade, a 5% increase in the total number of units. Single-family detached housing (one-unit detached) accounted for only 10% of this growth. This type of housing is occupied by an individual family and is not physically connected to any other housing unit. It is the typical home found in Roseville.

The majority of new housing development (72%) came in the form of single-family, attached housing (one-unit attached). This housing type is a structure containing a housing unit for one family that is physically connected



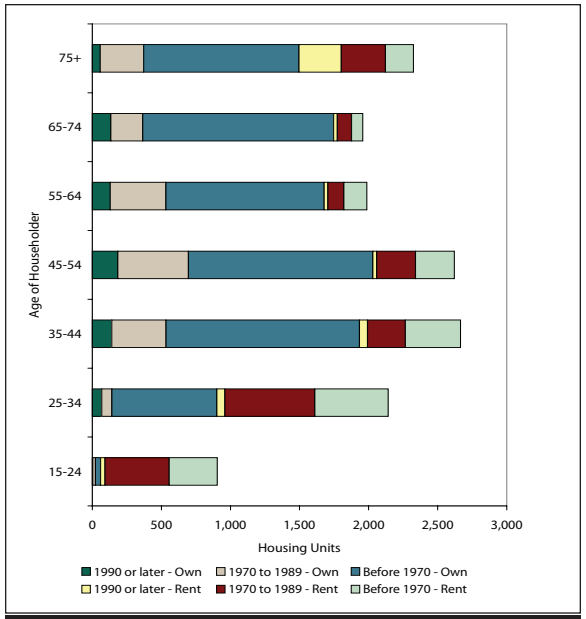
2000 Housing - Own/Rent

Figure 3.7



Population in 2000 Housing

Figure 3.8



Housing by Age of Householder

Figure 3.9

to one or more comparable housing units. Twin homes and town homes are common examples of single-family attached housing.

In 2000, single-family housing (detached and attached) made up 64% of Roseville's housing stock.

Nearly one-third (32%) of the 2000 housing supply was classified as rental (see Figure 3.7). The vast majority of rental housing was in buildings containing ten or more units. Only 206 units (2.4%) of all one-unit, detached housing were rental.

There were more limited options for owner-occupied housing with a density above one unit per building. Only 797 units (15% of all units with two or more units in a structure) were classified as owner-occupied. These units represent 8.1% of all owned housing in Roseville. The majority of these units were in buildings with 20 or more units.

Over two-thirds of Roseville's population in 2000 lived in single-family detached housing (see Figure 3.8) and nearly one-quarter of the population lived in rental housing. Eighty percent of renters lived in buildings with ten or more units.

Figure 3.9 connects the age of the housing with the age of the householder. The data show:

- A householder age 44 or younger occupied 30% of all owned housing built in 1990 or later.
- 76% of senior households (householder age 65 and older) lived in owned housing.
- The majority of Roseville's population in all age groups lives in single-family, owned housing.
- The 15-to-24 age group is the least likely to live in owned housing.
- The oldest residents live in either single-family housing or in larger rental structures.

- Few seniors age 65 to 74 live in rental housing.
- The majority of rental units (59%) are occupied by households headed by persons age 44 or younger.

This data provides insights on both the housing supply and the age of the population attracted to Roseville.

Past and Future Growth

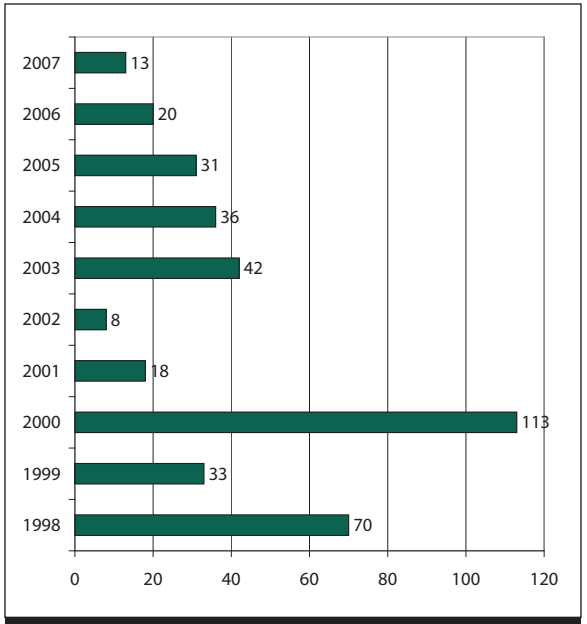
Growth trends and projections are critical elements of the Comprehensive Plan. Historic trends describe how current conditions evolved and may offer insights about future development. Looking to 2030, Roseville will continue to grow as a place to live, work, and shop. Projections of future development determine the demand for land and the need for infrastructure and municipal services.

This section looks back over recent development trends and looks ahead at projections of Roseville's future.

Development Trends

Recent development trends provide a useful context for planning. The chart in Figure 3.10 shows annual new housing starts (based on building permit data). This chart reflects several important residential development trends in Roseville, including:

- 384 new housing units were built between 1998 and 2007.
- Over one-half (56%) of these units were built in 2000 or before.
- Average growth over the past five years has been 28 units per year.



Building Permits - New Residential

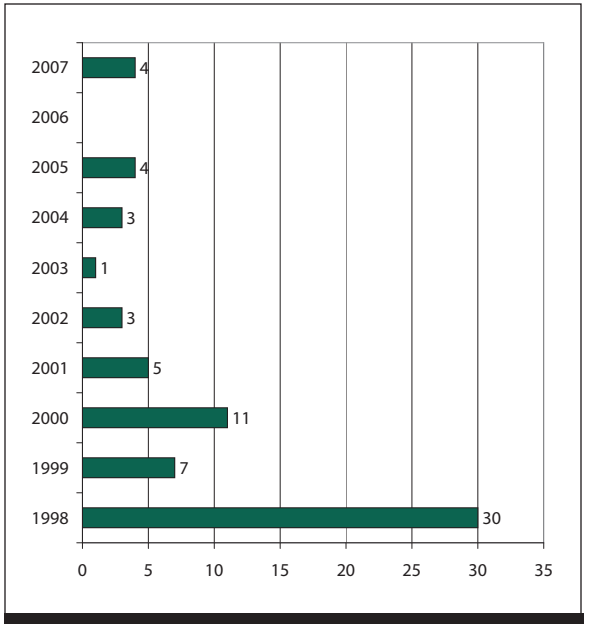
Figure 3.10

- New housing starts fell in each year from 2003 to 2007. Only 13 new units were built in 2007.

While these trends do not determine future housing development, they help to highlight important questions. What pace of new housing development can be expected over time? How can Roseville best encourage an appropriate mix of new housing options? How does housing influence the characteristics of the future population?

Commercial-industrial development followed a similar growth pattern (see Figure 3.11). Data show:

- A total of 68 new commercial-industrial projects were undertaken from 1998 to 2007.



Building Permits - New Commercial/Industrial

Figure 3.11

- Over 70% of the permits were issued in 2000 or before.
- From 2003 to 2007, an average of three new commercial-industrial projects were undertaken each year.

Metropolitan Council Forecasts

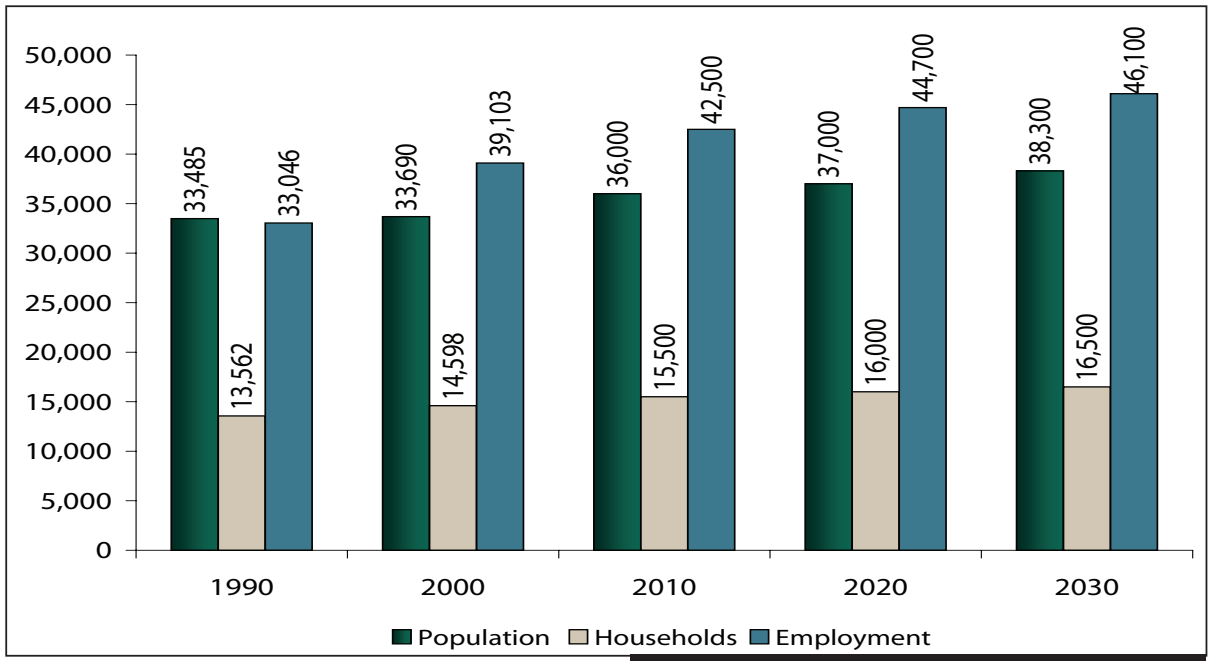
Future growth is a critical consideration in updating Roseville's Comprehensive Plan. The Comprehensive Plan relies on the most recent forecasts made by the Metropolitan Council, which were approved in August 2005. The chart in Figure 3.12 contains population, household, and employment forecasts for 2010, 2020,

and 2030 with comparisons to actual totals for 1990 and 2000.

These forecasts show Roseville's population increasing by 4,610 people (13.6%) from 2000 to 2030. The majority of this growth is expected to occur by 2010 with the addition of 2,310 new residents. The forecasted growth slows to an increase of 1,000 and 1,300 people over the following two decades.

The forecasts assume that the average household size remains constant at 2.2 people. The average household size is calculated by dividing the population living in households, excluding residents of general quarters, by total number of households. The number of Roseville residents living in general quarters is currently about 2,000, and this number is assumed to remain relatively constant through 2030.

The greater projected change comes in the area of employment. The Metropolitan Council forecasts predict almost 7,000 new jobs in Roseville between 2000 and 2030, an 18% increase. Similar to population, most of the growth is projected to occur by 2010, with slower expansion from 2010 to 2030.



Metropolitan Council Forecasts

Figure 3.12

Population Forecasts

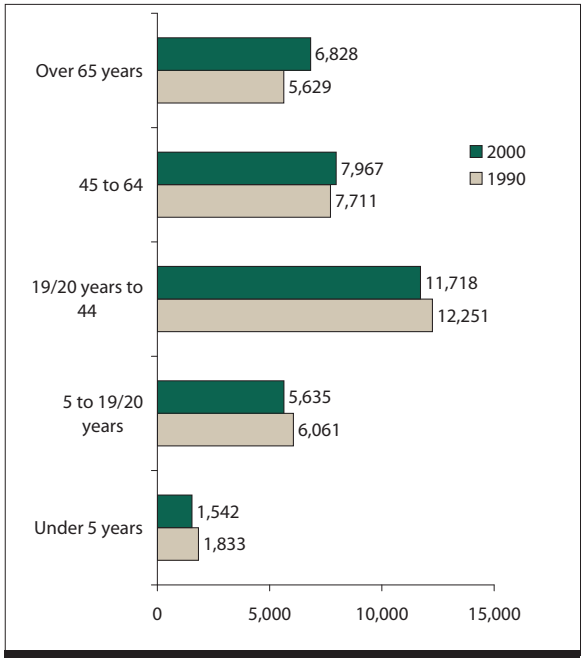
The population forecasts in this chapter are consistent with the Metropolitan Council's system statement for Roseville. These population forecasts are used as the basis for all chapters of the Comprehensive Plan. The City of Roseville will work with the Metropolitan Council to update these projections as the implications of development, demographic, and economic changes become clearer.

One of the challenges in updating the Comprehensive Plan is projecting growth in Roseville. The downturn in development since 2003 shows how quickly conditions can change. While the Metropolitan Council projections represent the best available estimate of future growth, they were made prior to the recent economic slowdown.

In looking to 2030, a variety of factors will influence the actual outcomes. Key factors include:

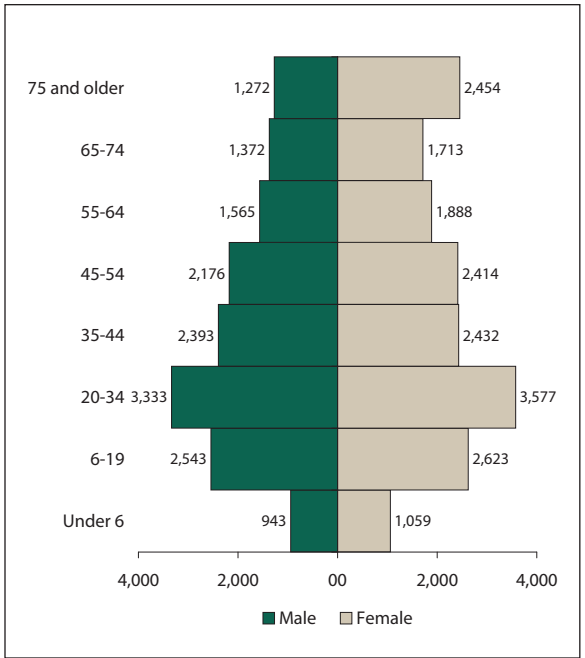
- Overall economic and housing market conditions
- Housing styles
- Energy costs
- Transportation
- Aging of the population and other demographic changes
- Competition from other communities

An important element in implementing the Comprehensive Plan will be to monitor these changes and their implications for the future of Roseville.



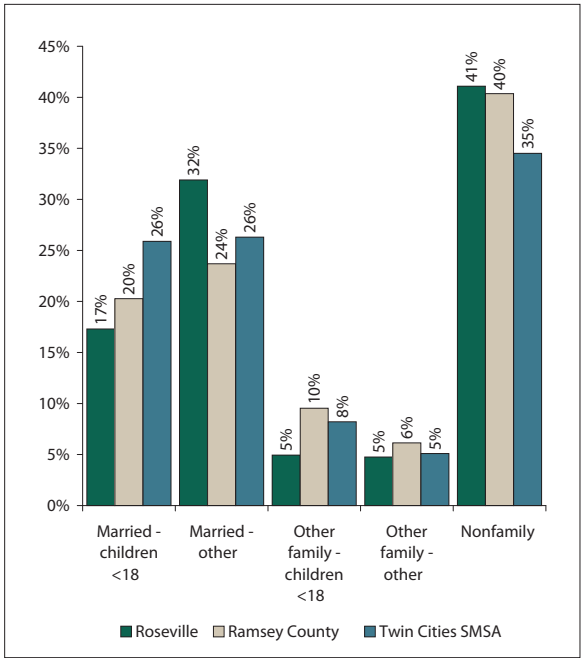
Changes in Age - 1990-2000

Figure 3.13



Gender of 2000 Population

Figure 3.14



Household Type (2000)

Figure 3.15

Characteristics of the Population

Age

Roseville's population increased by 0.6% between 1990 and 2000, going from 33,485 in 1990 to 33,690 in 2000. The 45+ age group grew by 1,455 residents while the number of residents under the age of 45 decreased by 1,250 people between 1990 and 2000. (See Figure 3.13.)

Roseville has a larger proportion of older residents than Ramsey County and the greater metropolitan area. Twenty percent of the city's reported population in 2000 was age 65 or older. This compares with 12% for Ramsey County and 10% for the Twin Cities region.

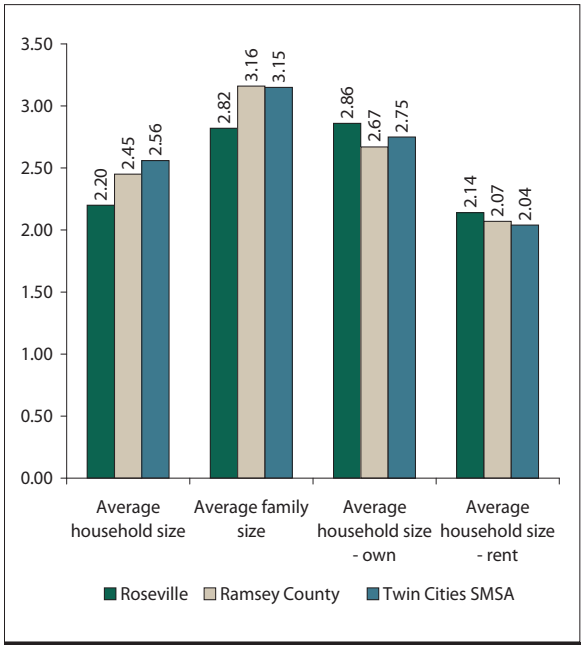
The median age of Roseville is notably older than that of the county and the region. The 2000 median age of Roseville's population was 41.0 years. This compares with 33.7 years for the county and 34.2 years for the region.

Figure 3.14 shows the age distribution of the 2000 population. In 2000, women made up 54% of Roseville's population. Women outnumbered men in all age groups.

Households

A household includes all the people who occupy a housing unit as their usual place of residence. (See box on next page for Census definitions of households.) Household characteristics offer another perspective on the characteristics of people living in Roseville:

- 59% of Roseville households are family households (see Figure 3.15). This compares with 60% for the entire county and 65% for the region.
- 49% of all Roseville family households include a married couple.



Household Size (2000)

Figure 3.16

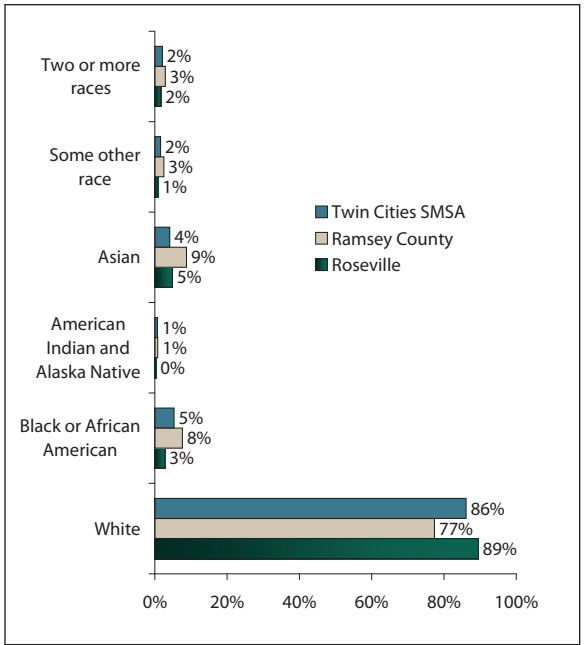
Definition of Households

A household includes all the people who occupy a housing unit as their usual place of residence.

A Family Household includes a householder and one or more people living in the same household who are related to the householder by birth, marriage, or adoption. A family household may contain people not related to the householder, but those people are not included as part of the householder's family in Census tabulations. This means that the population living in family household may exceed the population of families.

Nonfamily Households contain a group of unrelated people or one person living alone.

The Householder is the person in whose name the home is owned or rented.



Race of 2000 Population

Figure 3.17

- Only 22% of all households included children under the age of 18. For the region, 34% of all households contained children.
- Roseville has a larger proportion of nonfamily households (41%) than the region as a whole (35%). Roseville's nonfamily households consist largely of the householder living alone (82% of nonfamily households).

1,036 households were added from 1990 to 2000. This change represents a reduction of 417 family households and a 1,453 increase in nonfamily households. The number of households with persons living alone increased by 34%.

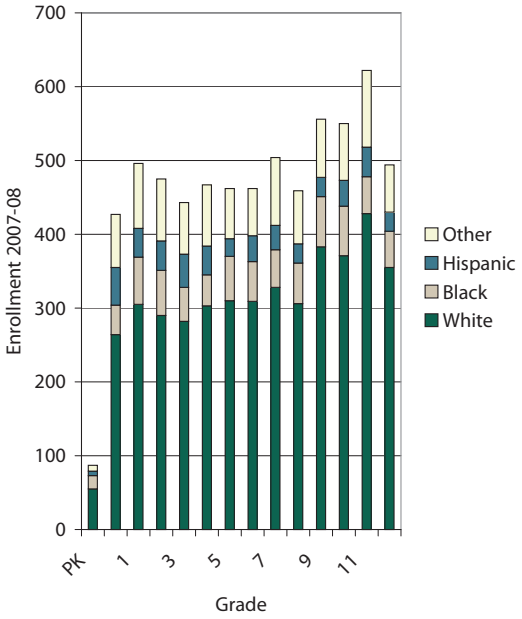
The average household and family size in Roseville is smaller than for Ramsey County and the region as a whole (Figure 3.16). The average size of household is getting smaller. From 1990 to 2000, the average size of all Roseville households dropped from 2.37 people to 2.20 people. Households in owner housing were larger (2.86 people per household) than those in rental housing (2.14 people).

The size and composition of households will be an important factor influencing the future population of Roseville.

Race

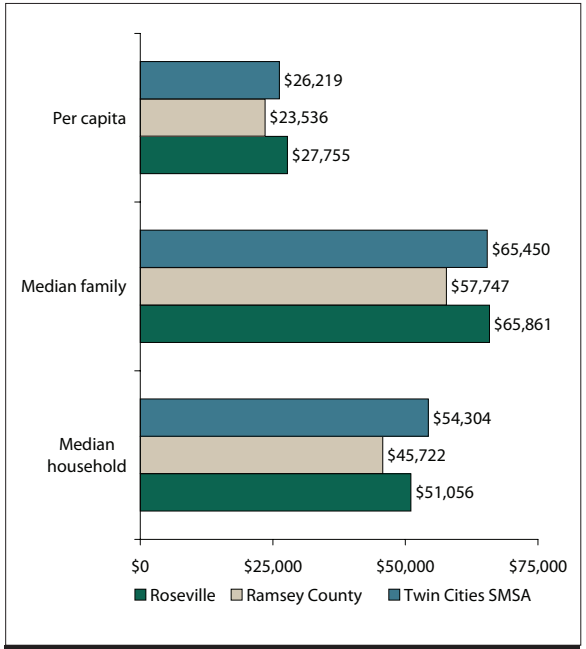
It is important to understand how the Census addresses race. The Census allows people to select the race or races with which they most closely identify. The standards for collecting and presenting data on race and ethnicity were revised for the 2000 Census. The new guidelines are intended to reflect "the increasing diversity of our Nation's population, stemming from growth in interracial marriages and immigration." As a result, race data from the 2000 Census is not directly comparable with that of any prior census.

Despite the data differences, it is useful to compare the racial composition of the population in 1990 and 2000. This chart shows a notable change in the diversity of Roseville's population. In 1990, 95.1% of the population was white. The 2000 Census reported that 89.5%



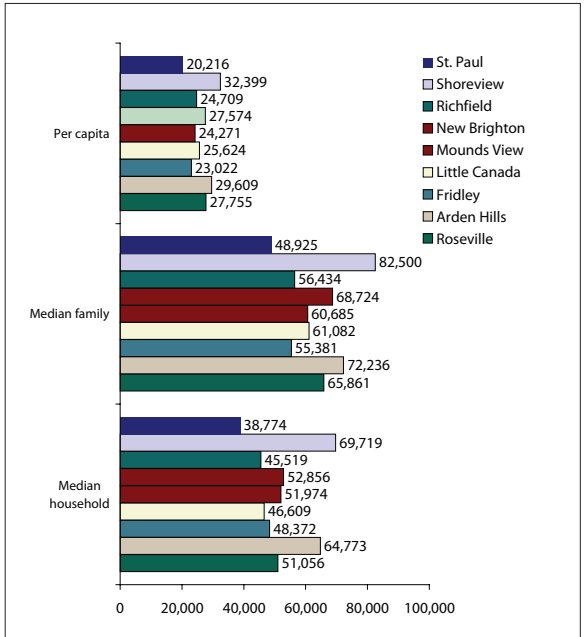
Race of 2007-08 School Enrollment

Figure 3.18



Income (2000)

Figure 3.19



Income - Other Cities (2000)

Figure 3.20

of Roseville's population identified itself as white. The racial diversity of Roseville's population is somewhat less than Ramsey County and the region as a whole (see Figure 3.17).

Another factor in understanding race data is the manner of reporting of the Hispanic population. People who identify their origin as Spanish, Hispanic, or Latino are not classified as a separate racial category–they may be *of any race*. In the 2000 Census, 667 people were reported as Hispanic or Latino (of any race). This represents 2% of the total population.

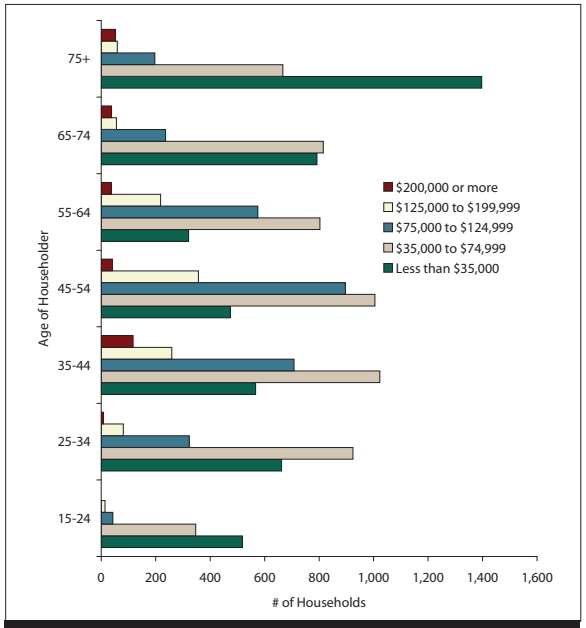
School enrollment data collected and reported by the Minnesota Department of Education provides a more current look at the racial composition of Roseville's population. For the 2007/2008 school year, the Roseville School District reported that 34% of total enrollment was a race other than white. (In this data, Hispanic is classified as a nonwhite category of race.) The chart in Figure 3.18 shows the racial composition for each grade. The nonwhite portion of the student population is generally consistent across the grades ranging from 28% in 12th grade to 39% in 2nd and 3rd grades. The data does not describe how open enrollment influences student characteristics.

Income

Income influences many aspects of community. Income provides the capacity to acquire housing (own or rent) and to purchase goods and services from local businesses. Income influences the demand for and the capacity to support public services.

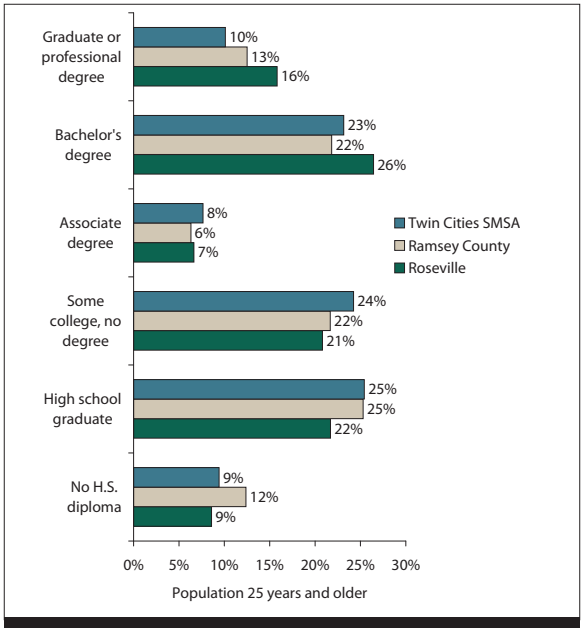
All measures of Roseville's income are *above* Ramsey County levels and comparable to the overall regional levels (see Figure 3.19).

Figure 3.20 compares Roseville with other similar suburban cities in the Twin Cities region. Roseville falls in the midrange for household, family and per capita



Income by Age of Householder (2000)

Figure 3.21



Educational Attainment (2000)

Figure 3.22

incomes. Incomes in Roseville are very similar to the other Ramsey County cities used in this comparison.

Another perspective comes from the relationship between income and age. The chart in Figure 3.21 shows the distribution of household income by age of the householder. This data illustrates several factors about the wealth of the community:

- Only 2% of all households have income over $200,000.
- 71% of all households had incomes below $75,000.
- Income levels drop after age 64. This trend reflects a shift from income to assets as people retire.
- The oldest and youngest households have the lowest incomes.
- Only 13% of all senior households has income above $75,000. 51% of senior households have incomes less than $35,000.

Educational Attainment

The Census shows an increase in college education among Roseville residents. In 2000, 69.7% of the population (age 25 and older) had attended college. This share of the population is up from 61.5% in the 1990 Census. Less than 9% of the 2000 population of people over 25 did not graduate from high school.

The chart in Figure 3.22 compares educational attainment in Roseville with Ramsey County and the region. Forty-two percent of Roseville's population had earned a bachelor's or master's degree compared with 34% for Ramsey County and 33% for the region.

Employment

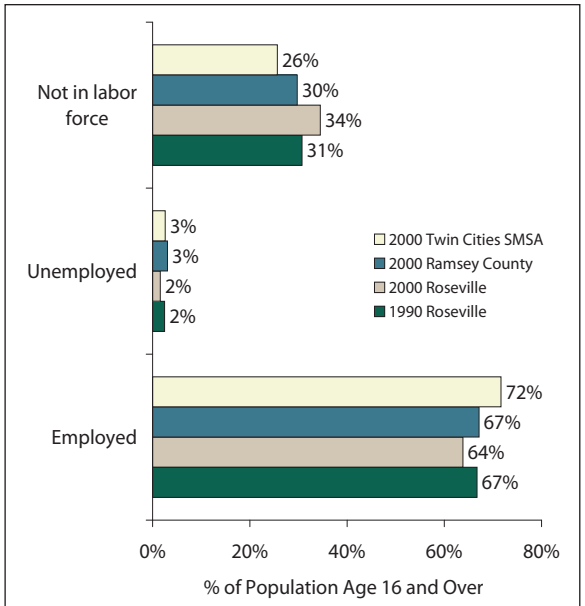
Employment touches many aspects of community life. Jobs provide the income to pay for housing and to purchase goods and services. The location of jobs influences the amount of time Roseville residents are in the community each day. Commuting decisions affect transportation systems.

Labor Force

The Census defines the potential working population as persons age 16 and older. The labor force includes all people classified in the *civilian labor force*, plus members of the U.S. Armed Forces. The civilian labor force consists of people classified as employed or unemployed.

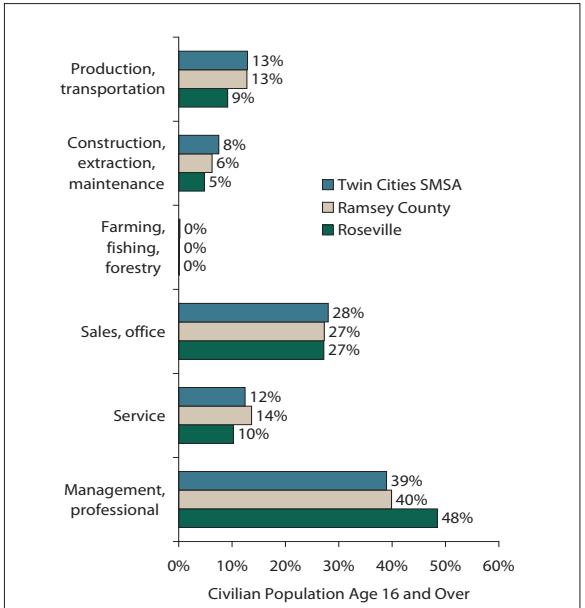
The share of Roseville's population in the labor force fell between 1990 and 2000 from 66.7% to 63.8%, respectively (see Figure 3.23). The change in the labor force comes from a larger portion of the population reporting itself as not in the labor force (30.7% in 1990 to 34.5% in 2000). Persons not in the labor force typically represent retirees, students, and stay-at-home parents. This change is not due to greater unemployment. The percent reported as unemployed stayed constant at 2% between 1990 and 2000.

Fewer of Roseville's working-age population is part of the labor force than the county or the region. This employment status is consistent with its age and demographic characteristics.



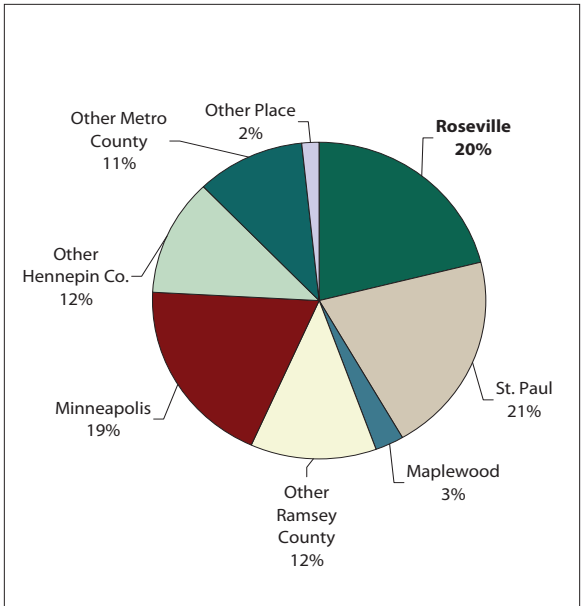
Residents in Labor Force

Figure 3.23



Occupation (2000)

Figure 3.24



Place of Employment

Figure 3.25

The Census looks at the percentage of the working age population in the labor force for various age groups. Roseville is similar to Ramsey County and the Twin Cities region for all age groups.

Labor force statistics break out data for the employment status of women. The proportion of women (by age group) in the labor force is comparable to Ramsey County and the region.

Occupation

Figure 3.24 compares the occupations of Roseville's population with Ramsey County and the region. Roseville stands out with over 48% of the working population employed in managerial and professional occupations. Roseville tends to be home to fewer people employed in service, construction, and production fields.

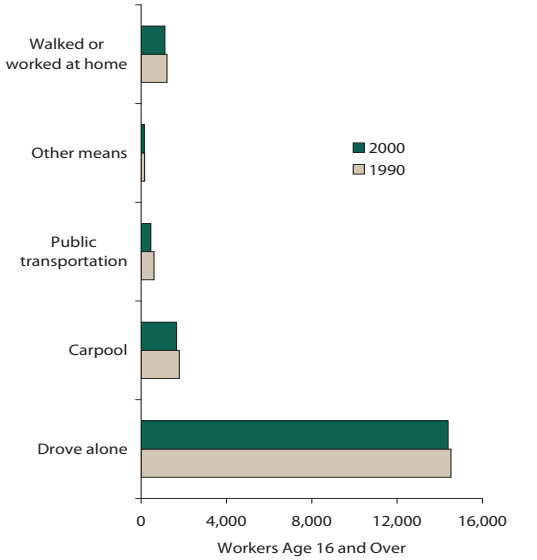
Location and Commuting

The Census tracks the location of workplace for the population. Only 20% of Roseville residents in the work force reported a place of employment in Roseville (see Figure 3.25). Thirty-six percent of Roseville workers are employed in St. Paul or another Ramsey County city. Another 29% travel to Hennepin County for employment. Eighty-seven percent of the Roseville work force was employed in Ramsey and Hennepin Counties.

Travel-to-work data shows a strong dependence on automobiles (see Figures 3.26). The percentage of Roseville workers driving alone to work increased slightly from 1990 (79.4%) to 2000 (81.0%). The labor force in Roseville makes limited use of public transportation (3.3% in 1990 and 2.6% in 2000). More people carpooled or worked at home than used public transportation. The share of workers that walked or worked at home decreased from 6.6% to 6.3% from 1990 to 2000.

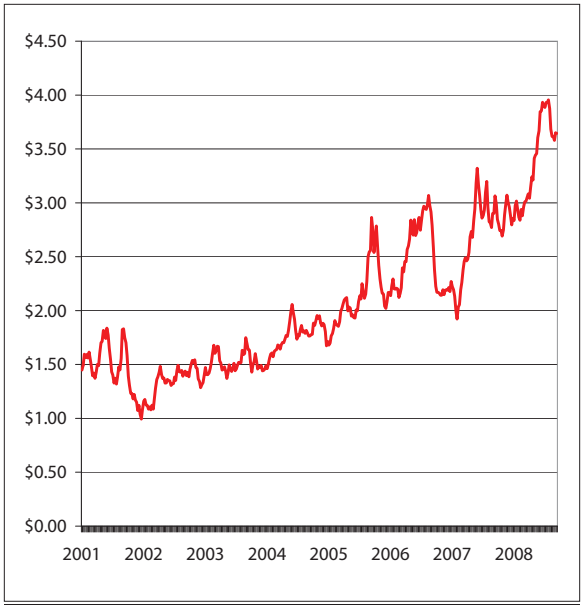
These commuting patterns are reflective of other suburban settings in the Twin Cities regions.

The Census also collects data on the mean travel time to work. The 2000 Census reported a mean commute time of 20 minutes. (This statistic was not reported in the 1990 Census.) Roseville's location contributes to



Means of Travel to Work (1990/2000)

Figure 3.26



Average Price for Gallon of Gasoline

Figure 3.27

lower travel times to work in comparison to the county and the region.

The decision to live or work in Roseville may be influenced by fuel and travel costs. The chart in Figure 3.27 shows changes in the average cost of gasoline since 1992. The cost of gasoline has risen sharply in the past six years. In December 2001, the average cost was $0.99 per gallon. The cost has risen steadily since then, reaching $3.95/gallon in July 2008 (a 298% increase).

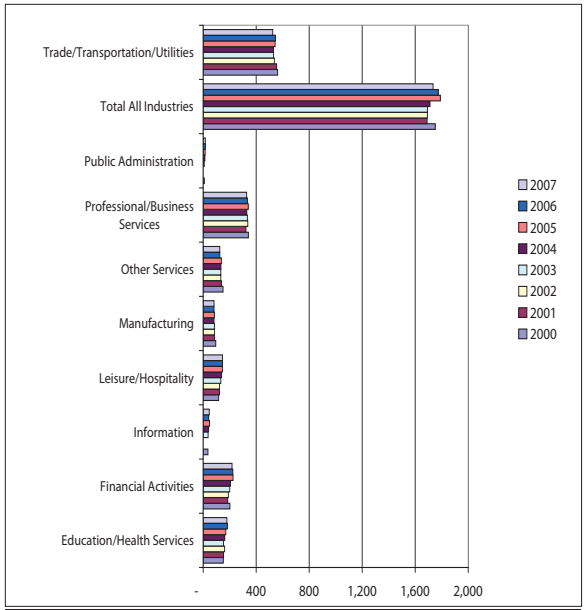
It is likely that the cost of gasoline will continue to rise over the life of the Comprehensive Plan. The impacts of higher fuel costs have implications for all aspects of the Plan.

Employment in Roseville

Roseville is a net importer of employment. In the 2000 Census, 17,761 Roseville residents were employed in the civilian labor force. Roseville was the place of employment for 34,432 people.

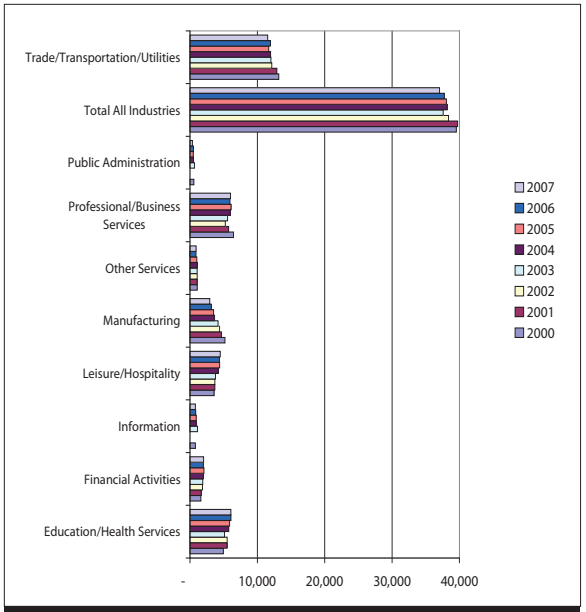
The 2000 Census reported the place of residence for people traveling to Roseville for work. Only one in ten people employed in Roseville also lived in Roseville. The Roseville work force comes from across the metropolitan area. Workers travel out from the core cities and in or across from other suburbs.

The Department of Employment and Economic Development conducts and publishes a Quarterly Census of



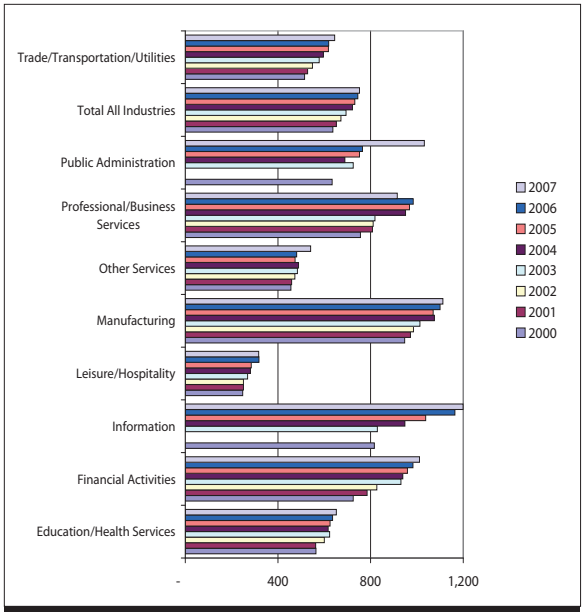
Average Number of Establishments

Figure 3.28



Average Number of Employees

Figure 3.29



Average Weekly Wages

Figure 3.30

Employment and Wages (QCEW). The QCEW covers all establishments reporting wage and employment data to the State under the Unemployment Insurance System. The charts in Figure 3.28, Figure 3.29, and Figure 3.30 show Roseville employment trends reported in the QCEW. Key employment trends include:

- The total number of business establishments in Roseville decreased by 16 firms between 2000 and 2007. Although reflecting an overall decrease in this time period, 43 firms (2.5%) located to the city between 2003 and 2007. During the 2003 to 2007 period, the most growth occurred in the Education/Health Services (26 establishments) and the Financial Activities (17 establishments) sectors.
- The total number of employees decreased by 2,468 (6%) from 2000 to 2007. *Manufacturing* business lost 2,251 jobs, more than 90% of the total decrease in jobs. *Trade-Transportation-Utilities, Information, Other Services, and Public Administration* businesses all reported fewer employees in 2007 than in 2000. Jobs were added in *Financial Activities, Professional/Business Services, Education/Health Services, and Leisure/Hospitality* businesses.
- The average weekly wage in 2007 was $752. This wage represents an 18% increase from 2000. All categories reported increased wages from 2000 to 2007. The highest 2007 average weekly wage was in *Information* ($1,199) and *Manufacturing* ($1,112). The lowest wages were found in *Leisure/Hospitality* ($317) and *Other Services* ($541). The 2007 average weekly wages in *Retail Trades* was $444.

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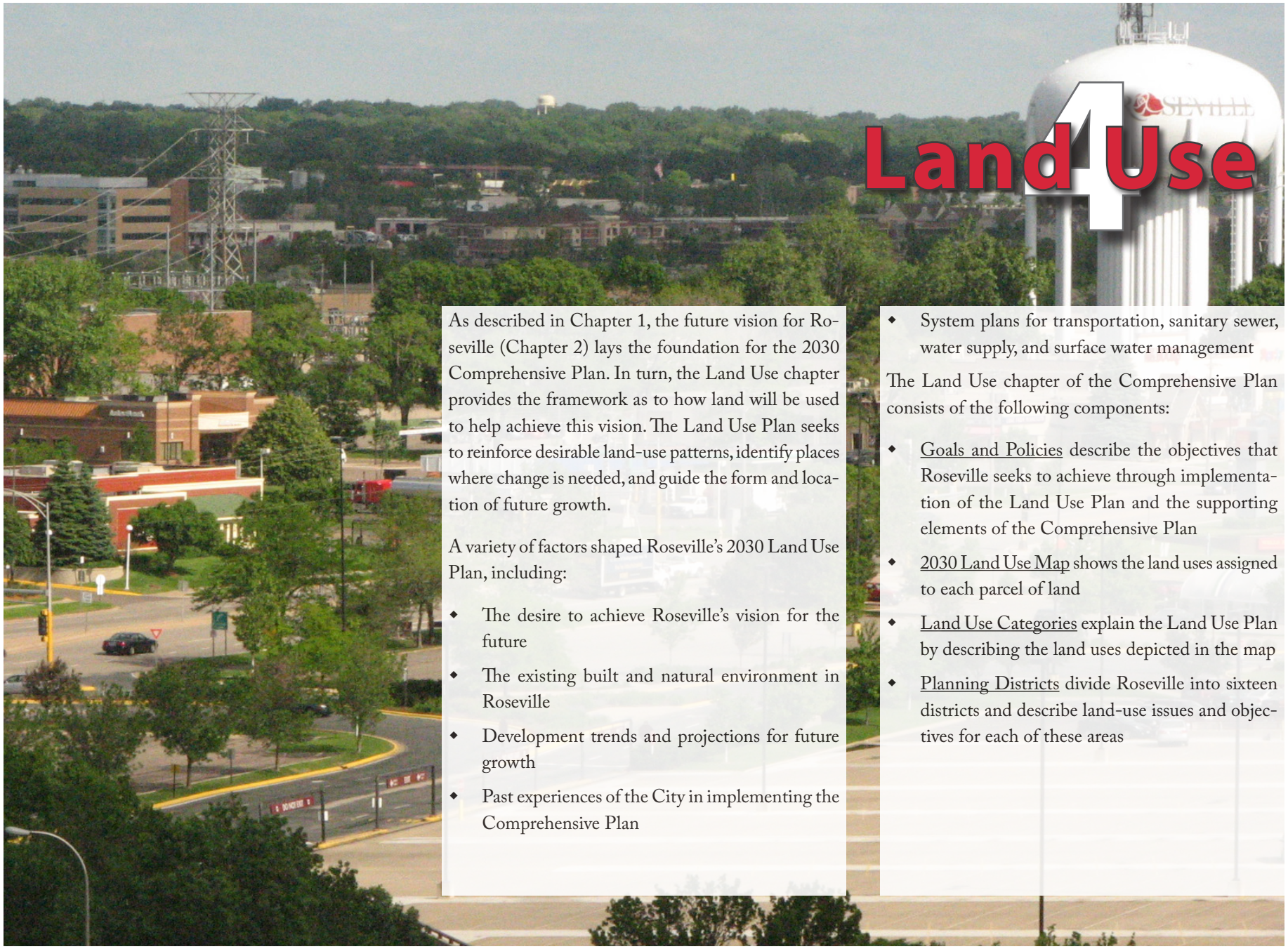


4 Land Use

As described in Chapter 1, the future vision for Roseville (Chapter 2) lays the foundation for the 2030 Comprehensive Plan. In turn, the Land Use chapter provides the framework as to how land will be used to help achieve this vision. The Land Use Plan seeks to reinforce desirable land-use patterns, identify places where change is needed, and guide the form and location of future growth.

A variety of factors shaped Roseville's 2030 Land Use Plan, including:

- The desire to achieve Roseville's vision for the future
- The existing built and natural environment in Roseville
- Development trends and projections for future growth
- Past experiences of the City in implementing the Comprehensive Plan
- System plans for transportation, sanitary sewer, water supply, and surface water management

The Land Use chapter of the Comprehensive Plan consists of the following components:

- Goals and Policies describe the objectives that Roseville seeks to achieve through implementation of the Land Use Plan and the supporting elements of the Comprehensive Plan
- 2030 Land Use Map shows the land uses assigned to each parcel of land
- Land Use Categories explain the Land Use Plan by describing the land uses depicted in the map
- Planning Districts divide Roseville into sixteen districts and describe land-use issues and objectives for each of these areas

Goals and Policies

The plans for land use in the City of Roseville are guided by the following goals and policies.

General Land Use Goals and Policies

Goal 1: Maintain and improve Roseville as an attractive place to live, work, and play by promoting sustainable land-use patterns, land-use changes, and new developments that contribute to the preservation and enhancement of the community's vitality and sense of identity.

Policy 1.1: Promote and provide for informed and meaningful citizen participation in planning and review processes.

Policy 1.2: Ensure that the City's official controls are maintained to be consistent with the 2030 Land Use Plan.

Policy 1.3: Ensure high-quality design, innovation, sustainability, and aesthetic appeal in private and public development and redevelopment, with emphasis on efficient site access, appropriately sized parking areas, and overall beautification through the adoption and utilization of year-round landscaping and site design standards, guidelines, principles, and other criteria.

Policy 1.4: Maintain orderly transitions between different land uses in accord with the general land-use guidance of the Comprehensive Plan by establishing or strengthening development design standards.

Policy 1.5: Promote well-planned and coordinated development.

Policy 1.6: Encourage improvements to the connectivity and walkability between and within the community's neighborhoods, gathering places and commercial areas through new development, redevelopment, and infrastructure projects.

Policy 1.7: Create a higher aesthetic level for the community through use of redevelopment and infrastructure improvements to reduce or eliminate visual pollutants such as overhead power, cable, and telephone lines, traffic controllers, junction boxes, and inappropriate signage.

Policy 1.8: Reduce land consumption for surface parking by encouraging construction of multilevel and underground parking facilities, shared parking facilities, and other strategies that minimize surface parking areas while providing adequate off-street parking.

Policy 1.9: Encourage and support new development, redevelopment, and infrastructure improvements that incorporate and protect alternative energy sources, such as solar access, geothermal, wind, and biomass.

Policy 1.10: Promote and support the provision of a citywide technology infrastructure that is accessible to both the public and private sectors.

Policy 1.11: Establish and maintain cooperative working relationships with other governmental bodies for mutual benefit in planning land use.

Policy 1.12: Consider opportunities for acquisition of institutional property proposed for conversion to private use and private property for sale that fills a need for parks, open space, or trail corridors.

Goal 2: Maintain and improve the mix of residential, commercial, employment, parks, and civic land uses throughout the community to promote a balanced tax base and to anticipate long-term economic and social changes.

Policy 2.1: Review the Land Use Plan regularly to ensure its usefulness as a practical guide to current and future development. Whenever practicable, coordinate the Plan with the plans of neighboring communities, the county, school districts, and the most current Metropolitan Council system plans.

Policy 2.2: Promote and support transit-oriented development and redevelopment near existing and future transit corridors.

Policy 2.3: Encourage a broad mix of commercial businesses within the community to diversify and strengthen the tax base and employment opportunities.

Goal 3: Identify underutilized, deteriorated, or blighted properties and guide them toward revitalization, reinvestment, or redevelopment consistent with community goals and good planning and development principles.

Policy 3.1: Support the use of master plans for small redevelopment areas.

Policy 3.2: Promote redevelopment that reduces blight, expands the tax base, enhances the mix of land uses in the community, and achieves other community objectives.

Policy 3.3: Apply strategies to effectively enforce City codes related to the maintenance of buildings and property.

Goal 4: Protect, improve, and expand the community's natural amenities and environmental quality.

Policy 4.1: Promote the use of energy-saving and sustainable design practices during all phases of development including land uses, site design, technologies, buildings, and construction techniques.

Policy 4.2: Seek to use environmental best practices for further protection, maintenance, and enhancement of natural ecological systems including lakes, lakeshore, wetlands, natural and man-made storm water ponding areas, aquifers, and drainage areas.

Policy 4.3: Promote preservation, replacement, and addition of trees within the community.

Policy 4.4: Existing and future development of business and industry, shopping, transportation, housing, entertainment, leisure, and recreation opportunities shall be in harmony with the commitment Roseville has made to its environment and quality of life, without compromising the ability of future generations to meet their own needs.

Goal 5: Create meaningful opportunities for community and neighborhood engagement in land-use decisions.

Policy 5.1: Utilize traditional and innovative ways to notify the public, the community, and neighborhoods about upcoming land-use decisions as early as possible in the review process.

Policy 5.2: Require meetings between the land-use applicant and affected persons and/or neighborhoods for changes in land-use designations and projects that have significant impacts, prior to submittal of the request to the City.

Policy 5.3: Provide for and promote opportunities for informed citizen participation at all levels in the planning and review processes at both the neighborhood and community level.

Policy 5.4: Ensure adequate and diverse representation of the appropriate stakeholders in land-use studies and advisory bodies.

Residential Area Goals and Policies

Goal 6: Preserve and enhance the residential character and livability of existing neighborhoods and ensure that adjacent uses are compatible with existing neighborhoods.

Policy 6.1: Promote maintenance and reinvestment in existing residential buildings and properties, residential amenities, and infrastructure to enhance the long-term desirability of existing neighborhoods and to maintain and improve property values.

Policy 6.2: Where higher intensity uses are adjacent to existing residential neighborhoods, create effective land use buffers and physical screening.

Goal 7: Achieve a broad and flexible range of housing choices within the community to provide sufficient alternatives to meet the changing housing needs of current and future residents throughout all stages of life.

Policy 7.1: Promote flexible development standards for new residential developments to allow innovative development patterns and more efficient densities that protect and enhance the character, stability, and vitality of residential neighborhoods.

Policy 7.2: Encourage high-quality, mixed residential developments that achieve the community's goals, policies, and performance standards, encourage parks and open space, and use high-quality site design features and building materials.

Policy 7.3: Consider increased densities in new residential developments to reduce housing costs, improve affordability, and attract transit-oriented development.

Policy 7.4: Promote increased housing options within the community that enable more people to live closer to community services and amenities such as commercial areas, parks, and trails.

Policy 7.5: Consider the conversion of underutilized commercial development into housing or mixed-use development.

Goal 8: Promote a sense of community by encouraging neighborhood identity efforts within the community.

Policy 8.1: Seek opportunities to plan, design, and develop inter- and intra-generational, multipurpose neighborhood gathering places.

Policy 8.2: Where feasible, provide or improve connections between residential areas and neighborhood amenities such as parks, trails, and neighborhood business areas.

Commercial Area Goals and Policies

Goal 9: Provide attractive, inviting, high-quality retail shopping and service areas that are conveniently and safely accessible by multiple travel modes including transit, walking, and bicycling.

Policy 9.1: Encourage commercial areas to make efficient use of land, provide for safe vehicular and pedestrian movements, provide adequate parking areas, provide appropriate site landscaping, and create quality and enduring aesthetic character.

Policy 9.2: Promote commercial development that is accessible by transit, automobile, walking, and bicycle.

Policy 9.3: Seek to make on-site transit stops part of commercial development and redevelopment.

Goal 10: Promote an appropriate mix of commercial development types within the community.

Policy 10.1: Use the Comprehensive Plan to guide new commercial development to locations appropriate for its scale and use.

Policy 10.2: Emphasize the development of commercial uses that meet the needs of existing and future Roseville residents.

Policy 10.3: Support neighborhood-scale commercial areas that provide convenient access to goods and services at appropriate locations within the community.

Employment Area Goals and Policies

Goal 11: Achieve a healthy balance between commercial and employment land uses to maintain a sound and diversified economic base and living-wage jobs.

Policy 11.1: Promote and support the redevelopment of physically and economically obsolete or underutilized property.

Policy 11.2: Restrict and control open storage uses in commercial and industrial areas.

Policy 11.3: Encourage the development of multistory office and light-industrial uses to use land efficiently, expand the property tax base, and create jobs.

Policy 11.4: Use official controls to ensure all office, industrial, and business park developments consist of high-quality design, efficient parking strategies, and appropriate site landscaping.

Policy 11.5: Ensure the provision of adequate parking facilities for employment uses and encourage the use of shared, multilevel, and/or underground parking structures to reduce excessive use of land area for parking.

Goal 12: Minimize the potentially negative impacts of high-intensity employment uses.

Policy 12.1: Direct the location and development of businesses generating significant large truck traffic to areas with appropriate infrastructure.

Policy 12.2: Encourage improvements that reduce nuisance characteristics of high-intensity employment uses, especially near residential uses.

Mixed-Use Area Goals and Policies

Goal 13: Improve the community's mix of land uses by encouraging mixed medium- and high-density residential uses with high-quality commercial and employment uses in designated areas.

Policy 13.1: Facilitate the improvement, environmental remediation, and redevelopment of underutilized, heavy-industrial land and trucking facilities in designated locations into a compatible mixture of residential and employment uses.

Policy 13.2: Develop and utilize master plans, as official controls, for redevelopment areas in order to achieve an appropriate mixture of uses in the mixed-use areas designated on the 2030 Future Land Use Map.

Goal 14: Promote and support the development of mixed-use areas that have a rich mix of related and mutually reinforcing uses within walking distance of each other.

Policy 14.1: Encourage a mix of two or more uses within each development project either within the same building or horizontally on the site.

Policy 14.2: Use official controls to ensure all mixed-use development is cohesive, compact, and pedestrian-oriented, consisting of high-quality design, efficient parking strategies, and appropriate site landscaping.

Policy 14.3: Promote and support the provision of a robust system of public spaces within mixed-use areas such as parks, plazas, pathways, streets, and civic uses to encourage community gathering and connections.

Policy 14.4: Discourage piecemeal development that does not achieve the goals and policies for mixed-use areas.

2030 Land Use Map

The 2030 Land Use Map (see Figure 4.1) shows the desired land use for all property in Roseville. Table 4.1 summarizes the planned land uses by category shown on the map. The planned future land uses depicted on this map reflect previous community planning efforts in Roseville as well as desired updates identified as part of the 2008 Comprehensive Plan Update process. As shown on the 2030 Land Use Map, the future land uses seek to:

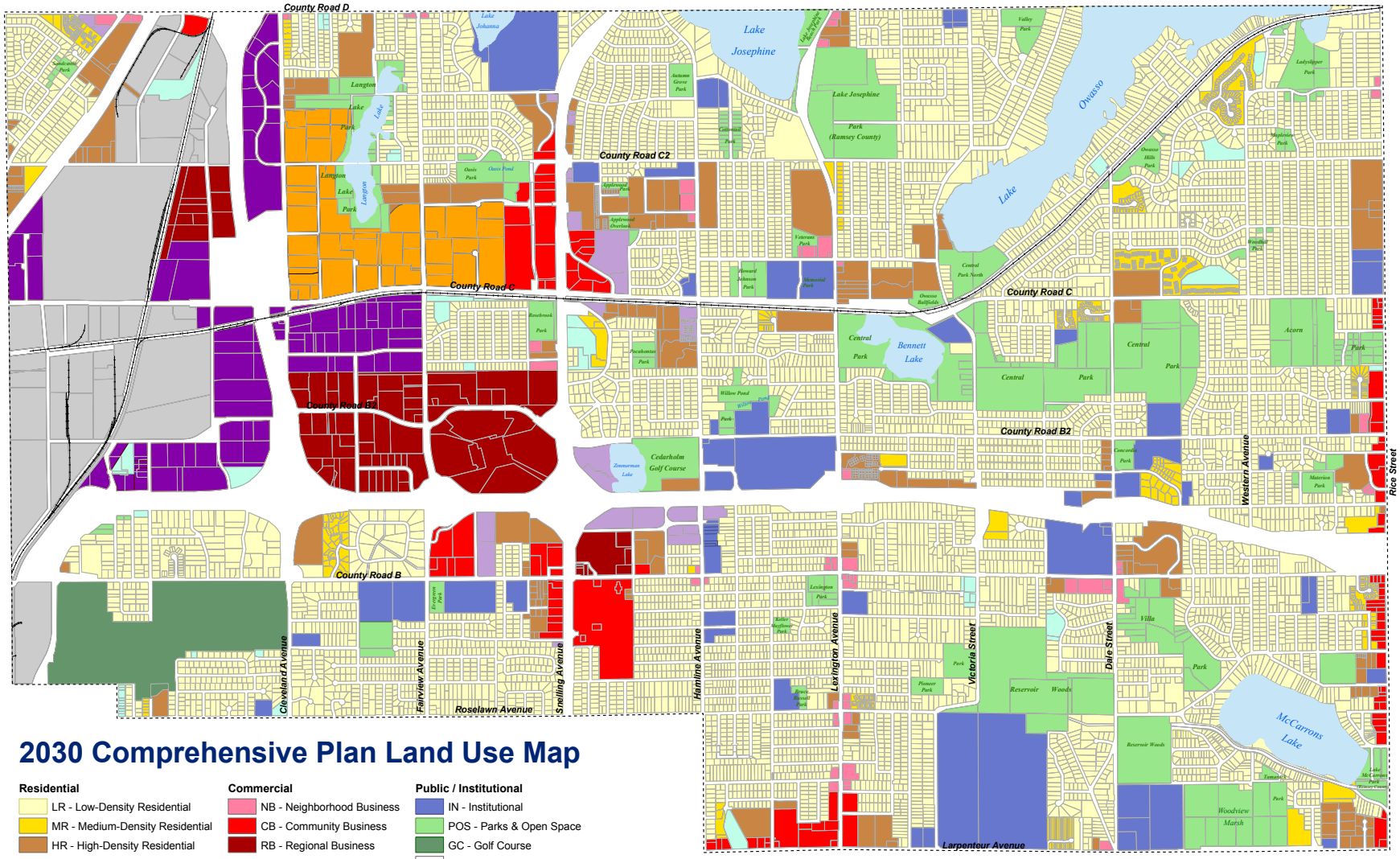
- Organize the community in a sustainable manner in order to balance households with jobs, to promote alternative mobility options, to respect the natural environment, and to result in enduring development patterns
- Make efficient use of municipal utility systems and facilitate the orderly and financially feasible expansion of these systems
- Provide the capacity for the type of growth desired by the community

The 2030 Land Use Map is only one piece of Roseville's Land Use Plan. The other components of the Land Use chapter of the Comprehensive Plan work with this map to explain the intent and objectives for future land use. Further, this map lays the foundation for land use controls that are used by the City to implement the Comprehensive Plan.

Land Use Category		Acres	% Total
LR	Low-Density Residential	3,037	34.28%
MR	Medium-Density Residential	160	1.80%
HR	High-Density Residential	422	4.76%
MU	Community Mixed Use	179	2.02%
NB	Neighborhood Business	45	0.51%
CB	Community Business	206	2.33%
RB	Regional Business	279	3.15%
O	Office	79	0.89%
BP	Business Park	282	3.18%
I	Industrial	496	5.60%
IN	Institutional	476	5.37%
POS	Park & Open Space	845	9.53%
GC	Golf Course	157	1.77%
ROW	Right of Way	1,770	19.98%
RR	Railroad	86	0.97%
W	Water Ponding	71	0.80%
LAKE	Lake	271	3.06%
	Total	**8,861**	**100.00%**

2030 Land Use Percentages by Category

Table 4.1



2030 Land Use Map

Figure 4.1

Land Use Categories

The 2030 Land Use Map depicts the overall planned land-use pattern in Roseville. This section defines the land-use categories shown on the 2030 Land Use Map.

Low-Density Residential (LR)

Low-density residential land uses include single-family detached houses generally with a density between 1.5 and four units per acre and two-family attached houses generally with a density of no more than eight units per acre.

Medium-Density Residential (MR)

Medium-density residential land uses include single-family attached housing types such as triplex, quadruplex, row houses, side-by-side townhouses, back-to-back townhouses, mansion townhouses, and small-lot detached houses, generally with a density greater than four units per acre up to 12 units per acre.

High-Density Residential (HR)

High-density residential land uses include multifamily housing types including apartments, lofts, flats, and stacked townhouses, generally with a density greater than 12 units per acre.

Community Mixed Use (CMU)

Community Mixed Use areas are intended to contain a mix of complementary uses that may include housing, office, civic, commercial, park, and open space uses. Community Mixed Use areas organize uses into a cohesive district, neighborhood, or corridor, connecting uses in common structures and with sidewalks and trails, and using density, structured parking, shared parking, and other approaches to create green space and public places within the areas. The mix of land uses may include Medium- and High-Density Residential, Office, Community Business, Institutional, and Parks and Open Space uses. Residential land uses should generally represent between 25% and 50% of the overall mixed-use area. The mix of uses may be in a common site, development area, or building. Individual developments may consist of a mix of two or more complementary uses that are compatible and connected to surrounding land-use patterns. To ensure that the desired mix of uses and connections are achieved, a more detailed small-area plan, master plan, and/or area-specific design principles is required to guide individual developments within the overall mixed-use area.

Regional Business (RB)

Regional Business areas include a collection of businesses and Institutional uses that provide goods and services to a regional market area. Uses found in Regional Business areas include regional-scale institutions and malls, shopping centers of various sizes, freestanding large-format stores, freestanding smaller businesses, multistory office buildings, and groupings of automobile dealerships. Regional Business areas are located in places with visibility and access from the regional highway system (Interstate 35W and State Highway 36).

Community Business (CB)

Community Business areas are oriented toward businesses and Institutional uses involved with the provision of goods and services to a local market area. Community business areas include shopping centers and freestanding businesses and institutions that promote community orientation and scale. To provide access and manage traffic, community business areas are located on streets designated as A Minor Augmentor or A Minor Reliever in the Transportation Plan. Community Business areas should have a strong orientation to pedestrian and bicycle access to the area and movement within the area. Residential uses, generally with a density greater than 12 units per acre, may be located in Community Business areas only as part of mixed-use buildings with allowable business uses on the ground floor.

Neighborhood Business (NB)

Neighborhood Business areas are small-scale business and Institutional areas located on or at the intersection of minor arterial and collector streets. Business uses in these areas may include retail, service, and office. Residential uses may be located in a mixed-use building in these areas. Residential uses should generally have a density between four and 12 units per acre and are subject to the other limitations for this land use. Buildings shall be scaled appropriately to the surrounding neighborhood. There should be appropriate buffers and pedestrian connections between Neighborhood Business areas and adjacent residential neighborhoods. Neighborhood Business areas should be connected to surrounding neighborhoods by sidewalks or trails.

Office (O)

Office uses include business, professional, administrative, scientific, technical, research, and development services at higher densities.

Industrial (I)

Industrial uses include manufacturing, assembly, processing, warehousing, laboratory, distribution, related office uses, and truck/transportation terminals.

Business Park (BP)

Business Park is an employment area that has a consistent architectural style with a mix of employment-oriented use types. These uses may include office, office-showroom-warehousing, research and development services, high-tech electronic manufacturing, medical, and lodging with business-park-supporting retail and services such as healthcare, fitness, child daycare, drycleaning, bank, coffee shop, restaurant, and convenience store.

Institutional (IN)

Institutional land uses include civic, school, library, church, cemetery, and correctional facilities.

Parks & Open Space (POS)

Park and open space land uses include public active and passive recreation areas such as parks, playfields, playgrounds, nature areas, and golf courses.

Golf Course (GC)

Golf course land uses include private golf courses, golf holes, practice ranges, and greens.

Road Right-of-Way (ROW)

Road right-of-way land uses include public and private road right-of-way for automobiles, transit, and non-vehicular transportation modes.

Railroad (RR)

Railway land uses include right-of-way utilized for public and private railroad related activities.

Lake (L)

Lake includes permanently flooded open water, rivers, and streams included in the Public Waters Inventory (PWI) maintained by the MN DNR and also includes the floodway areas designated by the Federal Emergency Management Agency (FEMA).

Water Ponding (WP)

Water ponding includes public or private land occupied by a constructed stormwater runoff pond.

Planning Districts

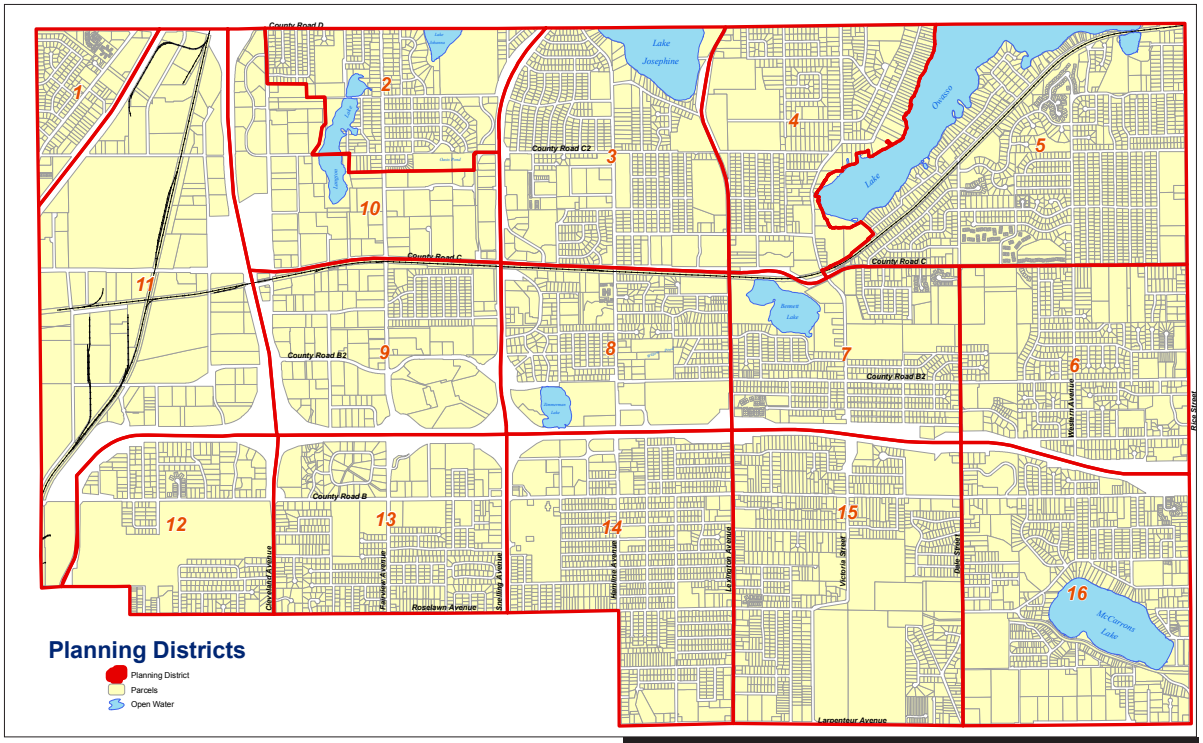
The 2030 Comprehensive Plan update continues the practice of planning land use by districts within Roseville. The 1994 Comprehensive Plan and the 2003 update evaluated land uses in each of the 15 planning districts. The 2030 Comprehensive Plan uses 16 districts as shown in Figure 4.2. The section that follows discusses current and future land use in each of these districts.

District 1

Planning District 1 is located in the northwest corner of the city bordered by County Road 88, County Road D and Highcrest Road. In Planning District 1, the primary existing land use is single-family residential with medium- and high-density residential development on the edges of the neighborhood. A neighborhood park, Sandcastle Park, is located in the center of the district. Small retail and office uses exist at the intersection of County Road D and Old Highway 8.

Land-Use Issues

This residential neighborhood is often perceived as being isolated as it is separated from the rest of Roseville's neighborhoods by major highways, a railroad, and the large industrial area west of I-35W. Bordering the southeast side of the district is County Road 88, which produces traffic and noise that can negatively impact the neighborhood. Existing land uses on the east side of County Road 88 are primarily heavy and light industrial as part of Roseville's large industrial area west of I-35W. The neighborhood would benefit from improved access to the rest of the Roseville, including on- or off-street routes for walking and biking that would better connect the neighborhood to the City's parks and recreation system.



Planning Districts

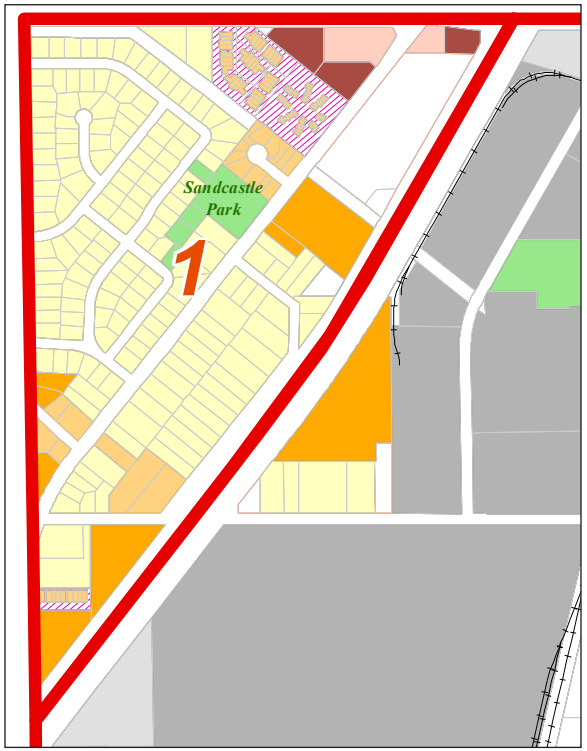
Figure 4.2

Planning District 1 contains one vacant site, which consists of two adjacent parcels totaling approximately nine acres that is located just south of County Road D between Old Highway 8 and County Road 88. Because potential soil and fill material problems on the site would challenge the economic feasibility of developing a multistory building, the site's previous future land use designation was Business. The desired development of more intensive uses will most likely require substantial soil corrections. If this land is developed with residential uses, the provision of public or private parks/open space should be considered as part of the development. This park land could be designed to improve the district's access to park space in the neighborhood as well as the community's park system.

Future Land Use

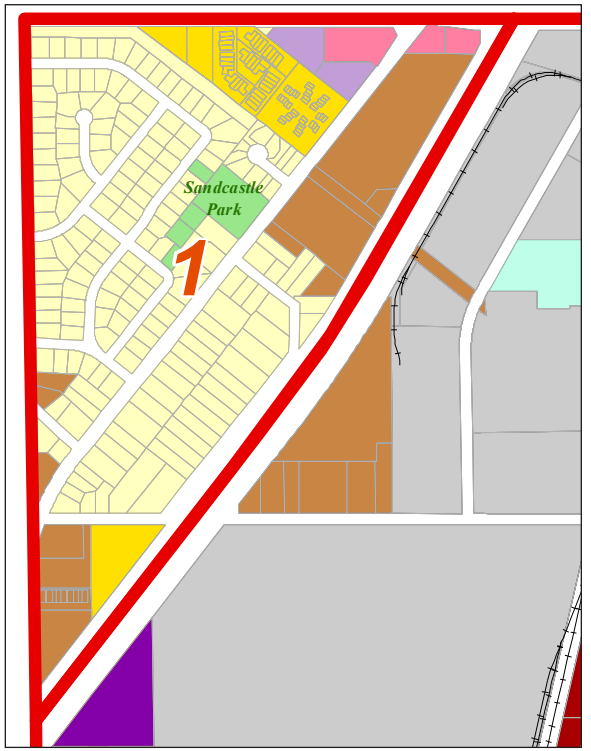
The Comprehensive Plan seeks to sustain and support the residential character of this district. The vacant land located just south of County Road D between Old Highway 8 and County Road 88 is guided for High-Density Residential. Since direct driveway access to County Road 88 would not be available and adjacent existing land uses are primarily residential, the future land-use designation was changed from Business to High-Density Residential as part of this 2008 update to the Comprehensive Plan.

The node at the intersection of County Road D and Old Highway 8, which was previously guided for Business and Limited Business, is now guided for Neighborhood Business and Office uses to reflect the new land-use categories of the 2030 Comprehensive Plan.



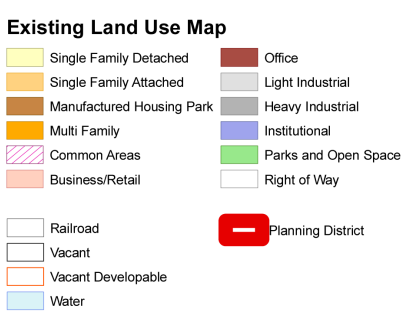
Existing Land Use - Planning District 1

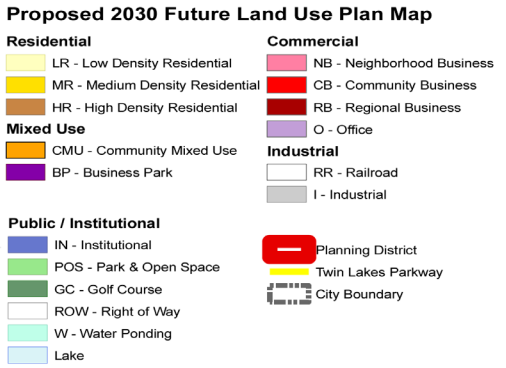
Figure 4.3



Future Land Use - Planning District 1

Figure 4.4





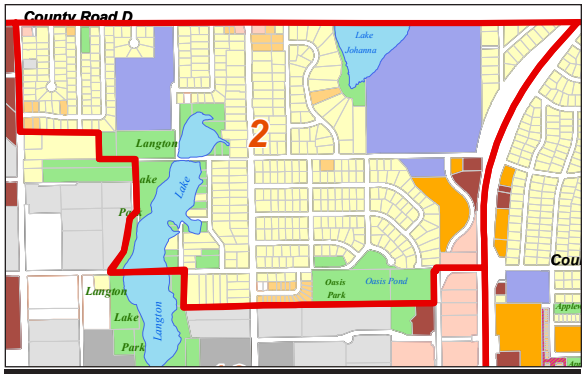
District 2

Planning District 2 runs from Cleveland Avenue on the west to Snelling Avenue on the east, and from County Road D on the north to County Road C2 on the south. In Planning District 2, the primary existing land uses are low-density residential, institutional, and parks/open space. The Northwestern College campus is partially located within Roseville adjacent to Lake Johanna in the northeast corner of the district. Langton Lake and Oasis Pond and the parks/open spaces surrounding them are located along the southern border of the district and provide separation between the residential neighborhood and the nonresidential areas to the south.

Land-Use Issues

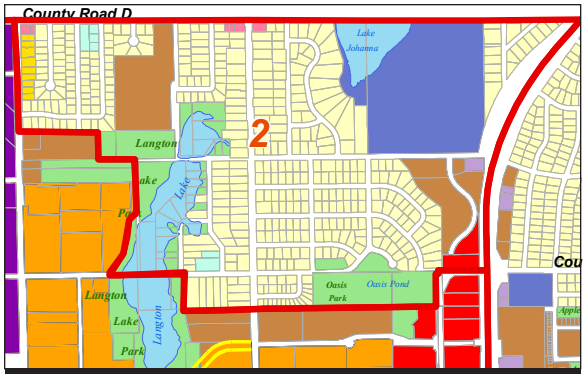
The primary land-use issues in District 2 occur on the edges. This district's southern edge borders the Twin Lakes Redevelopment Area, currently a mix of industrial and vacant land. The Comprehensive Plan guides the Twin Lakes area for a mix of residential and nonresidential land uses. Attention should be given to establishing appropriate transition/buffer land uses between future land uses in the Twin Lakes area and the existing low-density residential uses in Planning District 2.

Similar transition issues exist with the more intensive land uses along Snelling Avenue adjacent to Northwestern College and along Cleveland Avenue. Northwestern College has continued to grow in size, which creates pressures to expand its campus. In particular, there is a growing presence of student housing, some owned by the college, east of Snelling Avenue and south of County Road C2. The Comprehensive Plan seeks to balance maintaining the integrity of the existing neighborhoods with sustaining this more intense adjacent land use.



Existing Land Use - Planning District 2

Figure 4.5



Future Land Use - Planning District 2

Figure 4.6

Existing Land Use Map

- Single Family Detached
- Single Family Attached
- Manufactured Housing Park
- Multi Family
- Common Areas
- Business/Retail
- Office
- Light Industrial
- Heavy Industrial
- Institutional
- Parks and Open Space
- Right of Way
- Railroad
- Vacant
- Vacant Developable
- Water
- Planning District

Future Land Use

The 2030 Land Use plan for District 2 focuses on maintaining existing land uses. Planned uses are consistent with current development.

The Comprehensive Plan continues to guide land uses near the Northwestern College campus for the appropriate land uses rather than expanding the designation of institutional land uses east of Snelling Avenue and south of County Road C2.

Proposed 2030 Future Land Use Plan Map

Residential
- LR - Low Density Residential
- MR - Medium Density Residential
- HR - High Density Residential

Mixed Use
- CMU - Community Mixed Use
- BP - Business Park

Public / Institutional
- IN - Institutional
- POS - Park & Open Space
- GC - Golf Course
- ROW - Right of Way
- W - Water Ponding
- Lake

Commercial
- NB - Neighborhood Business
- CB - Community Business
- RB - Regional Business
- O - Office

Industrial
- RR - Railroad
- I - Industrial

- Planning District
- Twin Lakes Parkway
- City Boundary

District 3

Planning District 3 extends from Snelling Avenue on the west to Lexington Avenue on the east, and from County Road D on the north to County Road C on the south.

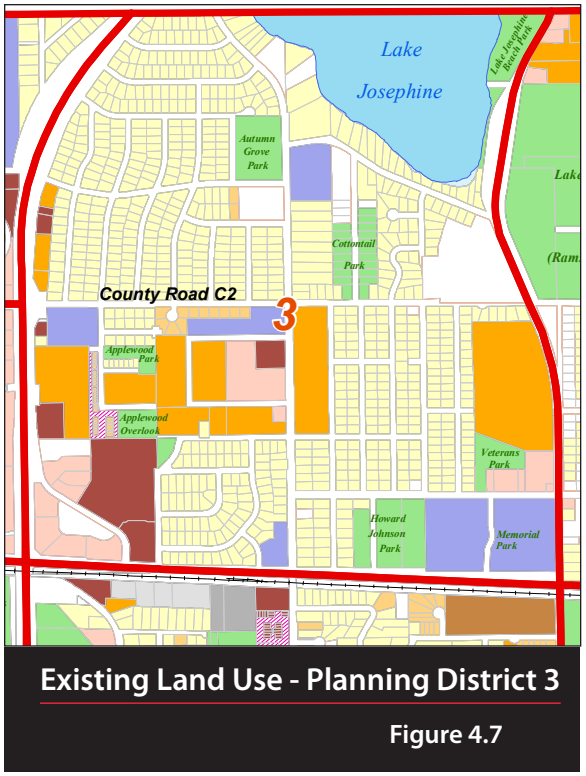
Land-Use Issues

The key land-use issue for District 3 is the future of the Hamline Shopping Center. The Comprehensive Plan anticipates the redevelopment of the existing shopping center. This redevelopment is envisioned as a mix of residential and commercial uses. The Plan shows separate land uses, but an integrated mixed-use project would also meet the objectives of the Comprehensive Plan. Retail uses at this location should be oriented to Hamline Avenue.

Future Land Use

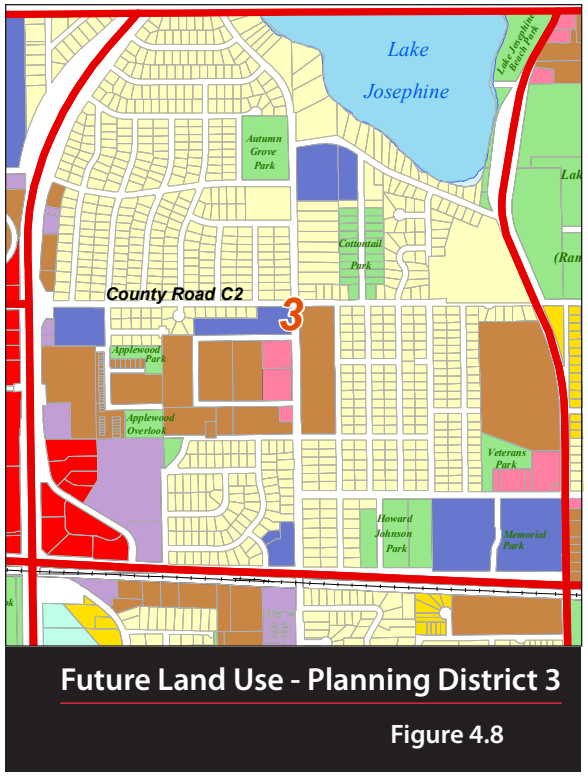
The Comprehensive Plan seeks to reinforce existing land-use patterns:

- Commercial and office uses are oriented to Snelling Avenue and County Road C.
- Higher-density housing options extend through the middle of this district.
- The Roseville municipal campus occupies the southeast corner of the district.
- A neighborhood commercial center lies north of the municipal campus.
- The remainder of the district is dominated by low-density housing.



Existing Land Use - Planning District 3

Figure 4.7



Future Land Use - Planning District 3

Figure 4.8

District 4

Planning District 4 begins at Lexington Avenue on the west, ends at the shoreline of Lake Owasso on the east, and is bounded by County Road D on the north and County Road C on the south.

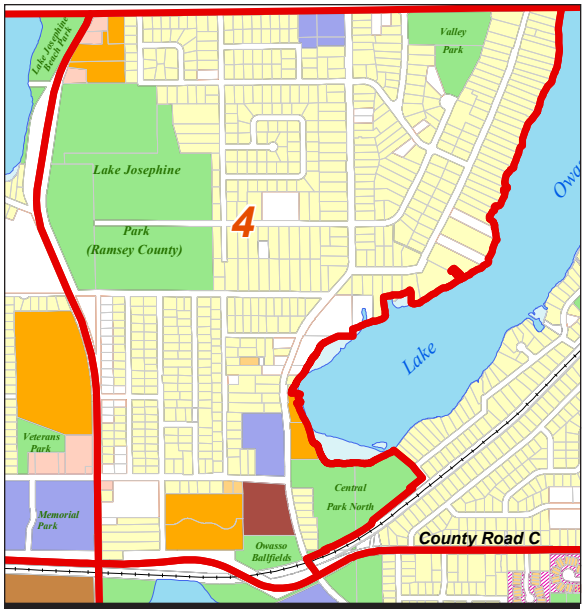
Land-Use Issues

The park and lakefront make District 4 a desirable residential setting. The Comprehensive Plan supports the existing land-use pattern.

Future Land Use

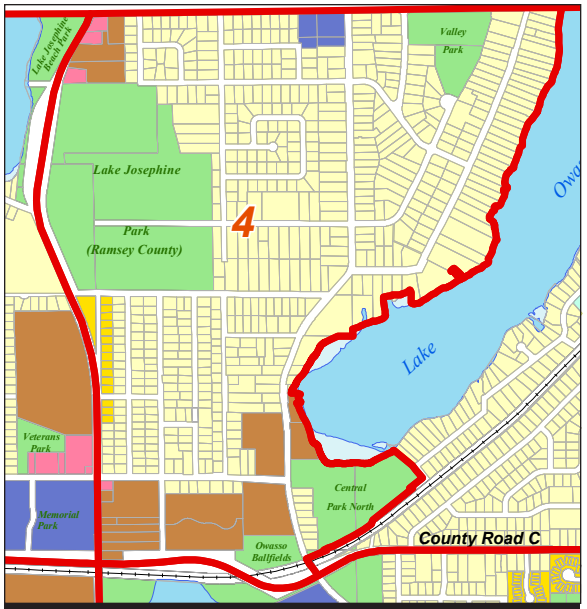
The majority of the district continues to be guided for low-density residential. Infill and redevelopment should be compatible with the surrounding neighborhood.

Medium- and high-density housing form edges along County Road C and Lexington Avenue.



Existing Land Use - Planning District 4

Figure 4.9



Future Land Use - Planning District 4

Figure 4.10

Existing Land Use Map

- Single Family Detached
- Single Family Attached
- Manufactured Housing Park
- Multi Family
- Common Areas
- Business/Retail
- Office
- Light Industrial
- Heavy Industrial
- Institutional
- Parks and Open Space
- Right of Way
- Railroad
- Vacant
- Vacant Developable
- Water
- Planning District

Proposed 2030 Future Land Use Plan Map

Residential
- LR - Low Density Residential
- MR - Medium Density Residential
- HR - High Density Residential

Mixed Use
- CMU - Community Mixed Use
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- RB - Regional Business
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Industrial
- RR - Railroad
- I - Industrial

Public / Institutional
- IN - Institutional
- POS - Park & Open Space
- GC - Golf Course
- ROW - Right of Way
- W - Water Ponding
- Lake

- Planning District
- Twin Lakes Parkway
- City Boundary

District 5

Planning District 5 occupies the northeast corner of Roseville. It runs from County Road D on the north to County Road C on the south. On the west is Lake Owasso and on the east is Rice Street.

Land-Use Issues

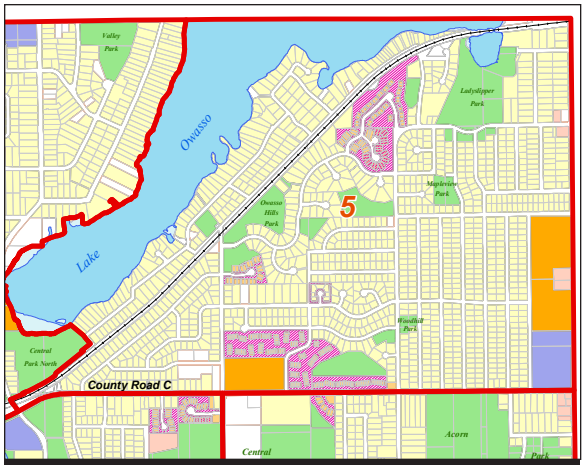
Planning District 5 is a sound residential area. The majority of the district is occupied by single-family housing. Some medium-density infill development (e.g. twin homes and townhomes) has been built. High-density housing exists along major road corridors like County Road C and Rice Street.

The condition of the housing immediately adjacent to Rice Street should be monitored. The long-term viability of this location as a setting for single-family homes will be influenced by traffic volumes on Rice Street and by land uses to the east in Little Canada.

Property in District 5 along Rice Street should be studied as part of redevelopment planning for the entire Rice Street corridor (see discussion in District 6).

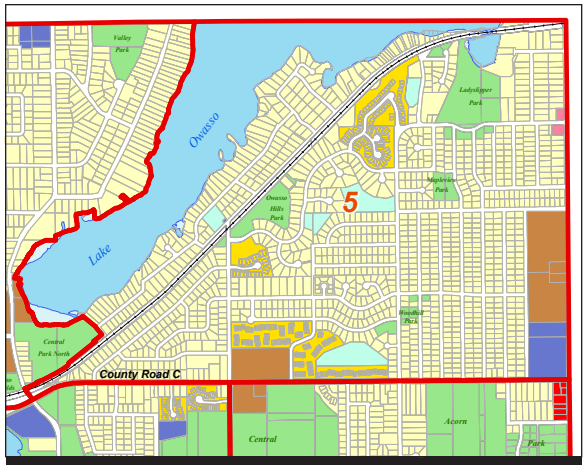
Future Land Use

The Comprehensive Plan reinforces existing land-use patterns.



Existing Land Use - Planning District 5

Figure 4.11



Future Land Use - Planning District 5

Figure 4.12

Existing Land Use Map

- Single Family Detached
- Single Family Attached
- Manufactured Housing Park
- Multi Family
- Common Areas
- Business/Retail
- Railroad
- Vacant
- Vacant Developable
- Water
- Office
- Light Industrial
- Heavy Industrial
- Institutional
- Parks and Open Space
- Right of Way
- Planning District

Proposed 2030 Future Land Use Plan Map

Residential
- LR - Low Density Residential
- MR - Medium Density Residential
- HR - High Density Residential

Mixed Use
- CMU - Community Mixed Use
- BP - Business Park

Public / Institutional
- IN - Institutional
- POS - Park & Open Space
- GC - Golf Course
- ROW - Right of Way
- W - Water Ponding
- Lake

Commercial
- NB - Neighborhood Business
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- RB - Regional Business
- O - Office

Industrial
- RR - Railroad
- I - Industrial

- Planning District
- Twin Lakes Parkway
- City Boundary

District 6

Planning District 6 stretches from County Road C on the north to Highway 36 on the south and from Dale Street on the west to Rice Street on the east.

Land-Use Issues

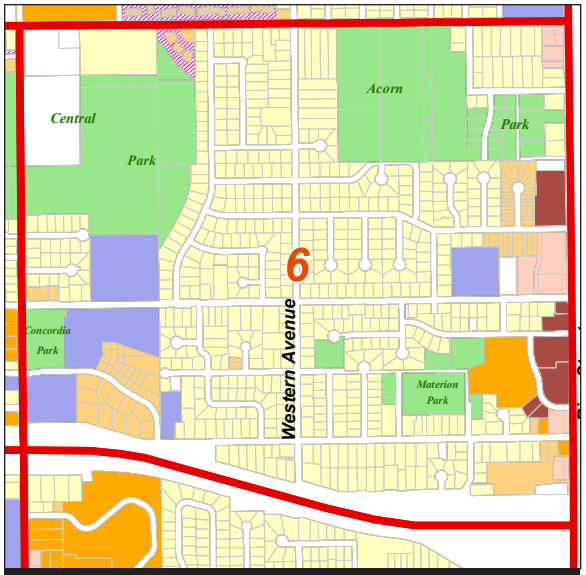
An important initiative growing out of the 2008 Comprehensive Plan update process is the need to undertake more detailed planning for the Rice Street corridor. Located in Roseville, Little Canada, and Maplewood, the corridor is a complex setting with a wide range of land uses, which creates both the opportunity and the need for redevelopment. The level of investigation conducted in preparation of the 2030 Plan did not allow for the exploration of future land-use options in conjunction with the adjacent cities.

Future Land Use

The land-use plan for District 6 is based on existing patterns. The majority of the district continues as single-family housing, parks, and institutional (e.g. schools, churches, etc.) uses.

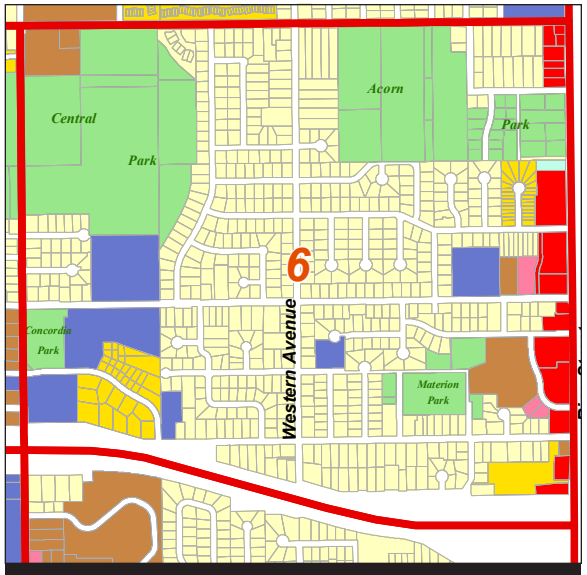
Future land use along Rice Street primarily reflects existing use. Properties along Rice Street are planned for a mix of retail, service, and office businesses. All non-residential uses are guided as Community Business to allow flexibility in future development. Existing single-family residential properties are guided for transition to commercial use.

Future development along Rice Street should be oriented to the street and not allowed to encroach into adjacent single-family neighborhoods.



Existing Land Use - Planning District 6

Figure 4.13



Future Land Use - Planning District 6

Figure 4.14

Existing Land Use Map

- Single Family Detached
- Single Family Attached
- Manufactured Housing Park
- Multi Family
- Common Areas
- Business/Retail
- Office
- Light Industrial
- Heavy Industrial
- Institutional
- Parks and Open Space
- Right of Way
- Railroad
- Vacant
- Vacant Developable
- Water
- Planning District

Proposed 2030 Future Land Use Plan Map

Residential
- LR - Low Density Residential
- MR - Medium Density Residential
- HR - High Density Residential

Mixed Use
- CMU - Community Mixed Use
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- IN - Institutional
- POS - Park & Open Space
- GC - Golf Course
- ROW - Right of Way
- W - Water Ponding
- Lake

- Planning District
- Twin Lakes Parkway
- City Boundary

District 7

Planning District 7 is bordered on the north by County Road C and on the south by Highway 36. The border on the west is Lexington Avenue and the border on the east is Dale Street.

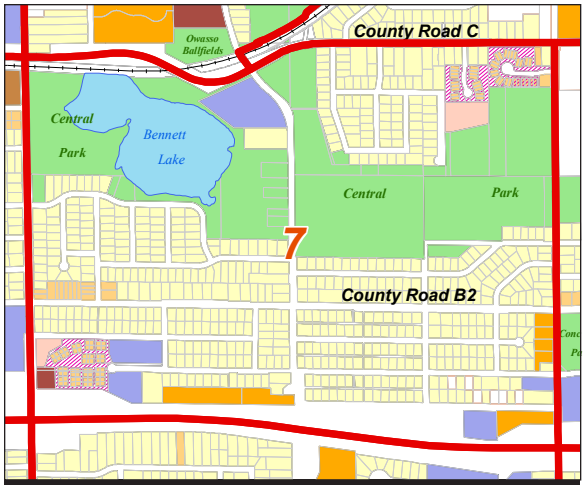
Land-Use Issues

As for many parts of eastern Roseville, the focus of the 2030 Comprehensive Plan is sustaining sound residential neighborhoods. No special land-use issues are identified in District 7.

Future Land Use

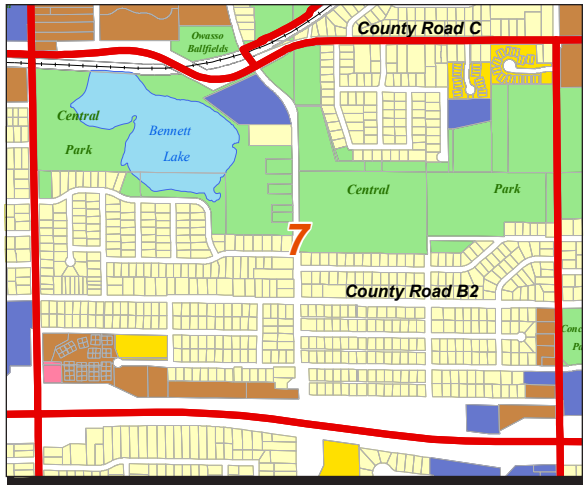
Throughout the north-central portion of this district is Central Park, a significant amenity for Roseville. Central Park serves as a foundation for the primary residential character of the district.

The primary land use is low-density residential (i.e., single-family). Medium- and high-density residential uses are oriented to County Road C, Dale Street, and Highway 36.



Existing Land Use - Planning District 7

Figure 4.15



Future Land Use - Planning District 7

Figure 4.16

Existing Land Use Map

- Single Family Detached
- Single Family Attached
- Manufactured Housing Park
- Multi Family
- Common Areas
- Business/Retail
- Office
- Light Industrial
- Heavy Industrial
- Institutional
- Parks and Open Space
- Right of Way
- Railroad
- Vacant
- Vacant Developable
- Water
- Planning District

Proposed 2030 Future Land Use Plan Map

Residential
- LR - Low Density Residential
- MR - Medium Density Residential
- HR - High Density Residential

Mixed Use
- CMU - Community Mixed Use
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- NB - Neighborhood Business
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Public / Institutional
- IN - Institutional
- POS - Park & Open Space
- GC - Golf Course
- ROW - Right of Way
- W - Water Ponding
- Lake

- Planning District
- Twin Lakes Parkway
- City Boundary

District 8

Planning District 8 is bordered by County Road C on the north, Highway 36 on the south, Snelling Avenue on the west and Lexington Avenue on the east.

Land-Use Issues

Planning District 8 contains a mix of land uses, which is dominated by single-family residential. The southern edge is formed by public/institutional uses including the Roseville Area High School, Roseville School District 623 headquarters, and Cedarholm Golf Course.

The northern edge is a mix of industrial, office, and residential uses. The Comprehensive Plan envisions the long-term redevelopment of industrial property with higher-density residential. The industrial uses exist on smaller parcels with constrained access. Improvements in the access to these properties will be needed.

Future Land Use

With the exception of the industrial area adjacent to County Road C (see discussion above), the future land-use plan is consistent with current land use.

Existing Land Use - Planning District 8

Figure 4.17

Existing Land Use Map

- Single Family Detached
- Single Family Attached
- Manufactured Housing Park
- Multi Family
- Common Areas
- Business/Retail
- Office
- Light Industrial
- Heavy Industrial
- Institutional
- Parks and Open Space
- Right of Way
- Railroad
- Vacant
- Vacant Developable
- Water
- Planning District

Future Land Use - Planning District 8

Figure 4.18

Proposed 2030 Future Land Use Plan Map

Residential
- LR - Low Density Residential
- MR - Medium Density Residential
- HR - High Density Residential

Mixed Use
- CMU - Community Mixed Use
- BP - Business Park

Commercial
- NB - Neighborhood Business
- CB - Community Business
- RB - Regional Business
- O - Office

Industrial
- RR - Railroad
- I - Industrial

Public / Institutional
- IN - Institutional
- POS - Park & Open Space
- GC - Golf Course
- ROW - Right of Way
- W - Water Ponding
- Lake

- Planning District
- Twin Lakes Parkway
- City Boundary

District 9

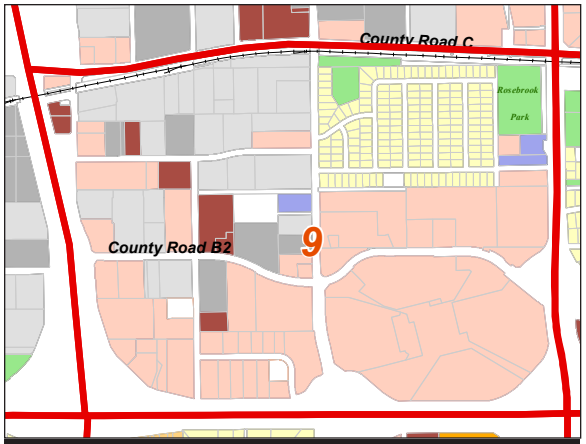
Planning District 9 is bordered by County Road C on the north, Highway 36 on the south, Interstate-35W on the west and Snelling Avenue on the east. District 9 includes four primary uses:

- Rosedale Shopping Center
- Crossroads Center, Rosedale Commons, Rosedale Marketplace, and other commercial areas around Rosedale
- James Addition single-family residential neighborhood
- Tower Place

Land-Use Issues

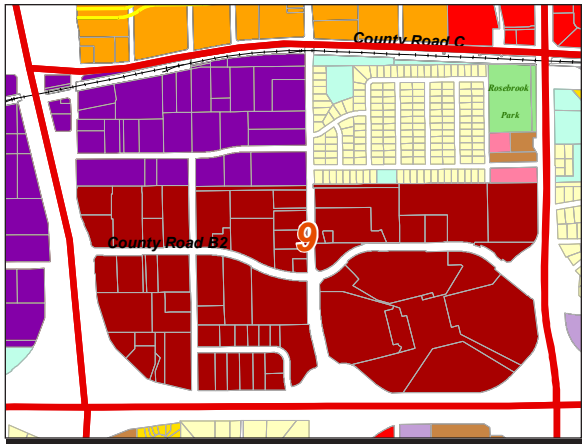
District 9 is a focal point of Roseville's connection with the regional transportation system. Interstate 35W and Highway 36 are regional travel routes. Rosedale Shopping Center serves as a transit hub. The role of Snelling Avenue should increase as a transit connection with the Central Corridor light rail transit line. These transportation systems support the concentration of Regional Business land uses in this district.

History has shown that this access and visibility does not guarantee a successful retail environment. Shopping areas adjacent to Rosedale have realized mixed results. The Comprehensive Plan seeks to establish and sustain an excellent retail environment, allowing businesses to benefit from shared market and customers. The designation of this larger area adjacent to Rosedale as Regional Business represents an expansion of the area allowing regional scale businesses in the future. Attracting businesses with a regional customer base to this district should decrease pressure to locate such businesses in other areas.



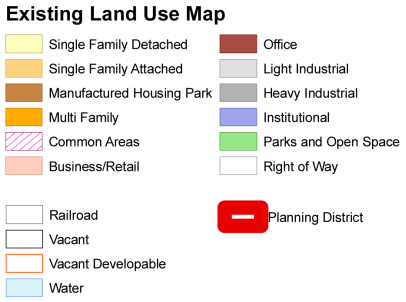
Existing Land Use - Planning District 9

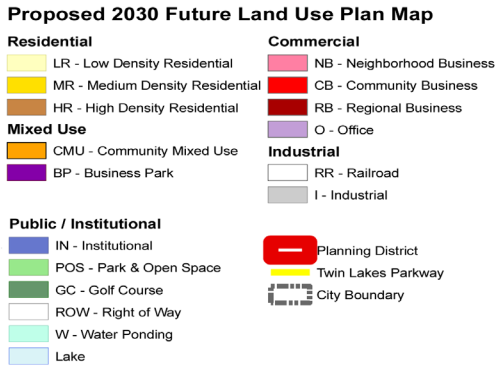
Figure 4.19



Future Land Use - Planning District 9

Figure 4.20





The land-use pattern to the west of Rosedale retains a retail character, but becomes more freestanding businesses. This pattern is likely to continue. While these sites have high visibility, the access is more limited than the immediate Rosedale area. This accessibility should influence the nature of businesses locating in this part of District 9.

There are existing office, industrial, and institutional uses along County Road B2 west of Fairview Avenue. These include Caterpillar, Salvation Army, and the U.S. Post Office. The Comprehensive Plan does not seek the immediate redevelopment of these properties. Rather, the Plan is an indication of the intent to provide for

future growth of regional commercial businesses when the existing uses are no longer viable.

Access is also an issue for the northern portion of this district. The northern edge of District 9 is formed by a rail line and powerline corridor. Access comes from a single rail crossing and connection with County Road C. A grade change prevents additional street access to the south and creates relatively narrow sites. These factors limit the potential for high-traffic-volume uses.

The rail line has been discussed as a potential future transit corridor (the Northeast Diagonal). Transit service would change the nature of development opportunities in this area.

The Comprehensive Plan seeks to sustain the viability of the James Addition as a low-density residential neighborhood. Although surrounded by major transportation corridors and regional shopping areas, this neighborhood retains its integrity.

Future Land Use

Tower Place is guided with the Business Park category, new for the 2030 Comprehensive Plan. This land use designation is based on the desire to encourage the continued development of the area with office, office/warehouse, and office/showroom types of development. Commercial uses in this area should be supportive of the employment-oriented nature of the area. Lodging and restaurants are existing examples of compatible uses.

The Comprehensive Plan supports the long-term viability of Rosedale as a Regional Business. Although many of the businesses surrounding Rosedale could be found in other commercial land-use areas, the Regional Business designation reflects the influences of a regional shopping center and two regional transportation corridors (Highway 36 and Interstate 35W).

District 10

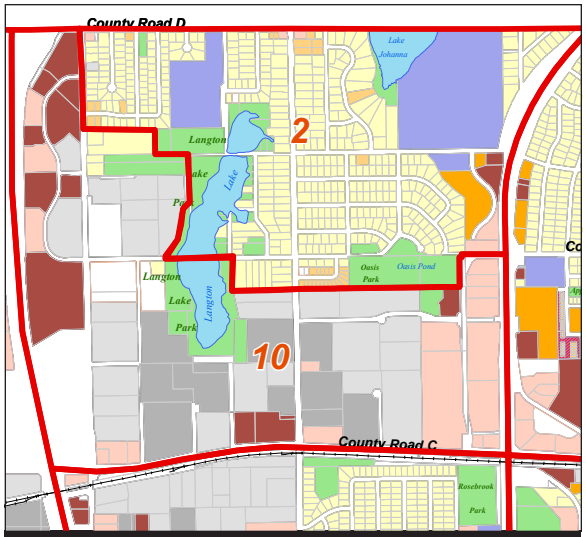
Planning District 10 extends from County Road D on the north to County Road C to the south, and from Interstate 35W on the west to a portion of Snelling Avenue on the east. This area includes the Centre Pointe Planned Unit Development and the Twin Lakes redevelopment area. The area is an evolving mix of office and other businesses with supporting commercial and housing.

The previous versions of the Comprehensive Plan for this district included industrial areas west of Interstate 35W, Tower Place, and the commercial area extending south to Highway 36. The area has been divided into new districts with more common land-use issues.

Land-Use Issues

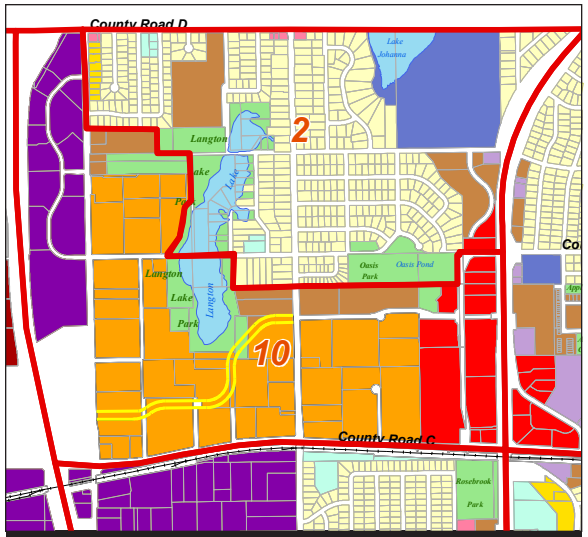
The primary issue for District 10 will be continuing efforts to facilitate the redevelopment of the Twin Lakes area. Twin Lakes has been a long-term redevelopment focus of the City. A series of planning studies and environmental reviews have defined development issues and community desires for this area. While the location and access to the regional transportation system make District 10 a desirable development area, classic redevelopment issues (e.g. obsolete existing uses, underutilized property, poor site configuration, and site contamination) create challenges in attracting investment.

Previous planning has envisioned a master-planned approach to redevelopment. A large-scale project would allow the City to work with a single developer to guide land uses and public improvements. Such a project has not materialized. Future development will more likely



Existing Land Use - Planning District 10

Figure 4.21



Future Land Use - Planning District 10

Figure 4.22

Existing Land Use Map

- Single Family Detached
- Single Family Attached
- Manufactured Housing Park
- Multi Family
- Common Areas
- Business/Retail
- Office
- Light Industrial
- Heavy Industrial
- Institutional
- Parks and Open Space
- Right of Way
- Railroad
- Vacant
- Vacant Developable
- Water
- Planning District

Proposed 2030 Future Land Use Plan Map

Residential
- LR - Low Density Residential
- MR - Medium Density Residential
- HR - High Density Residential

Mixed Use
- CMU - Community Mixed Use
- BP - Business Park

Public / Institutional
- IN - Institutional
- POS - Park & Open Space
- GC - Golf Course
- ROW - Right of Way
- W - Water Ponding
- Lake

Commercial
- NB - Neighborhood Business
- CB - Community Business
- RB - Regional Business
- O - Office

Industrial
- RR - Railroad
- I - Industrial

- Planning District
- Twin Lakes Parkway
- City Boundary

be a series of smaller projects. This approach places more responsibility on the City for creating an appropriate mix of uses and a sustainable development pattern.

The Rosedale Square and Roseville Crossings retail areas form the east edge of District 10. No additional commercial/retail development of this scale is planned for District 10. Midway Ford is the only auto dealership in Roseville that is not located in a Regional Business area.

Future Land Use

The Twin Lakes area is designated as Community Mixed Use, a new land-use category for the 2030 Comprehensive Plan. The mixed-use designation for this area reflects several factors:

- The need to retain flexibility in working with developers over an extended period of time to create high-quality and sustainable new development
- The recognition that the ability to correct site pollution will influence the type and location of development
- The desire to have employment as the primary orientation of future development, balanced with the recognition that commercial and residential uses help to support business development
- Twin Lakes should not be developed with shopping as the primary focus of future land use

The Comprehensive Plan lays the foundation for future development. The City intends to rely on the following official controls and environmental studies to guide land use and to evaluate specific development proposals:

- Zoning regulations
- Twin Lakes Business Park Master Plan
- Twin Lakes Business Park Alternative Urban Areawide Review (AUAR)
- Twin Lakes Redevelopment Area Design Principles

The Centre Pointe area is guided as Business Park, a new land-use category for the 2030 Comprehensive Plan. Centre Pointe is a strong example of the mix of business land uses intended for the category. The primary focus of the area is office and other service businesses. Commercial uses, such as lodging, provide support to the underlying employment objective of this area. Future land use will be a continuation of this pattern.

District 11

Planning District 11 is the area bound by the the city boundary of New Brighton to the north, Interstate 35W to the east and south, the city boundaries of Minneapolis and St. Anthony to the west, and County Road 88 to the northwest.

This district was part of District 10 in the previous Comprehensive Plan.

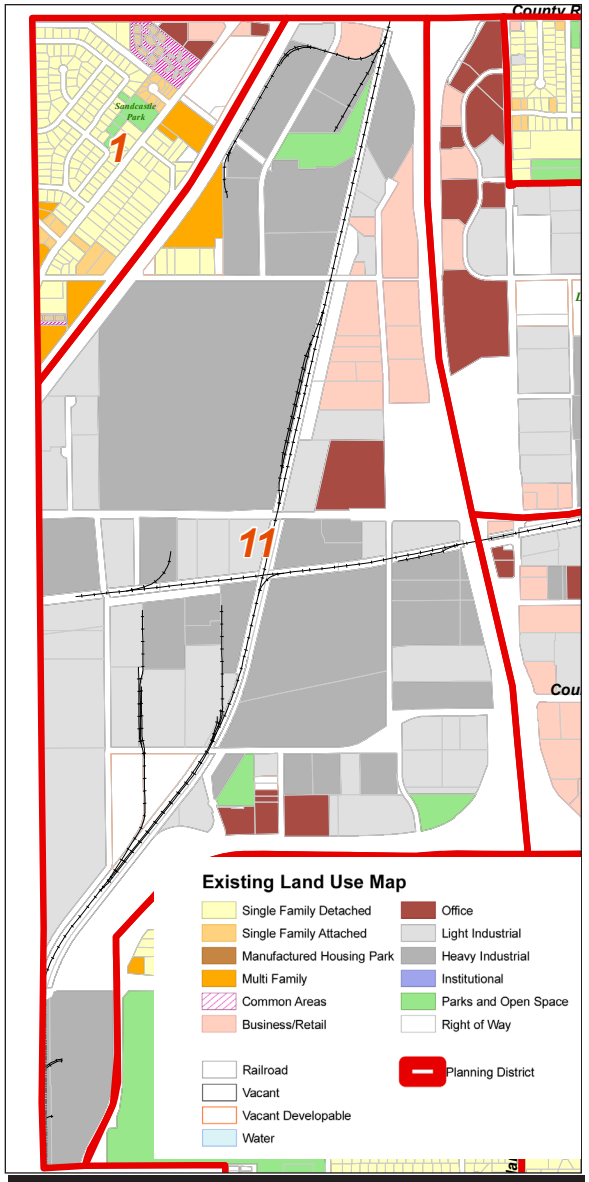
Land-Use Issues

District 11 continues as a major employment area for Roseville and the region. The area is suited to sustaining a wide range of industrial and office uses. New investment has been attracted to this district by its combination of location and accessibility.

The district is located adjacent to Gross Golf Course. The amenity of the golf course combined with the proximity to employment would provide a good location for housing if, in the future, redevelopment of existing industrial was desired.

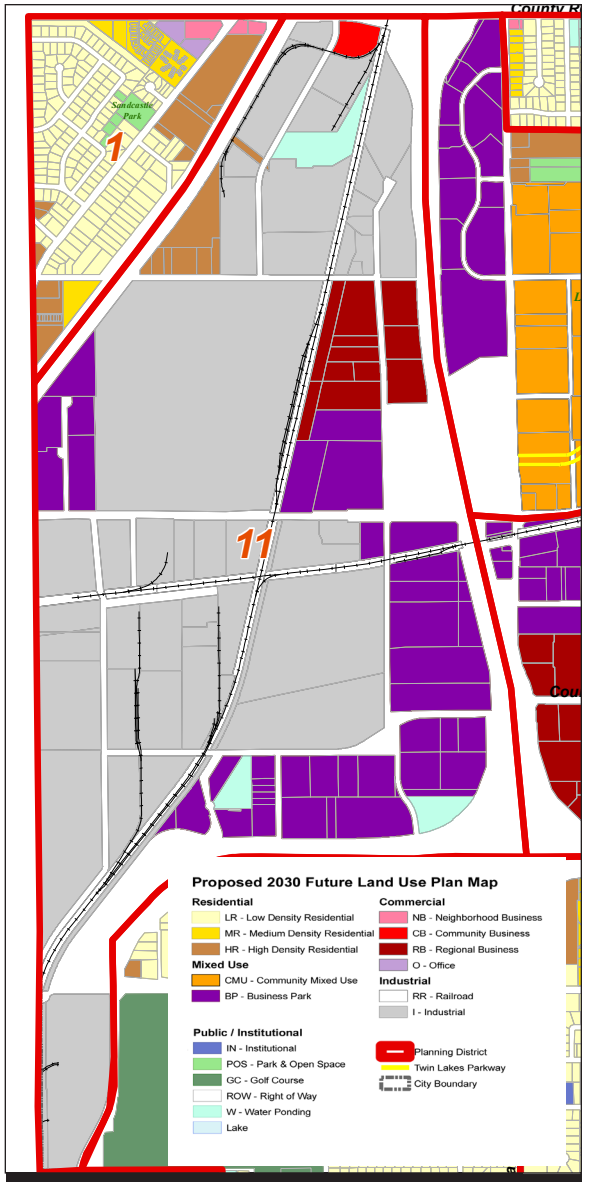
The Paper Calmenson site is located in the southwest corner of this district. The regional highway system isolates this site from the rest of Roseville. The Plan guides the property for continued industrial use, with the recognition that future redevelopment may be needed.

Automobile dealerships are concentrated adjacent to Interstate 35W north of County Road C. Other commercial uses are limited to service businesses that support the overall office/industrial orientation of this district.



Existing Land Use - Planning District 11

Figure 4.23



Future Land Use - Planning District 11

Figure 4.24

A small triangular area contains existing residential uses, both multifamily and single-family, at the corner of County Road 88 and County Road C2. This area is surrounded by industrial uses and major roads, which creates incompatibility issues and isolates these residents.

Future Land Use

The majority of the district retains an industrial land-use designation to sustain existing uses and to provide an area for similar uses to locate. It is recognized, however, that some existing industrial property is under-utilized. Non-industrial land uses may be considered if compatible with overall plans for this district.

The edges are guided as Business Park. The goal is to continue to attract the new office, office/showroom, and office/warehouse development that has come to this area in recent years.

The automobile dealerships are guided as Regional Business in recognition of the regional draw created by this concentration of businesses. The visibility, access, and location of these properties create a desirable setting for businesses with a regional trade area.

If land in this district is redeveloped with residential uses, the provision of public or private parks/open space should be considered as part of the development. This park land could be designed to improve the district's access to park space in the neighborhood as well as the community's park system. Any residential uses should also be connected with other parts of the community.

District 12

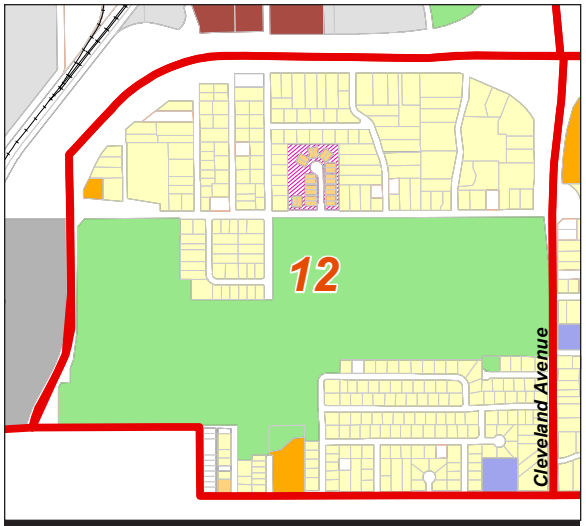
Planning District 12 is bounded on the west by Highway 280 and on the east by Cleveland Avenue. It is bounded on the north by Highway 36 and to the south by Roselawn Avenue.

Land-Use Issues

The land-use pattern in Planning District 12 is dominated by Midland Hills Golf Course, a private golf course, and surrounding residential development. The golf course consists of 160 acres, constituting approximately 40% of the planning district's land, and it physically separates the northern and southern neighborhoods. Experiences of other Twin Cities communities have demonstrated some of the issues created when private golf courses are no longer viable and seek redevelopment. The Comprehensive Plan guides Midland Hills as Golf Course to clearly signify that it is not part of the public park system. The property will be zoned in a manner that makes it consistent with the Comprehensive Plan land-use designation. If future redevelopment is proposed, then the City will address the request in the same manner as any other proposal to change land use.

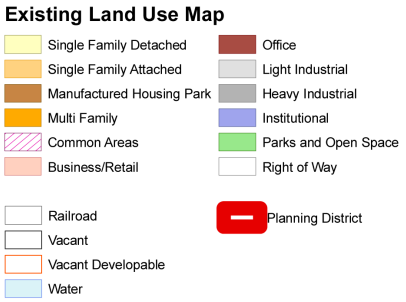
This planning district currently does not contain any public park space. The closest existing public park is located to the east at Fairview Avenue and County Road B, and is athletic fields only. Because this planning district is fully developed, the potential for finding land for a future park is very limited.

The previous access between County Road B and Highway 280 has been closed. It is anticipated that the street will be turned back to the City and converted to a local street. That change supports the long-term viability of this neighborhood.



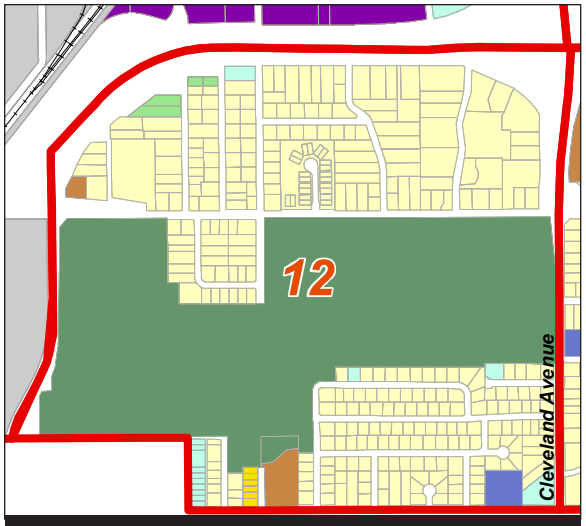
Existing Land Use - Planning District 12

Figure 4.25



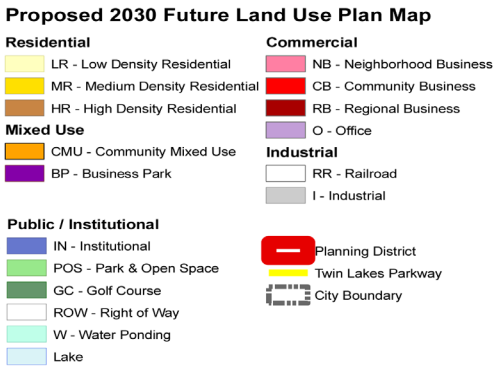
Future Land Use

The Comprehensive Plan supports the existing land-use pattern in District 12. The only future land-use change desired is identification of potential sites for a future neighborhood park.



Future Land Use - Planning District 12

Figure 4.26



District 13

Planning District 13 is bounded on the north by Highway 36 and on the south by Roselawn Avenue and is bounded on the west by Cleveland Avenue and on the east by Snelling Avenue.

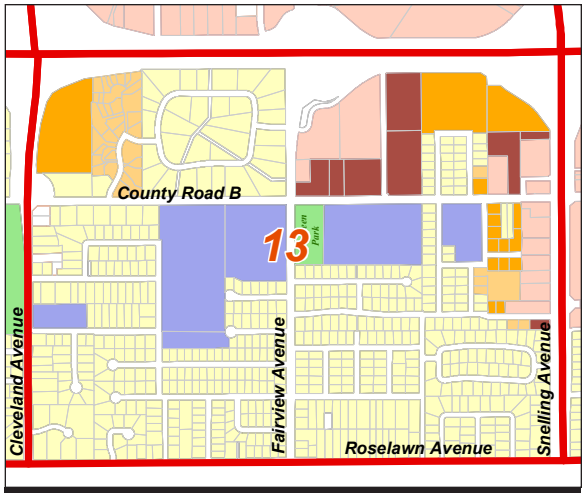
Land-Use Issues

The southeast quadrant of Fairview Avenue and Highway 36 is a commercial district that currently functions as an extension of the Rosedale Area. Site and access constraints make this area best suited for community-scale retail uses in the future. The Plan envisions this commercial area, which could be retail, service, or office uses, extending south to County Road B.

Small retail uses line the west side of Snelling Avenue. This area is a viable retail setting despite poor access and internal movement. Access and site dimensions limit alternatives for use of these properties.

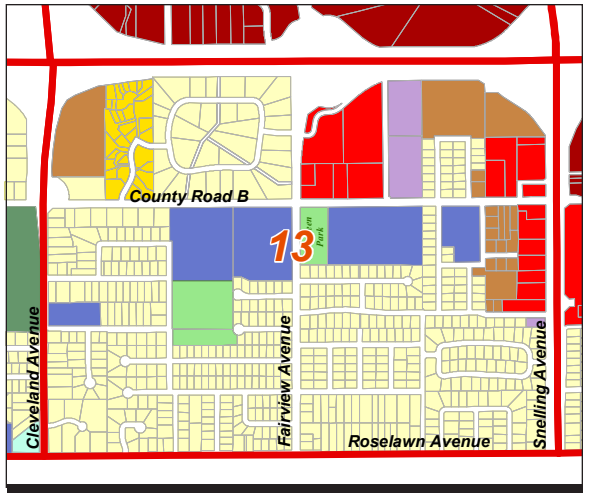
The single-family neighborhood north of County Road B (Midlothian Road-Laurie Road-Haddington Road) is surrounded by land uses not typically compatible with low-density residential. The planning process for the 2030 Comprehensive Plan considered other land uses and opted to retain the existing low-density residential designation. The City should monitor the condition of this housing stock. If redevelopment becomes necessary or desirable, change should not be piecemeal. Since low-density residential land uses are anticipated to remain here long-term, adjacent non-residential land uses are guided for office uses rather than more intense business uses.

Residential areas south of County Road B are also impacted negatively by the high-intensity commercial



Existing Land Use - Planning District 13

Figure 4.27



Future Land Use - Planning District 13

Figure 4.28

Existing Land Use Map

- Single Family Detached
- Single Family Attached
- Manufactured Housing Park
- Multi Family
- Common Areas
- Business/Retail
- Office
- Light Industrial
- Heavy Industrial
- Institutional
- Parks and Open Space
- Right of Way
- Railroad
- Vacant
- Vacant Developable
- Water
- Planning District

Proposed 2030 Future Land Use Plan Map

Residential
- LR - Low Density Residential
- MR - Medium Density Residential
- HR - High Density Residential

Mixed Use
- CMU - Community Mixed Use
- BP - Business Park

Public / Institutional
- IN - Institutional
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Commercial
- NB - Neighborhood Business
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- O - Office

Industrial
- RR - Railroad
- I - Industrial

- Planning District
- Twin Lakes Parkway
- City Boundary

uses along Snelling Avenue, including spillover noise, traffic, and lighting.

Overall, this district is a mix of institutional uses, large-lot single-family residential, smaller-lot single-family residential, apartments, condominiums, office, and retail. This planning district is lacking adequate public parks and open spaces to support this mix of land uses. The only public park located within the district is the 4-acre Evergreen Park, which is athletic fields. The planning district does not have a neighborhood park.

Future Land Use

The Comprehensive Plan primarily guides future land uses to support the existing land-use pattern. The commercial areas along Snelling Avenue and Fairview Avenue are guided to be more community-oriented in the future, so they are designated as Community Business rather than Regional Business uses. If and when any of these commercial properties redevelop, there is a need to provide adequate buffering between the commercial uses and the adjacent residential uses.

Since this planning district lacks adequate public parks, the City should pursue identification and acquisition of land for future parks whenever opportunities emerge. The City should continue to promote a cooperative venture with School District 623 for the Fairview Community Center property. In the event that the land is for sale or is available for a land-use change, the City should consider this land for a future community center or park land.

District 14

Planning District 14 is bounded on the north by Highway 36 and on the south by Larpenteur Avenue. It is bounded on the west by Snelling Avenue and on the east by Lexington Avenue.

Land-Use Issues

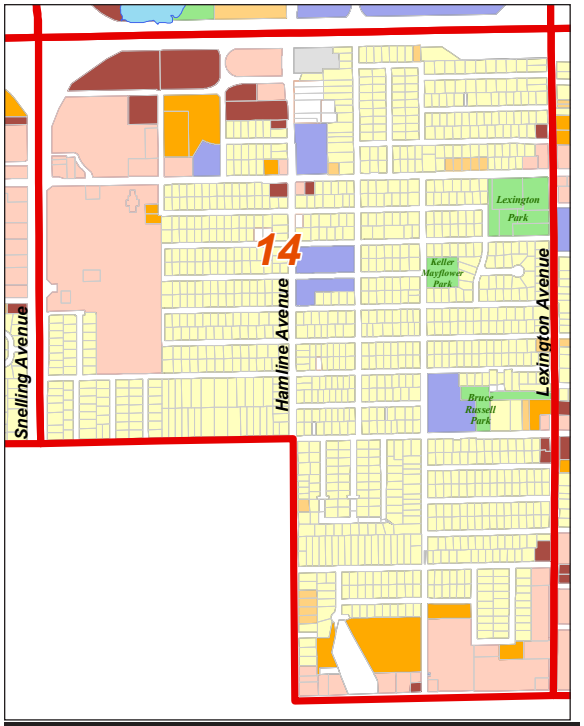
The continued evolution of the HarMar Mall shopping center will be a key factor for this area. The core facilities are changing from the original indoor shopping mall to more exterior-facing storefront and freestanding buildings. The Comprehensive Plan encourages changes toward a sustainable commercial district based on retail and service businesses.

The enhancement of transit facilities and service in this area could create an opportunity for integrating housing with these commercial uses. Additional study is needed to evaluate adequately the viability of a mixed-use development pattern at HarMar.

The single-family residential area along Sandhurst Drive west of Hamline Avenue is sound, but is surrounded by more intense land uses. The City should monitor the condition of this housing stock. If redevelopment become necessary or desirable, change should not be piecemeal.

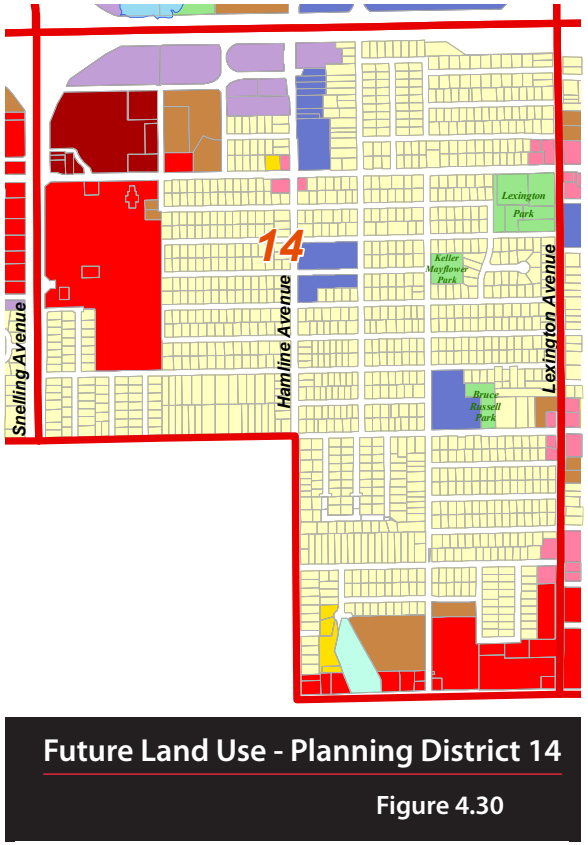
The western portion of this planning district is underserved by public parks, similar to Districts 12 and 13. The closest neighborhood parks are to the east near Lexington Avenue.

The Ramsey County Library is an attraction for District 14. The library is programmed for expansion to the north. The Comprehensive Plan supports the commercial node at County Road B and Hamline Avenue



Existing Land Use - Planning District 14

Figure 4.29



Future Land Use - Planning District 14

Figure 4.30

and encourages development of businesses that take advantage of the attraction created by the Library.

Future Land Use

The Comprehensive Plan seeks to:

- Promote strong commercial districts at Snelling Avenue and County Road B and at Larpenteur Avenue and Lexington Avenue
- Focus medium- and high-density residential around the commercial districts
- Sustain neighborhood commercial nodes at:
  - County Road B and Hamline Avenue
  - County Road B and Lexington Avenue
  - Lexington Avenue and Roselawn Avenue
- Maintain the integrity of existing single-family neighborhoods that constitute the majority of land use in this district
- Explore opportunities for providing a future neighborhood park in the western half of the planning district
- Pursue a more detailed study of the HarMar Mall site that explores future land-use and redevelopment alternatives for this site

District 15

Planning District 15 is bounded by Highway 36 on the north, Larpenteur Avenue on the south, Lexington Avenue on the west and Dale Street on the east.

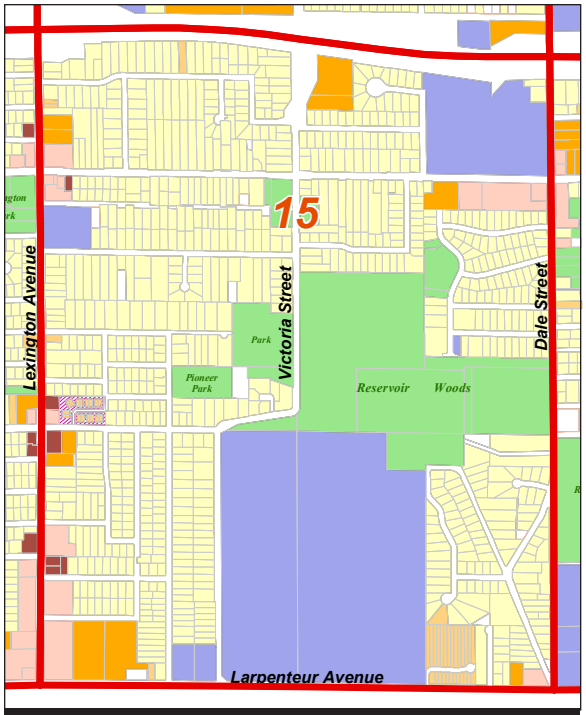
Land-Use Issues

The keys to future land use in this district involve supporting existing commercial districts and nodes while maintaining the integrity of the predominantly single-family residential land-use pattern.

Future Land Use

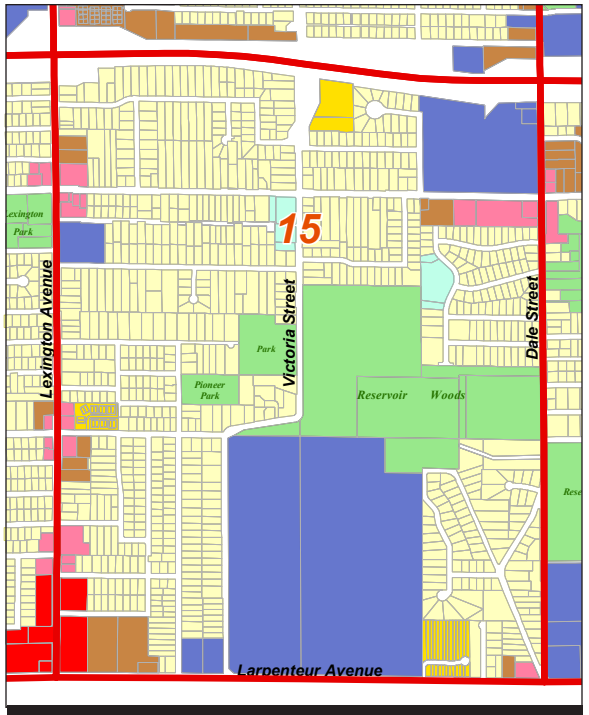
The Comprehensive Plan seeks to support the existing mix of land uses by:

- Promoting a strong commercial district at Larpenteur Avenue and Lexington Avenue
- Focusing medium- and high-density residential at existing locations along major street corridors
- Sustaining neighborhood commercial nodes at:
  - County Road B and Lexington Avenue
  - Lexington Avenue and Roselawn Avenue
  - County Road B and Dale Street
- Maintaining the integrity of existing single-family neighborhoods that constitute the majority of land use in this district



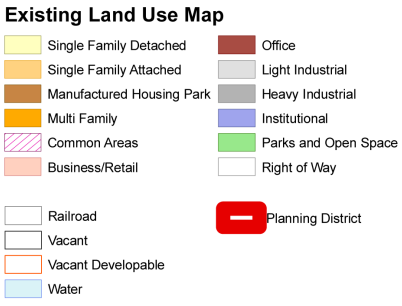
Existing Land Use - Planning District 15

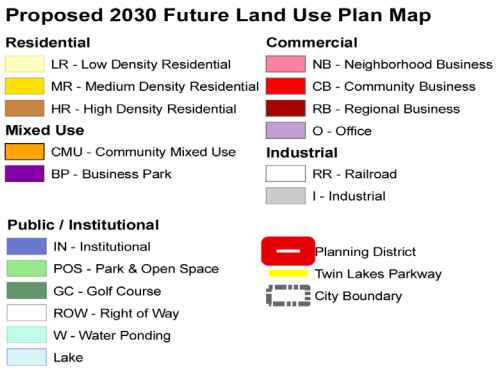
Figure 4.31



Future Land Use - Planning District 15

Figure 4.32





District 16

Planning District 16 is bordered on the north by Highway 36, on the south by Larpenteur Avenue, on the west by Dale Street, and on the east by Rice Street.

Land-Use Issues

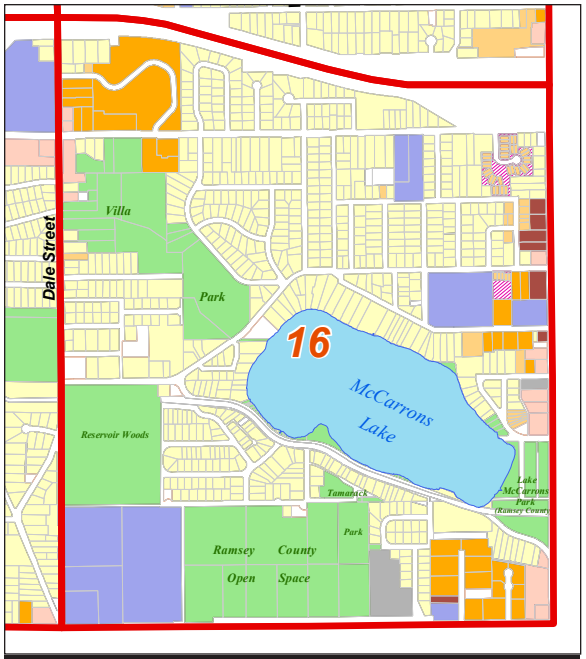
As described in District 6, an important initiative growing out of the 2008 Comprehensive Plan update process is the need to undertake more detailed planning for the Rice Street corridor. Located in Roseville, Little Canada, and Maplewood, the corridor is a complex setting with a wide range of land uses, which creates both the opportunity and the need for redevelopment. The level of investigation conducted in preparation of the 2030 Plan did not allow for the planning needed to explore future land-use options in conjunction with the adjacent cities.

There have been discussions about changes in use for Ramsey County detention facilities in this district. No changes to this land use are shown in the Comprehensive Plan.

Future Land Use

District 16 consists of numerous open spaces, including wetlands, a County park, City park systems, cemetery space, and St. Paul Water Works property. The primary focus of land-use planning for this district is to preserve open space and sustain residential areas.

The Plan seeks to strengthen the viability of Rice Street for retail, service, and office businesses.

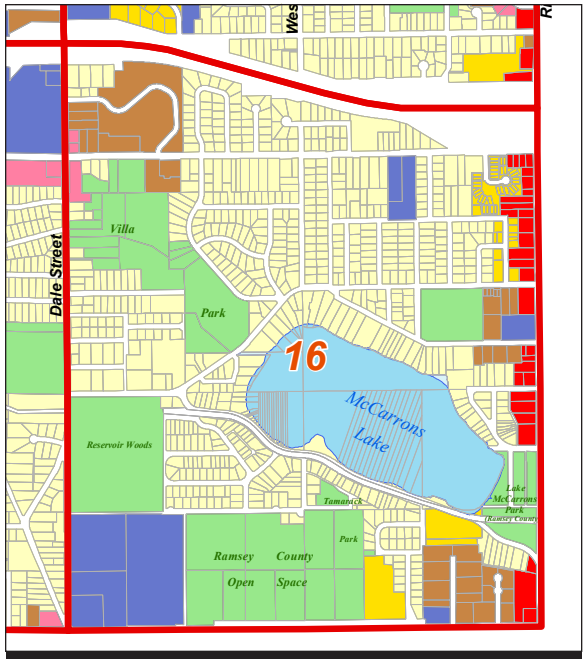


Existing Land Use - Planning District 16

Figure 4.33

Existing Land Use Map

- Single Family Detached
- Single Family Attached
- Manufactured Housing Park
- Multi Family
- Common Areas
- Business/Retail
- Office
- Light Industrial
- Heavy Industrial
- Institutional
- Parks and Open Space
- Right of Way
- Railroad
- Vacant
- Vacant Developable
- Water
- Planning District



Future Land Use - Planning District 16

Figure 4.34

Proposed 2030 Future Land Use Plan Map

Residential
- LR - Low Density Residential
- MR - Medium Density Residential
- HR - High Density Residential

Mixed Use
- CMU - Community Mixed Use
- BP - Business Park

Commercial
- NB - Neighborhood Business
- CB - Community Business
- RB - Regional Business
- O - Office

Industrial
- RR - Railroad
- I - Industrial

Public / Institutional
- IN - Institutional
- POS - Park & Open Space
- GC - Golf Course
- ROW - Right of Way
- W - Water Ponding
- Lake

- Planning District
- Twin Lakes Parkway
- City Boundary

5 Transportation

Introduction

Transportation networks are composed of a combination of infrastructure and public policies that facilitate the movement of people and products. This section provides information regarding the current transportation network within Roseville. In addition, this section provides guidance for decision makers regarding investment opportunities related to the maintenance and enhancement of the transportation network.

Roseville is located in Ramsey County and shares common borders with Minneapolis, St. Anthony, New Brighton, Arden Hills, Shoreview, Little Canada, Maplewood, St. Paul, Falcon Heights, and Lauderdale. Roseville is connected with these surrounding communities through a number of freeways and other arterials, primarily I-35W, TH 280, TH 36, and TH 51 (Snelling Avenue N). The expansion of the metropolitan region north and east of Roseville has added to the traffic congestion along these and other transportation corridors. In addition, Roseville is served by a somewhat modified grid of streets extending across most of the city. These streets include W Larpenteur Avenue, County Road B, County Road B2, County Road C, Cleveland Avenue N, Fairview Avenue N, Hamline Avenue N, Lexington Avenue N, Victoria Avenue N, Dale Street N, and Rice Street N.

Roseville is a fully developed suburb with an established roadway system. In the coming decades, Roseville will have limited opportunities for the construction of new roads. In addition, Roseville will have limited opportunities to expand existing roadways within fully developed areas. Yet the demand for transportation is likely to continue to increase. Creative deployment of additional transit options and infrastructure, the implementation of innovative technologies to increase roadway capacity, and policies supporting and encouraging the use of non-motorized transportation are likely to play an increasing role in Roseville's transportation system.

Residents and businesses are impacted by traffic congestion, particularly during peak periods. Many commuters from the north traveling to Minneapolis or St. Paul for employment must pass through Roseville. As the freeways and major arterials become congested, it becomes increasingly likely that drivers will divert onto local residential streets that are not intended to accommodate large volumes of through traffic.

This transportation plan is needed to meet Metropolitan Council and State planning requirements while addressing local transportation needs for sustainable and cost-effective street, transit, freight, bicycle, and pedestrian improvements. The goals, policies, and strategies identified in this chapter provide transportation choices for residents, employees, visitors, and companies doing business in Roseville. The ideas provide opportunities that can make walking, cycling, and using transit more convenient and economical alternatives to traditional automobile travel. This chapter supports a balanced transportation system that fosters neighborhood connectivity and promotes economic development, while not detracting from community values.

The Transportation chapter of the Comprehensive Plan consists of the following elements:

- Goals and Policies
- Sustainable Transportation
- Existing Transportation Conditions
- Existing Transit Service
- Planning Context - Studies, Projects, Issues
- Future Transportation System
- Implementation Plans and Recommendations

Goals and Policies

Residents and businesses must be provided with transportation facilities and services that meet their needs in a safe and efficient manner. Transportation facilities, at the same time, need to be planned and constructed so as to minimize negative social, environmental, and aesthetic impacts. In addition, residents who cannot or choose not to drive need to have safe and efficient transportation options. The following section lists specific transportation goals and corresponding transportation policies.

Goal 1: Coordinate transportation decisions with other government entities and coordinate planning efforts to ensure connectivity of regional routes.

Policy 1.1: Continue to cooperate with County and State transportation departments, Metropolitan Council, and neighboring communities to achieve orderly and timely development of existing and proposed roadway, pathway, and transit routes serving the city.

Policy 1.2: Coordinate all street planning with county, state, and federal road plans; work cooperatively with MnDOT and Ramsey County to improve landscaping, screening, lighting, and maintenance of through-city roadway systems, especially TH 36.

Policy 1.3: Cooperate with State and Federal agencies and railroad companies to enhance safety at all highway, railroad, and pedestrian crossings.

Policy 1.4: Provide notification to the Federal Aviation Agency (FAA) using FAA Form 7460, as may be amended, and the Minnesota Department of Transportation, Aeronautics Division, when any construction or alteration of an object would affect general airspace, as defined in Minnesota Statutes 360."

Goal 2: Create a sustainable transportation network by encouraging more efficient use of existing roadways and limiting the need for future roadway expansion.

Policy 2.1: Promote non-motorized transportation and transit as reasonable alternatives to driving.

Policy 2.2: Promote travel demand management (TDM) strategies to achieve greater efficiency of the existing roadway network.

Policy 2.3: Ensure that the transportation network responds to changing transportation technologies and modes.

Goal 3: Create a safe and efficient roadway network, able to accommodate the existing and projected demand for automobile capacity and to reduce roadway congestion.

Policy 3.1: System-wide transportation capacity should be achieved by using a high level of network connectivity, appropriately spaced and properly sized thoroughfares, and multiple travel modes, rather than by increasing the capacity of individual thoroughfares.

Policy 3.2: Channel major traffic volumes onto community collector streets, arterials, and highways and discourage motorized traffic from passing through residential areas on local streets.

Policy 3.3: Identify, evaluate, and correct problems of congestion in high-traffic areas and recurrent accident sites.

Policy 3.4: Encourage the use of intelligent transportation systems (ITS) to mitigate capacity issues and increase efficiency and safety of the existing roadway network.

Policy 3.5: Create and/or upgrade the major thoroughfare systems to multiple traffic lanes when warranted by traffic conditions.

Policy 3.6: Develop streets according to their designated functional class; pavement width, load capacity, and continuity of the street must recognize the function for which the street is intended.

Policy 3.7: Maintain high-quality neighborhoods through the ongoing City Pavement Management Program to rehabilitate or reconstruct city streets.

Goal 4: Promote the use of transit as a reasonable alternative to driving automobiles during both congested and non-congested time periods through land-use and transportation decisions.

Policy 4.1: Cooperate with and assist the Regional Transit Board (RTB) to provide effective transit service to all areas of the city.

Policy 4.2: Support Metro Transit as a primary transit provider for the city.

Policy 4.3: Advocate planning and development of the Northeast Diagonal Transit Corridor.

Policy 4.4: Support the Rosedale Transit Hub and Snelling Avenue Transit Corridor and examine the feasibility of adding transit mini-hubs in other areas of the city.

Policy 4.5: Encourage the development of park-and-rides to reduce congestion on arterials throughout Roseville.

Policy 4.6: Clearly mark bus stops and provide adequate space for buses to pull out of the moving traffic lane for loading and unloading.

Policy 4.7: Provide adequate and attractive pedestrian access to bus stops by expanding the existing network of sidewalks as recommended in the Pathway Master Plan.

Policy 4.8: Encourage transit-supportive development along existing and future transit corridors.

Policy 4.9: Provide input into the rail corridor planning and abandonment processes; if rails are removed, the corridors should be preserved for public uses, such as transit or pathways, and in the event of rail line abandonment, an appropriate public agency should acquire the land for public purposes.

Policy 4.10: Play an active role in planning for potential transitways and preserving potential rights-of-way and station locations.

Goal 5: Encourage the use of non-motorized transportation by providing a high-quality network of both off-road and on-road pathways, and ensure that bicycle and pedestrian routes are safe, efficient, and attractive.

Policy 5.1: Recognize the needs and preferences of pedestrians and cyclists with various skill, experience levels, and purpose by providing a wide range of facilities to accommodate commuter, functional, and recreational trips.

Policy 5.2: Create and/or upgrade on-road bicycle facilities, where feasible, to ensure the safety of cyclists and improve the efficiency of the bicycle network.

Policy 5.3: Aggressively expand Roseville's off-road pathway system.

Policy 5.4: Update the Pathways Master Plan as needed.

Sustainable Transportation

"Sustainability" is increasingly being embraced by communities throughout the metro area; however, there are differing definitions of what sustainability entails. For the purposes of this transportation plan, sustainability means conducting an activity or providing a service in a manner that minimizes the consumption of natural resources. Sustainability also includes understanding–and planning for–the full social, environmental, and economic costs associated with transportation and land-use decisions. From a transportation perspective, sustainable goals that Roseville strives for are as follows:

1. General Planning: Coordinate land-use and transportation planning so that the transportation system efficiently and effectively supports existing and anticipated development. Mixed-use developments, when compared with equally sized developments where land uses are strictly separated, can slow the growth of vehicular trips. Encouraging higher residential densities, where appropriate, can provide the "critical mass" of activity necessary to support increased transit use. However, increasing residential densities and commercial land-use

intensity to encourage transit use and reduce automobile congestion are often competing objectives. For this reason, coordination of land-use and transportation planning is critical.

2. Transportation Choices and Roadway Needs: Reduce traditional, single-occupancy motorized travel through Transportation Demand Management (TDM), increased non-motorized travel, and transit. This approach has two benefits. First, it limits the consumption of fuel by single-occupant vehicles and associated air emissions. Second, it can reduce the demand for added roadway capacity, allowing roadway "footprints" and impacts to be minimized. TDM, non-motorized transportation, and transit considerations will be discussed in greater detail in this chapter. Encourage telecommuting through the development of technology infrastructure.
3. Appropriate Roadway Design: Plan and design roadways using best professional practices, including functional classification, sound transportation and engineering practices, access management guidelines, and other proven tools to provide transportation facilities that have good operational and safety characteristics.
4. Sustainable Practices: Employ reuse/recycling, procurement measures, and facility maintenance practices pertaining to transportation that limit the use of resources. This includes reuse/recycling of roadway materials as part of reconstruction projects, evaluation of alternative fuel vehicles for City fleets, and other measures.

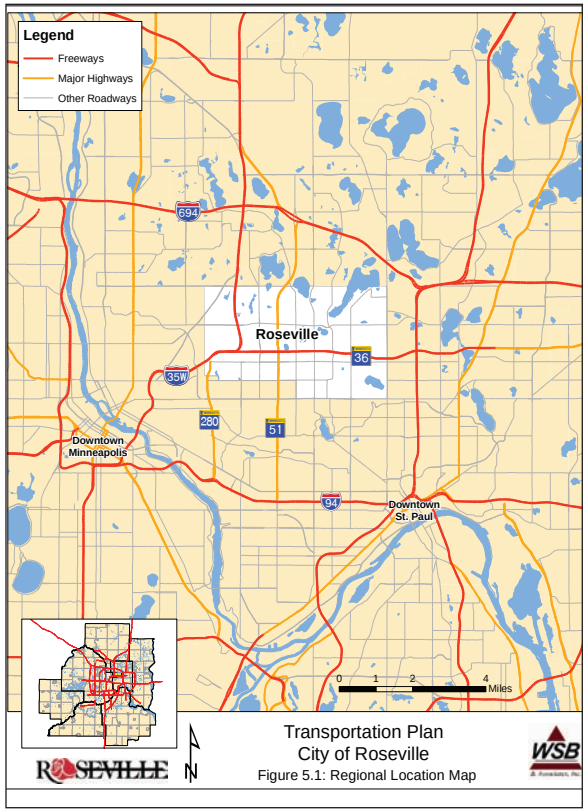


Figure 5.1: Regional Location Map

Existing Transportation Conditions

Roadway Overview

Roseville is depicted in Figure 5.1 (Regional Location Map). It is located within the I-694 beltway. Important regional roadways that pass through or adjacent to the city include I-35W, TH 280, TH 36, and Snelling Avenue N. Figure 5.2 (Existing (2006) Daily Traffic Volumes) displays the current roadway system and the 2006 daily traffic volumes. Figure 5.3 (Existing (2008) Number of Lanes) displays the number of lanes on each roadway segment.

Jurisdictional Classification

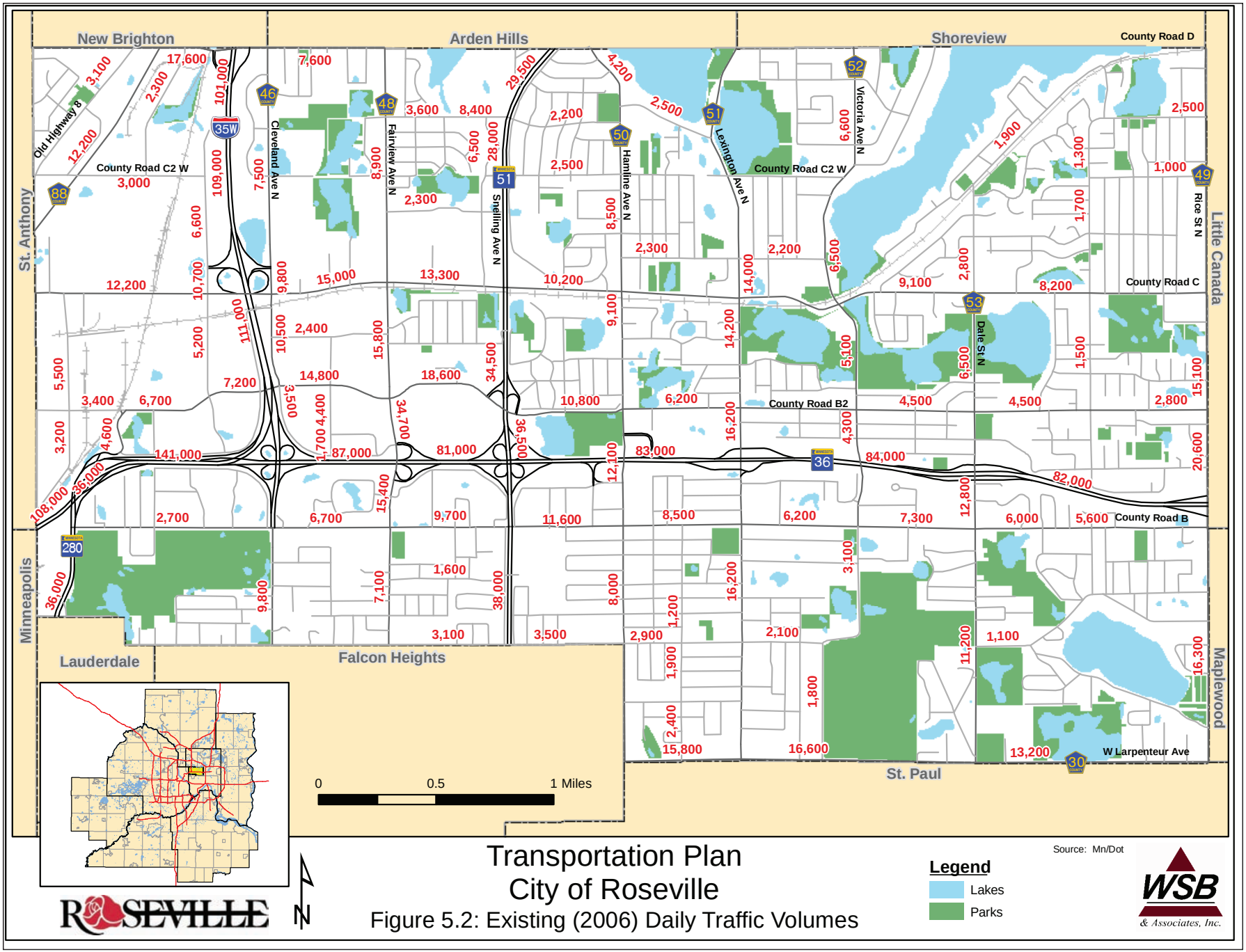
Jurisdiction over the roadway system in Roseville is shared among three levels of government: the State of Minnesota, Ramsey County, and Roseville. The Minnesota Department of Transportation (MnDOT) maintains the interstate and trunk highway systems. Ramsey County maintains the County State Aid Highway (CSAH) and County Road Systems, aside from a few, short private streets. The remaining streets and roadways are the responsibility of Roseville, including Municipal State Aid (MSA) streets. Over 19% of the land area in the city is used for right-of-way. Since the municipal boundaries separating Roseville from adjacent cities often lie within a roadway right-of-way, partnership with adjacent cities is required to coordinate maintenance of these roadways. Figure 5.4 (Roadway Jurisdictional Classification) displays the jurisdictional classification of each roadway within Roseville. Table 5.1 displays the number of roadway miles associated with each jurisdictional class.

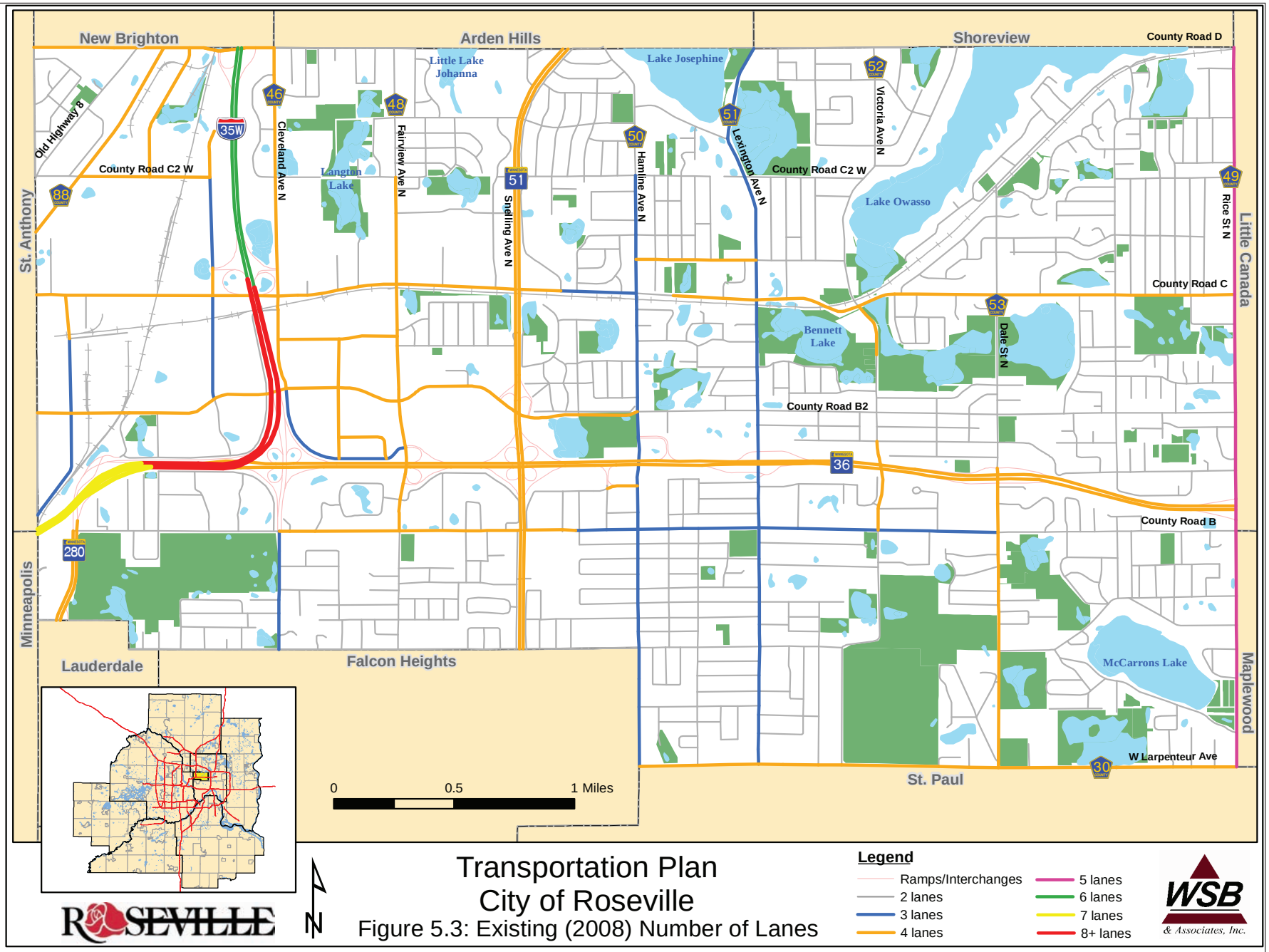
Jurisdictional Classification	Miles	Percent of Total Miles
State of Minnesota	10.6	6.2%
Ramsey County	37.9	22.1%
City of Roseville (MSA)	28.9	16.8%
City of Roseville	94.4	54.9%
TOTAL	171.8	100.0%

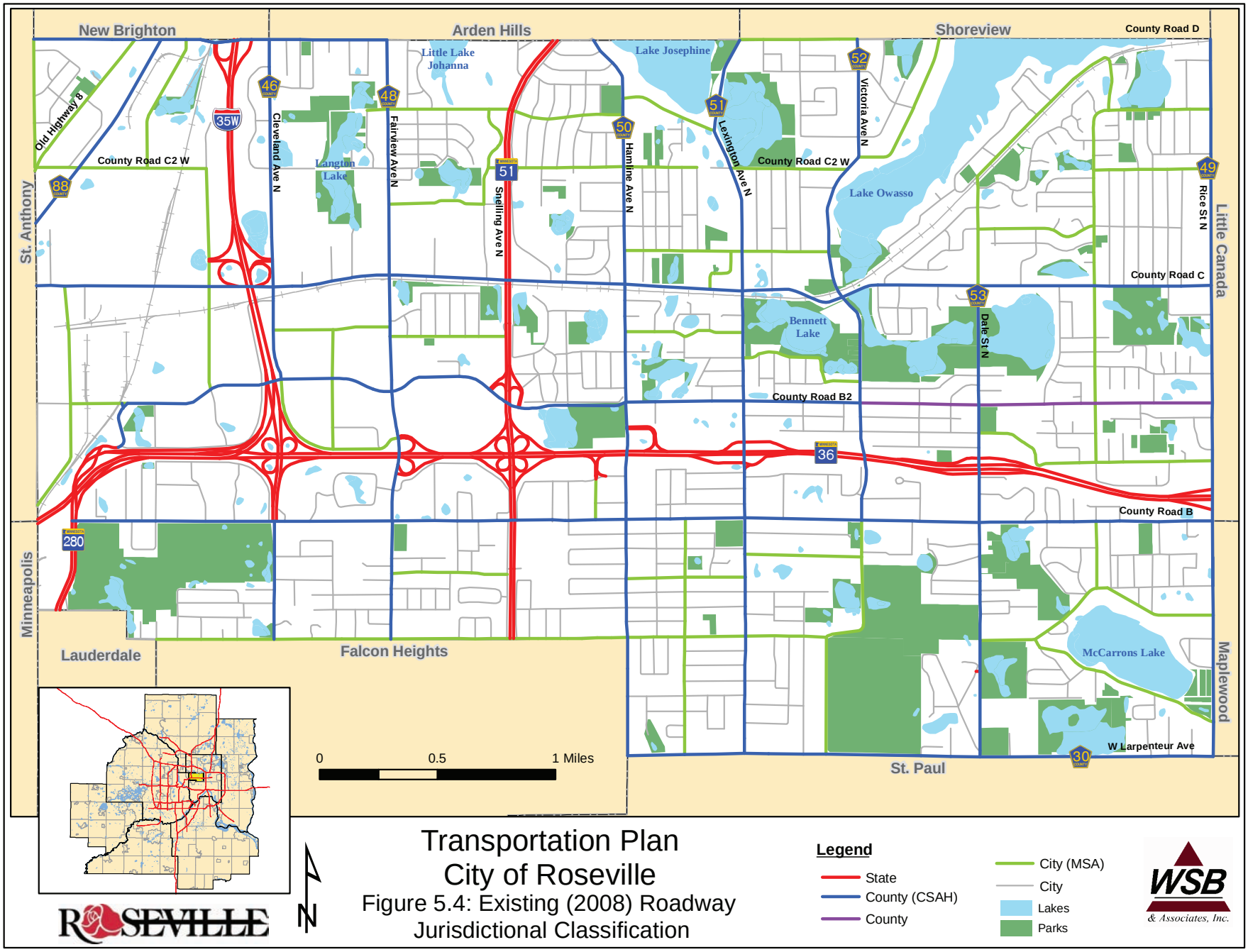
Source: City of Roseville, Metropolitan Council, WSB & Associates, Inc.

Existing (2008) Roadway Miles by Jurisdictional Classification

Table 5.1


New Brighton
Arden Hills
Shoreview
County Road D
St. Anthony
Little Canada
Minneapolis
Lauderdale
Falcon Heights
St. Paul
Maplewood
Old Highway 8
County Road C2 W
Cleveland Ave N
Fairview Ave N
Snelling Ave N
Hamline Ave N
Lexington Ave N
Victoria Ave N
Rice St N
County Road C
Dale St N
County Road B2
County Road B
W Larpenteur Ave
0
0.5
1 Miles
Legend
Lakes
Parks
Source: Mn/Dot
Transportation Plan
City of Roseville
Figure 5.2: Existing (2006) Daily Traffic Volumes
ROSEVILLE
WSB & Associates, Inc.


New Brighton
Arden Hills
Shoreview
St. Anthony
Little Canada
Minneapolis
Lauderdale
Falcon Heights
St. Paul
Maplewood
Little Lake Johanna
Lake Josephine
Langton Lake
Bennett Lake
Lake Owasso
McCarrons Lake
Old Highway 8
County Road C2 W
Cleveland Ave N
Fairview Ave N
Snelling Ave N
Hamline Ave N
Lexington Ave N
Victoria Ave N
County Road D
Rice St N
County Road C
Dale St N
County Road B2
County Road B
W Larpenteur Ave
35W
36
280
0
0.5
1 Miles
Legend
Ramps/Interchanges
2 lanes
3 lanes
4 lanes
5 lanes
6 lanes
7 lanes
8+ lanes
Transportation Plan
City of Roseville
Figure 5.3: Existing (2008) Number of Lanes
ROSEVILLE
WSB & Associates, Inc.


New Brighton
Arden Hills
Shoreview
St. Anthony
Little Canada
Minneapolis
Lauderdale
Falcon Heights
St. Paul
Maplewood
Little Lake Johanna
Lake Josephine
Langton Lake
Lake Owasso
Bennett Lake
McCarrons Lake
Old Highway 8
County Road C2 W
County Road D
County Road C
County Road B2
County Road B
W Larpenteur Ave
Cleveland Ave N
Fairview Ave N
Snelling Ave N
Hamline Ave N
Lexington Ave N
Victoria Ave N
Rice St N
Dale St N
35W
51
36
280
0
0.5
1 Miles
Transportation Plan
City of Roseville
Figure 5.4: Existing (2008) Roadway
Jurisdictional Classification
Legend
State
County (CSAH)
County
City (MSA)
City
Lakes
Parks
ROSEVILLE
WSB
& Associates, Inc.

Roseville continually upgrades the local road system according to its Pavement Management Program. The purpose of the program is to ensure the most efficient use of public funds through scheduled roadway maintenance and the strategic investment in roadway reconstruction projects. There is considerable input from local residents and other stakeholders in this program.

Functional Classification System

The purpose of a functional classification system is to create a hierarchy of roads that collect and distribute traffic from neighborhoods to the metropolitan highway system based on the principles of access and mobility. Access describes the extent to which a roadway allows users to reach destinations on adjacent land, while mobility describes the extent to which a roadway accommodates through traffic. All roadways provide a mixture of access and mobility based on the design features of the roadway and the surrounding land uses. Within the functional classification framework, roads are located and designed to provide the designated levels of access and mobility.

The functional classification system used in Roseville conforms to the Metropolitan Council standards. The Metropolitan Council has published these criteria in its Transportation Development Guide/Policy Plan. This guide separates roadways into four primary classifications: principal arterials, minor arterials, collectors, and local roadways. These classifications address the function of state, county, and city streets from a standpoint of maximizing the safety and efficiency of traffic movement through the city while providing satisfactory access to residents and businesses.

Figure 5.5 (Existing (2008) Roadway Functional Classification) displays the existing functional classes of roadways in Roseville. Table 5.2 displays the number of miles of roadway in Roseville by functional classification.

Principal Arterials

Principal arterials are the highest roadway classification and are considered part of the metropolitan highway system. Principal arterials include all Interstate freeways and other limited access facilities designed to maximize traffic mobility and safety. These roadways are intended to connect the metropolitan centers with one another and to connect major business concentrations. Parallel facilities are typically spaced two to three miles apart, and interchanges are usually spaced at least one mile apart. Principal arterials place emphasis on mobility and provide very little , if any, access to adjacent land. They connect only with other principal arterials and select minor arterials and collectors.

In Roseville, there are three principal arterials: I-35W, TH 36, and TH 280. These facilities are envisioned to continue functioning as principal arterials for the planned future of Roseville. Table 5.3 lists the principal arterials located within Roseville and quantifies daily traffic volumes.

Functional Classification	Miles	Percent of Total Miles
Principal Arterial	8.8	3.5%
A Minor Augmentor Arterial	9.1	3.6%
A Minor Reliever Arterial	16.2	6.5%
B Minor Arterial	14.1	5.6%
Collector Roadways	10.1	4.0%
Local Roadways	192.4	76.8%
TOTAL	250.7	100.0%

Source: City of Roseville, Metropolitan Council, WSB & Associates, Inc.

Existing (2008) Roadway Miles by Functional Classification

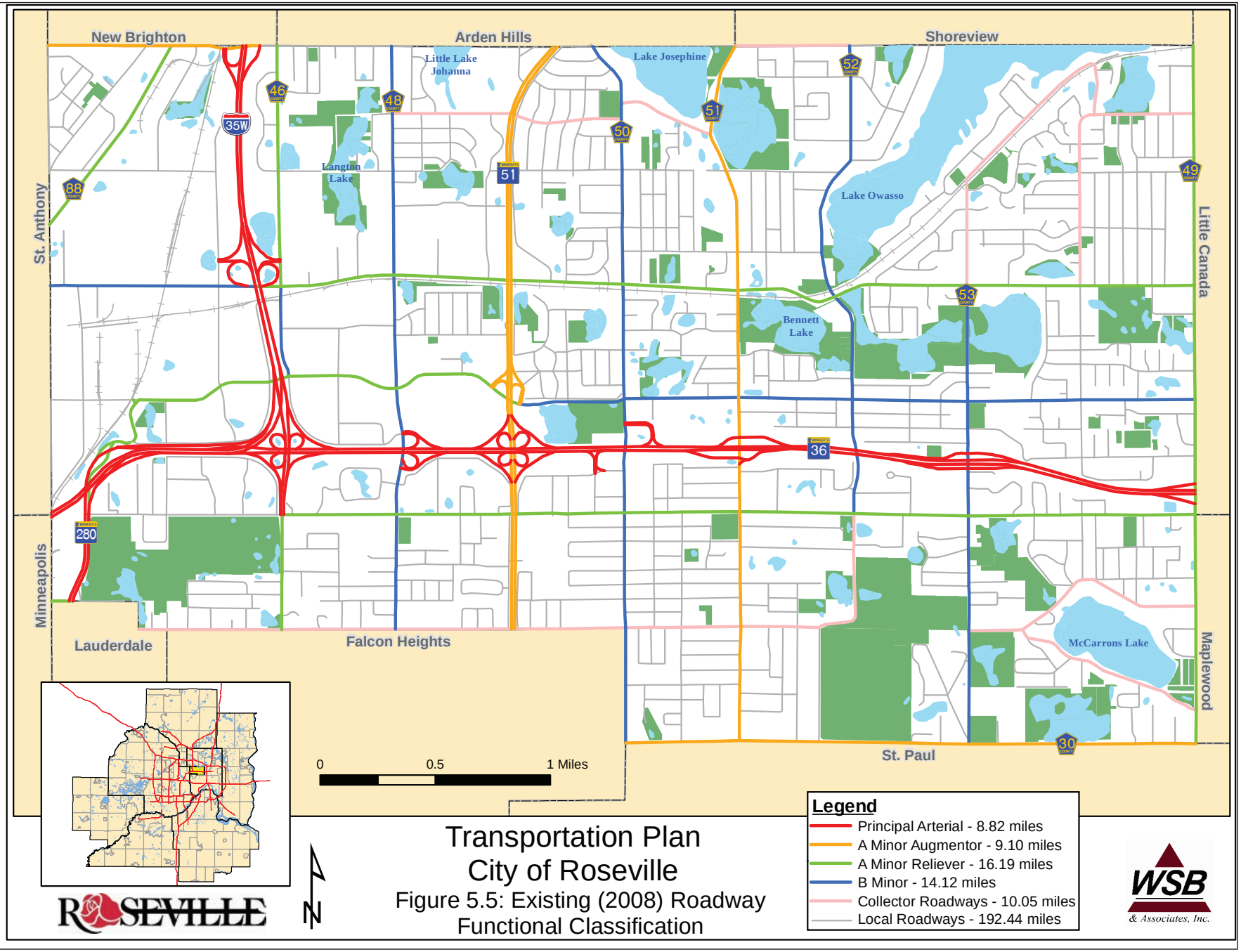
Table 5.2

Roadway	From	To	Lanes	2006 Daily Traffic Volumes
I-35W	West City Limits	TH 280	7	108,000
I-35W	TH 280	Cleveland Ave. (CSAH 46)	9	141,000
I-35W	TH 36	County Road C	8	111,000
I-35W	County Road C	County Road D	6	109,000
TH 280	South City Limits	I-35W	4	36,000
TH 36	I-35W	Fairview Ave. (CSAH 48)	4	87,000
TH 36	Fairview Ave. (CSAH 48)	Snelling Ave. (TH 51)	4	81,000
TH 36	Snelling Ave. (TH 51)	Lexington Ave. (CSAH 51)	4	83,000
TH 36	Lexington Ave. (CSAH 51)	Dale St. (CSAH 53)	4	84,000
TH 36	Dale St. (CSAH 53)	Rice St. (CSAH 49)	4	82,000

SOURCE: Mn/DOT, City of Roseville, WSB & Associates, Inc.

Principal Arterial Roadways - Existing Characteristics

Table 5.3



Transportation Plan
City of Roseville
Figure 5.5: Existing (2008) Roadway Functional Classification

ROSEVILLE

WSB & Associates, Inc.

Roadway	From	To	Lanes	2006 Daily Traffic Volumes
Snelling Ave. (TH 51)	Roselawn Ave.	County Road B	4	38,000
Snelling Ave. (TH 51)	County Road B	TH 36	4	38,000
Snelling Ave. (TH 51)	TH 36	County Road B2	4	36,500
Snelling Ave. (TH 51)	County Road B2	County Road C	4	34,500
Snelling Ave. (TH 51)	County Road C	North City Limits	4	28,000-29,500
Lexington Ave. (CSAH 51)	Larpenteur Ave. (CSAH 30)	County Road B	3-4	16,200
Lexington Ave. (CSAH 51)	County Road B	County Road B2	3	16,200
Lexington Ave. (CSAH 51)	County Road B2	County Road C	3	14,200
Lexington Ave. (CSAH 51)	County Road C	North City Limits	3	14,000
Larpenteur Ave. (CSAH 30)	Hamline Ave. (CSAH 50)	Lexington Ave. (CSAH 51)	4	15,800
Larpenteur Ave. (CSAH 30)	Lexington Ave. (CSAH 51)	Dale St. (CSAH 53)	4	16,600
Larpenteur Ave. (CSAH 30)	Dale St. (CSAH 53)	Rice St. (CSAH 49)	4	13,200
County Road D	West City Limits	New Brighton Blvd. (CSAH 88)	4	18,400
County Road D	New Brighton Blvd. (CSAH 88)	I-35W	4	17,600

SOURCE: Mn/DOT, City of Roseville, WSB & Associates, Inc.

A Minor Augmentor Arterials - Existing Characteristics

Table 5.4

Minor Arterials

Minor arterials place emphasis on mobility within the metropolitan area. Minor arterials should connect to principal arterials, other minor arterials, and collector roadways, though limited connection to local roadways is acceptable. Minor arterials within Roseville have been further classified into A minor (reliever), A minor (augmentor), and B minor arterials. A minor (augmentor) arterials are found only within the I-494/694 beltway and are intended to serve medium to long trips where principal arterials do not exist. A minor (reliever) arterials are typically aligned roughly parallel to principal arterials and accommodate overflow traffic from congested principal arterials. A minor arterials are eligible for federal funding to help fund improvements.

Roadway	From	To	Lanes	2006 Daily Traffic Volumes
New Brighton Blvd. (CSAH 88)	West City Limits	North City Limits	4	12,200
County Road B	Cleveland Ave. (CSAH 46)	Fairview Ave. (CSAH 48)	4	6,700
County Road B	Fairview Ave. (CSAH 48)	Snelling Ave. (TH 51)	4	9,700
County Road B	Snelling Ave. (TH 51)	Hamline Ave. (CSAH 50)	3-4	11,600
County Road B	Hamline Ave. (CSAH 50)	Lexington Ave. (CSAH 51)	3	8,500
County Road B	Lexington Ave. (CSAH 51)	Victoria Ave. N	3	6,200
County Road B	Victoria Ave. N	Dale St. (CSAH 53)	3	7,300
County Road B	Dale St. (CSAH 53)	Rice St. (CSAH 49)	2-4	5,600-6,000
St. Croix Street	TH 280	Terminal Road	4	4,600
Terminal Road	St. Croix Street	Long Lake Road	4	6,700
County Road B2	Long Lake Road	Cleveland Ave. (CSAH 46)	4	7,200
County Road B2	Cleveland Ave. (CSAH 46)	Fairview Ave. (CSAH 48)	4	14,800
County Road B2	Fairview Ave. (CSAH 48)	Snelling Ave. (TH 51)	4	18,600
County Road C	Cleveland Ave. (CSAH 46)	Fairview Ave. (CSAH 48)	4	15,000
County Road C	Fairview Ave. (CSAH 48)	Snelling Ave. (TH 51)	4	13,300
County Road C	Snelling Ave. (TH 51)	Hamline Ave. (CSAH 50)	3-4	10,200
County Road C	Hamline Ave. (CSAH 50)	Lexington Ave. (CSAH 51)	2-4	10,200
County Road C	Lexington Ave. (CSAH 51)	Victoria St. (CSAH 52)	4	9,100
County Road C	Victoria St. (CSAH 52)	Dale St. (CSAH 53)	4	9,100
County Road C	Dale St. (CSAH 53)	Rice St. (CSAH 49)	4	8,200
Cleveland Ave. (CSAH 46)	Roselawn Ave.	County Road B	3	9,800
Cleveland Ave. (CSAH 46)	County Road C	County Road D	4	7,500-9,800
Rice St. (CSAH 49)	Larpenteur Ave. (CSAH 30)	County Road B	3	16,300
Rice St. (CSAH 49)	County Road B	County Road B2	3	20,600
Rice St. (CSAH 49)	County Road B2	County Road C	3	15,100
Rice St. (CSAH 49)	County Road C	North City Limits	3	15,900

SOURCE: Mn/DOT, City of Roseville, WSB & Associates, Inc.

A Minor Reliever Arterials - Existing Characteristics

Table 5.5

Roadway	From	To	Lanes	2006 Daily Traffic Volumes
Fairview Ave. (CSAH 48)	County Road B	TH 36	4	15,400
Fairview Ave. (CSAH 48)	TH 36	County Road B2	4	34,700
County Road B	TH 280	Cleveland Ave. (CSAH 46)	2	2,700
County Road B2	Snelling Ave. (TH 51)	Hamline Ave. (CSAH 50)	4	10,800
County Road B2	Hamline Ave. (CSAH 50)	Lexington Ave. (CSAH 51)	2	6,200
County Road B2	Lexington Ave. (CSAH 51)	Victoria St. (CSAH 52)	2	6,200
County Road B2	Victoria St. (CSAH 52)	Dale St. (CSAH 53)	2	4,500
County Road B2	Dale St. (CSAH 53)	Western Ave.	2	4,500
County Road B2	Western Ave.	Rice St. (CSAH 49)	2	2,800
County Road C	West City Limits	Cleveland Ave. (CSAH 46)	4	12,200
County Road D	Cleveland Ave. (CSAH 46)	Fairview Ave. (CSAH 48)	2	7,600
Cleveland Ave. (CSAH 46)	County Road B2	County Road C	3-4	10,500
Fairview Ave. (CSAH 48)	Roselawn Ave.	County Road B	2	7,100
Fairview Ave. (CSAH 48)	County Road B2	County Road C	4-5	15,800
Fairview Ave. (CSAH 48)	County Road C	County Road D	2-4	8,900
Hamline Ave. (CSAH 50)	Larpenteur Ave. (CSAH 30)	County Road B	3	8,000
Hamline Ave. (CSAH 50)	County Road B	County Road C	3	9,100
Hamline Ave. (CSAH 50)	County Road C	North City Limits	3	4,200-8,500
Victoria St. (CSAH 52)	County Road B	County Road B2	2-4	4,300
Victoria St. (CSAH 52)	County Road B2	County Road C	2-4	5,100
Victoria St. (CSAH 52)	County Road C	North City Limits	2	6,500-6,600
Dale St. (CSAH 53)	Larpenteur Ave. (CSAH 30)	County Road B	4	11,200
Dale St. (CSAH 53)	County Road B	County Road B2	4	12,800
Dale St. (CSAH 53)	County Road B2	County Road C	2	6,500

SOURCE: Mn/DOT, City of Roseville, WSB & Associates, Inc.

B Minor Arterials - Existing Characteristics
Table 5.6

Roadway	From	To	Lanes	2006 Daily Traffic Volumes
Roselawn Ave.	West City Limits	Snelling Ave. (TH 51)	2	3,100
Roselawn Ave.	Snelling Ave. (TH 51)	Hamline Ave. (CSAH 50)	2	3,500
Roselawn Ave.	Hamline Ave. (CSAH 50)	Lexington Ave. (CSAH 51)	2	2,900
Roselawn Ave.	Lexington Ave. (CSAH 51)	Victoria St. (CSAH 52)	2	2,100
Roselawn Ave.	Dale St. (CSAH 53)	McCarron Blvd.	2	1,100
Victoria St. (CSAH 52)	Roselawn Ave.	County Road B	2	3,100
Lydia Ave W	Fairview Ave. (CSAH 48)	Snelling Ave. (TH 51)	2	3,600-8,400
Lydia Ave W	Snelling Ave. (TH 51)	Hamline Ave. (CSAH 50)	2	2,200
Josephine Road	Hamline Ave. (CSAH 50)	Lexington Ave. (CSAH 51)	2	2,500
Dale St. (CSAH 53)	County Road C	S Owasso Blvd.	2	2,800
S Owasso Blvd.	Dale St. (CSAH 53)	S Owasso Blvd.	2	1,900
S Owasso Blvd.	Western Ave N	Rice St. (CSAH 49)	2	2,600
Western Ave N.	County Road C	S Owasso Blvd.	2	1,300-1,700

SOURCE: Mn/DOT, City of Roseville, WSB & Associates, Inc.

Collector Roadways - Existing Characteristics
Table 5.7

Tables 5.4 and 5.5 list the A minor (augmentor) and A minor (reliever) roadways within Roseville.

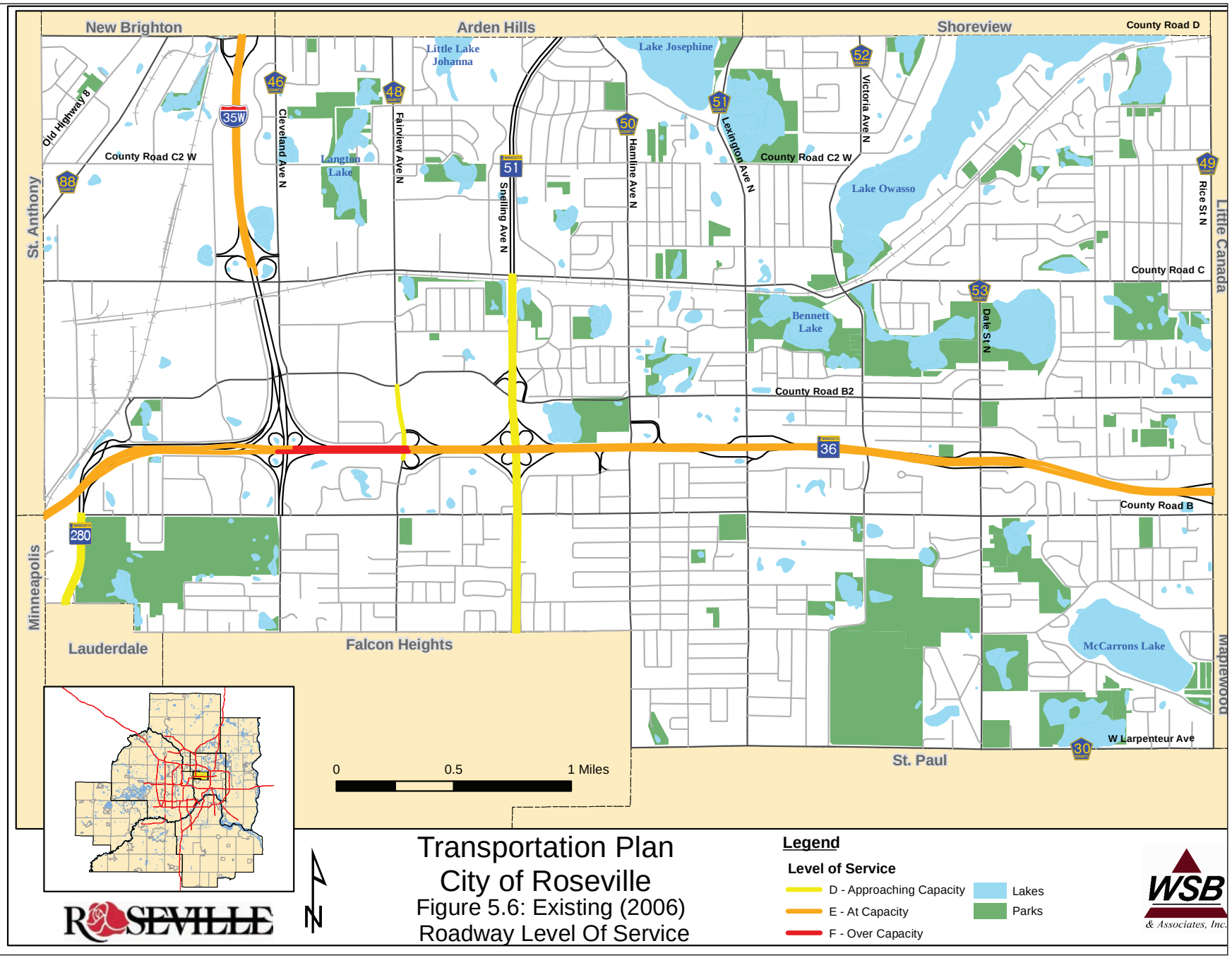
All other minor arterials are considered B minor arterials. B minor arterials serve the same functions as A minor arterials, but are not eligible for federal funding. The B minor arterial roadways within Roseville are summarized in Table 5.6.

Collector Roadways

The collector system provides connections between neighborhoods. Collector roadways are designed to serve shorter trips that can reasonably be completed without utilizing roads with a higher classification, and to move traffic from local neighborhoods to roadways of higher classification. Collectors also provide supplementary interconnections of major traffic generators within the metro centers and regional business concentrations. Mobility and access are equally important. Collector roadways are typically spaced at one-half mile intervals within developed areas. Collector roadways are summarized in Table 5.7.

Local Streets

The local street network provides the most access and the least mobility within the overall functional classification system. Local streets provide access to individual homes and businesses, but are not intended to efficiently accommodate through traffic. Through


New Brighton
Arden Hills
Shoreview
St. Anthony
Minneapolis
Lauderdale
Falcon Heights
St. Paul
Little Canada
Maplewood
Little Lake Johanna
Lake Josephine
Langton Lake
Lake Owasso
Bennett Lake
McCarrons Lake
Old Highway 8
County Road C2 W
County Road D
County Road C
County Road B2
County Road B
W Larpenteur Ave
Cleveland Ave N
Fairview Ave N
Snelling Ave N
Hamline Ave N
Lexington Ave N
Victoria Ave N
Rice St N
Dale St N
35W
280
36
0
0.5
1 Miles
N
Transportation Plan
City of Roseville
Figure 5.6: Existing (2006)
Roadway Level Of Service
Legend
Level of Service
D - Approaching Capacity
E - At Capacity
F - Over Capacity
Lakes
Parks
ROSEVILLE
WSB
& Associates, Inc.

traffic should be discouraged from using local roads by using an appropriate combination of geometric designs, traffic control devices, and policies.

Existing (2006) Capacity Analysis

In general, the capacity of a roadway is a measure of its ability to accommodate a certain volume of moving vehicles. Segment level of service (LOS) refers to a quantitative comparison between an existing traffic volume and the maximum volume of traffic the roadway can accommodate in its present configuration. It should be noted that this level of analysis, typically referred to as a Planning Level Analysis, is not detailed intersection or site-specific analysis, and does not replace the need for a delay-based analysis, typically referred to as an Operations Analysis, to evaluate specific developments within smaller geographic areas. For clarification, each of these types of analyses is described in the following paragraphs.

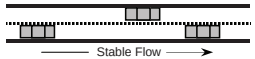
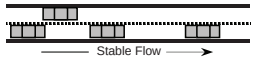
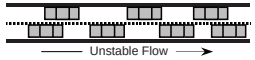
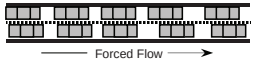
Planning Level of Service

For the purpose of this study, a planning level of service (LOS) was used. Planning level of service compares volume-to-capacity (v/c) ratios, which correlate to a LOS letter grade. Using a capacity threshold equivalent to the D/E boundary, per MnDOT guidelines, provides an indication of whether a roadway is operating with excess capacity, at capacity, or over capacity. When the v/c ratio is below 1.00, the roadway is considered to be operating at an acceptable LOS. When the roadway is operating at or above 1.00, the roadway is considered to be operating at capacity or over capacity. The more the v/c ratio exceeds 1.00, the greater the traffic congestion. Table 5.8 contains a summary of generalized traffic thresholds for specific roadway types, LOS, and number

Facility Type	Number of Lanes	Level of Service Threshold *(upper capacity limits)*					
					Approaching Capacity	At-Capacity	Over-Capacity
		A	B	C	D	E	F
Interstate / Freeway	8	46,000	73,000	109,000	140,000	170,000	> 170,000
	6	34,000	55,000	82,000	105,000	127,000	> 127,000
	4	17,000	37,000	55,000	70,000	85,000	>85,000
Divided Arterial / Expressway	6	22,000	35,000	56,000	63,000	70,000	>70,000
	4	15,000	23,000	37,000	42,000	47,000	>47,000
Divided Minor Arterial	6	18,000	28,000	42,000	51,000	59,000	>59,000
	5	16,000	25,000	40,000	45,000	50,000	>50,000
	4	12,000	19,000	30,000	36,000	42,000	>42,000
	3	8,000	13,000	20,000	27,000	34,000	>34,000
	2	5,000	8,000	12,000	18,000	24,000	>24,000
	2 (one-way)	6,000	10,000	16,000	19,000	25,000	>25,000
Undivided Minor Arterial	6	17,000	27,000	40,000	49,000	57,000	>57,000
	5	15,000	24,000	38,000	43,000	47,000	>47,000
	4	11,000	18,000	28,000	34,000	40,000	>40,000
	3	7,000	12,000	19,000	26,000	32,000	>32,000
	2	4,000	7,000	11,000	17,000	23,000	>23,000
	2 (one-way)	6,000	9,000	15,000	18,000	24,000	>24,000
Collector	4	7,000	11,000	18,000	22,000	26,000	>26,000
	3	5,000	8,000	12,000	17,000	21,000	>21,000
	2	3,000	5,000	7,000	11,000	15,000	>15,000
	2 (one-way)	4,000	6,000	9,000	12,000	16,000	>16,000

SOURCE: Highway Capacity Manual, Twin Cities Regional Travel Demand Model, and WSB & Associates, Inc.

Generalized Average Daily Traffic Thresholds
Table 5.8

Level of Service	Volume/Capacity (V/C) Ratio	Traffic Flow	Description
A	0.00 to 0.39		**FREE FLOW** Low volumes and no delays.
B	0.40 to 0.59		**STABLE FLOW** Low volumes and speeds dictated by travel conditions.
C	0.60 to 0.79		**STABLE FLOW** Speeds and maneuverability closely controlled due to higher volumes.
D	0.80 to 0.99		**RESTRICTED FLOW** Higher density traffic restricts maneuverability and volumes approaching capacity.
E	1.00 to 1.19		**UNSTABLE FLOW** Low speeds, considerable delays, and volumes at or slightly over capacity.
F	1.20 and above		**FORCED FLOW** Very low speeds, volumes exceed capacity, and long delays with stop-and-go traffic.

SOURCE: Highway Capacity Manual and WSB & Associates, Inc.

Description of LOS Categories
Table 5.9

Roadway	From	To	Volume/Capacity (V/C) Traffic Volume Range* Lower	Upper	Existing Range of LOS (2006)	
I-35W	West City Limits	TH 280	1.03	only 1 count	E	(At Capacity)
I-35W	TH 280	Cleveland Ave. (CSAH 46)	1.01	only 1 count	E	(At Capacity)
I-35W	TH 36	County Road C	0.79	only 1 count	C	(Below Capacity)
I-35W	County Road C	County Road D	1.04	only 1 count	E	(At Capacity)
TH 280	South City Limits	I-35W	0.86	only 1 count	D	(Approaching Capacity)
TH 36	I-35W	Fairview Ave. (CSAH 48)	1.24	only 1 count	F	(Over Capacity)
TH 36	Fairview Ave. (CSAH 48)	Snelling Ave. (TH 51)	1.16	only 1 count	E	(At Capacity)
TH 36	Snelling Ave. (TH 51)	Lexington Ave. (CSAH 51)	1.19	only 1 count	E	(At Capacity)
TH 36	Lexington Ave. (CSAH 51)	Dale St. (CSAH 53)	1.20	only 1 count	E	(At Capacity)
TH 36	Dale St. (CSAH 53)	Rice St. (CSAH 49)	1.17	only 1 count	E	(At Capacity)

** When the roadway segment has more than one count location, the V/C is provided for both volumes (low and high).*

SOURCE: Mn/DOT and WSB & Associates, Inc.

Principal Arterials - Existing (2006) Capacity Analysis
Table 5.10

of traffic lanes. These capacity thresholds are based on the Highway Capacity Manual and the Twin Cities Regional Travel Demand Model.

In roadway planning and design, it is undesirable to either overbuild or underbuild a facility. The goal is to build a facility that effectively and efficiently moves traffic. The design of a roadway should reflect its location. In general, people in more urban environments expect to incur some congestion during the peak hours, hence the LOS D/E capacity threshold. In rural environments, LOS C is often used as the basis for roadway planning and design, as people typically have a lower tolerance for traffic congestion. Roseville falls into the urban environment category; therefore, the LOS D/E threshold represents the appropriate design capacity for roadways.

At this LOS, traffic is generally expected to experience restricted flow only during the peak travel periods. During off-peak periods, traffic flow generally operates at LOS A to LOS C.

Table 5.9 lists the level of service categories, approximate volume-to-capacity (v/c) ratios and general descriptions of the traffic operations for each category.

The LOS for roadways in Roseville was obtained by comparing the traffic level thresholds with the most recent available daily traffic counts (2006). Figure 5.6 (Existing (2006) Roadway Level of Service) displays the results of the capacity analysis completed for the existing conditions.

Operations Analysis

In a detailed traffic analysis, an operations level of service evaluation is conducted. In this type of analysis, the focus

Roadway	From	To	Volume/Capacity (V/C) Traffic Volume Range* Lower	Upper	Existing Range of LOS (2006)	
Snelling Ave. (TH 51)	Roselawn Ave.	County Road B	0.90	only 1 count	D	(Approaching Capacity)
Snelling Ave. (TH 51)	County Road B	TH 36	0.90	only 1 count	D	(Approaching Capacity)
Snelling Ave. (TH 51)	TH 36	County Road B2	0.87	only 1 count	D	(Approaching Capacity)
Snelling Ave. (TH 51)	County Road B2	County Road C	0.82	only 1 count	D	(Approaching Capacity)
Snelling Ave. (TH 51)	County Road C	North City Limits	0.67	0.70	C	(Below Capacity)
Lexington Ave. (CSAH 51)	Larpenteur Ave. (CSAH 30)	County Road B	0.45	0.60	B	(Below Capacity)
Lexington Ave. (CSAH 51)	County Road B	County Road B2	0.60	only 1 count	B	(Below Capacity)
Lexington Ave. (CSAH 51)	County Road B2	County Road C	0.53	only 1 count	B	(Below Capacity)
Lexington Ave. (CSAH 51)	County Road C	North City Limits	0.52	only 1 count	B	(Below Capacity)
Larpenteur Ave. (CSAH 30)	Hamline Ave. (CSAH 50)	Lexington Ave. (CSAH 51)	0.44	only 1 count	B	(Below Capacity)
Larpenteur Ave. (CSAH 30)	Lexington Ave. (CSAH 51)	Dale St. (CSAH 53)	0.46	only 1 count	B	(Below Capacity)
Larpenteur Ave. (CSAH 30)	Dale St. (CSAH 53)	Rice St. (CSAH 49)	0.37	only 1 count	A	(Below Capacity)
County Road D	West City Limits	New Brighton Blvd. (CSAH 88)	0.51	only 1 count	B	(Below Capacity)
County Road D	New Brighton Blvd. (CSAH 88)	I-35W	0.49	only 1 count	B	(Below Capacity)

** When the roadway segment has more than one count location, the V/C is provided for both volumes (low and high).*

SOURCE: Mn/DOT and WSB & Associates, Inc.

A Minor (Augmentor) Arterials - Existing (2006) Capacity Analysis

Table 5.11

Roadway	From	To	Volume/Capacity (V/C) Traffic Volume Range* Lower	Upper	Existing Range of LOS (2006)	
New Brighton Blvd. (CSAH 88)	West City Limits	North City Limits	0.29	only 1 count	A	(Below Capacity)
County Road B	Cleveland Ave. (CSAH 46)	Fairview Ave. (CSAH 48)	0.19	only 1 count	A	(Below Capacity)
County Road B	Fairview Ave. (CSAH 48)	Snelling Ave. (TH 51)	0.27	only 1 count	A	(Below Capacity)
County Road B	Snelling Ave. (TH 51)	Hamline Ave. (CSAH 50)	0.32	0.43	A to B	(Below Capacity)
County Road B	Hamline Ave. (CSAH 50)	Lexington Ave. (CSAH 51)	0.33	only 1 count	A	(Below Capacity)
County Road B	Lexington Ave. (CSAH 51)	Victoria Ave. N	0.24	only 1 count	A	(Below Capacity)
County Road B	Victoria Ave. N	Dale St. (CSAH 53)	0.28	only 1 count	A	(Below Capacity)
County Road B	Dale St. (CSAH 53)	Rice St. (CSAH 49)	0.16	0.35	A	(Below Capacity)
St. Croix Street	TH 280	Terminal Road	0.14	only 1 count	A	(Below Capacity)
Terminal Road	St. Croix Street	Long Lake Road	0.20	only 1 count	A	(Below Capacity)
County Road B2	Long Lake Road	Cleveland Ave. (CSAH 46)	0.21	only 1 count	A	(Below Capacity)
County Road B2	Cleveland Ave. (CSAH 46)	Fairview Ave. (CSAH 48)	0.44	only 1 count	B	(Below Capacity)
County Road B2	Fairview Ave. (CSAH 48)	Snelling Ave. (TH 51)	0.52	only 1 count	B	(Below Capacity)
County Road C	Cleveland Ave. (CSAH 46)	Fairview Ave. (CSAH 48)	0.42	only 1 count	B	(Below Capacity)
County Road C	Fairview Ave. (CSAH 48)	Snelling Ave. (TH 51)	0.37	only 1 count	A	(Below Capacity)
County Road C	Snelling Ave. (TH 51)	Hamline Ave. (CSAH 50)	0.30	0.39	A	(Below Capacity)
County Road C	Hamline Ave. (CSAH 50)	Lexington Ave. (CSAH 51)	0.30	0.60	A to B	(Below Capacity)
County Road C	Lexington Ave. (CSAH 51)	Victoria St. (CSAH 52)	0.27	only 1 count	A	(Below Capacity)
County Road C	Victoria St. (CSAH 52)	Dale St. (CSAH 53)	0.27	only 1 count	A	(Below Capacity)
County Road C	Dale St. (CSAH 53)	Rice St. (CSAH 49)	0.24	only 1 count	A	(Below Capacity)
Cleveland Ave. (CSAH 46)	Roselawn Ave.	County Road B	0.38	only 1 count	A	(Below Capacity)
Cleveland Ave. (CSAH 46)	County Road C	County Road D	0.22	0.29	A	(Below Capacity)
Rice St. (CSAH 49)	Larpenteur Ave. (CSAH 30)	County Road B	0.63	only 1 count	C	(Below Capacity)
Rice St. (CSAH 49)	County Road B	County Road B2	0.79	only 1 count	C	(Below Capacity)
Rice St. (CSAH 49)	County Road B2	County Road C	0.58	only 1 count	B	(Below Capacity)
Rice St. (CSAH 49)	County Road C	North City Limits	0.61	only 1 count	C	(Below Capacity)

** When the roadway segment has more than one count location, the V/C is provided for both volumes (low and high).*

SOURCE: Mn/DOT and WSB & Associates, Inc.

A Minor (Reliever) Arterials - Existing (2006) Capacity Analysis

Table 5.12

is on quantifying seconds of delay, typically due to the traffic control device at an intersection. The results of the traffic operations analysis are typically presented in the form of a letter grade (A to F) that provides a qualitative indication of the operational efficiency or effectiveness. By definition, LOS A conditions represent high-quality operations (i.e., motorists experience very little delay or interference) and LOS F conditions represent very poor operations (i.e., extreme delay or severe congestion). Oftentimes, these conditions can be mitigated through the implementation of geometric improvements at the intersections, such as the addition of turning lanes and/or adjustiment of signal timing. These measures are generally referred to as Transportation System Management (TSM) techniques, and are used to address congestion with minimal cost.

Principal Arterials

The congestion analysis suggests that only one roadway segment currently operates over capacity, or at LOS F. TH 36 between I-35W and Fairview Avenue N has a v/c ratio of 1.24, above the 1.2 threshold signifying LOS F. Table 5-10 lists the LOS calculated for all of the principal Arterials. Since TH 36 has four continuous lanes throughout Roseville, it is estimated to reach LOS F when daily traffic estimates reach 85,000 vehicles per day. All of TH 36 is estimated to carry over 80,000 vehicles per day, approaching the LOS F threshold.

Minor Arterials

Table 5.11 lists the current estimated LOS for the A minor (augmentor) arterials in Roseville.

Table 5.12 lists the estimated LOS for all A minor (reliever) arterials in Roseville.

Roadway	From	To	Volume/Capacity (V/C) Traffic Volume Range*		Existing Range of LOS (2006)	
			Lower	Upper		
Fairview Ave. (CSAH 48)	County Road B	TH 36	0.43	only 1 count	B	(Below Capacity)
Fairview Ave. (CSAH 48)	TH 36	County Road B2	0.96	only 1 count	D	(Approaching Capacity)
County Road B	TH 280	Cleveland Ave. (CSAH 46)	0.16	only 1 count	A	(Below Capacity)
County Road B2	Snelling Ave. (TH 51)	Hamline Ave. (CSAH 50)	0.32	only 1 count	A	(Below Capacity)
County Road B2	Hamline Ave. (CSAH 50)	Lexington Ave. (CSAH 51)	0.36	only 1 count	A	(Below Capacity)
County Road B2	Lexington Ave. (CSAH 51)	Victoria St. (CSAH 52)	0.36	only 1 count	A	(Below Capacity)
County Road B2	Victoria St. (CSAH 52)	Dale St. (CSAH 53)	0.26	only 1 count	A	(Below Capacity)
County Road B2	Dale St. (CSAH 53)	Western Ave.	0.26	only 1 count	A	(Below Capacity)
County Road B2	Western Ave.	Rice St. (CSAH 49)	0.16	only 1 count	A	(Below Capacity)
County Road C	West City Limits	Cleveland Ave. (CSAH 46)	0.36	only 1 count	A	(Below Capacity)
County Road D	Cleveland Ave. (CSAH 46)	Fairview Ave. (CSAH 48)	0.45	only 1 count	B	(Below Capacity)
Cleveland Ave. (CSAH 46)	County Road B2	County Road C	0.31	0.40	A to B	(Below Capacity)
Fairview Ave. (CSAH 48)	Roselawn Ave.	County Road B	0.42	only 1 count	B	(Below Capacity)
Fairview Ave. (CSAH 48)	County Road B2	County Road C	0.37	0.46	A to B	(Below Capacity)
Fairview Ave. (CSAH 48)	County Road C	County Road D	0.26	0.52	A to B	(Below Capacity)
Hamline Ave. (CSAH 50)	Larpenteur Ave. (CSAH 30)	County Road B	0.31	only 1 count	A	(Below Capacity)
Hamline Ave. (CSAH 50)	County Road B	County Road C	0.35	only 1 count	A	(Below Capacity)
Hamline Ave. (CSAH 50)	County Road C	North City Limits	0.16	0.33	A	(Below Capacity)
Victoria St. (CSAH 52)	County Road B	County Road B2	0.13	0.25	A	(Below Capacity)
Victoria St. (CSAH 52)	County Road B2	County Road C	0.15	0.30	A	(Below Capacity)
Victoria St. (CSAH 52)	County Road C	North City Limits	0.38	0.39	A	(Below Capacity)
Dale St. (CSAH 53)	Larpenteur Ave. (CSAH 30)	County Road B	0.33	only 1 count	A	(Below Capacity)
Dale St. (CSAH 53)	County Road B	County Road B2	0.38	only 1 count	A	(Below Capacity)
Dale St. (CSAH 53)	County Road B2	County Road C	0.38	only 1 count	A	(Below Capacity)

* When the roadway segment has more than one count location, the V/C is provided for both volumes (low and high).

SOURCE: Mn/DOT and WSB & Associates, Inc.

B Minor Arterials - Existing (2006) Capacity Analysis

Table 5.13

Roadway	From	To	Volume/Capacity (V/C) Traffic Volume Range*		Existing Range of LOS (2006)	
			Lower	Upper		
Roselawn Ave.	West City Limits	Snelling Ave. (TH 51)	0.28	only 1 count	A	(Below Capacity)
Roselawn Ave.	Snelling Ave. (TH 51)	Hamline Ave. (CSAH 50)	0.32	only 1 count	A	(Below Capacity)
Roselawn Ave.	Hamline Ave. (CSAH 50)	Lexington Ave. (CSAH 51)	0.26	only 1 count	A	(Below Capacity)
Roselawn Ave.	Lexington Ave. (CSAH 51)	Victoria St. (CSAH 52)	0.19	only 1 count	A	(Below Capacity)
Roselawn Ave.	Dale St. (CSAH 53)	McCarron Blvd.	0.10	only 1 count	A	(Below Capacity)
Victoria St. (CSAH 52)	Roselawn Ave.	County Road B	0.28	only 1 count	A	(Below Capacity)
Lydia Ave W	Fairview Ave. (CSAH 48)	Snelling Ave. (TH 51)	0.33	0.76	A to C	(Below Capacity)
Lydia Ave W	Snelling Ave. (TH 51)	Hamline Ave. (CSAH 50)	0.20	only 1 count	A	(Below Capacity)
Josephine Road	Hamline Ave. (CSAH 50)	Lexington Ave. (CSAH 51)	0.23	only 1 count	A	(Below Capacity)
Dale St. (CSAH 53)	County Road C	S Owasso Blvd.	0.25	only 1 count	A	(Below Capacity)
S Owasso Blvd.	Dale St. (CSAH 53)	S Owasso Blvd.	0.17	only 1 count	A	(Below Capacity)
S Owasso Blvd.	Western Ave N	Rice St. (CSAH 49)	0.24	only 1 count	A	(Below Capacity)
Western Ave N.	County Road C	S Owasso Blvd.	0.12	0.15	A	(Below Capacity)

* When the roadway segment has more than one count location, the V/C is provided for both volumes (low and high).

SOURCE: Mn/DOT and WSB & Associates, Inc.

Collector Roadways - Existing (2006) Capacity Analysis

Table 5.14

B Minor Arterials

Table 5.13 lists the estimated LOS for all B minor arterials in Roseville. All of the B minor arterials are estimated to operate under capacity. Fairview Avenue N between TH 36 and County Road B2 is approaching capacity.

Collector Roadways

Table 5.14 lists the estimated LOS for all collector roadways within Roseville.

Crash Information

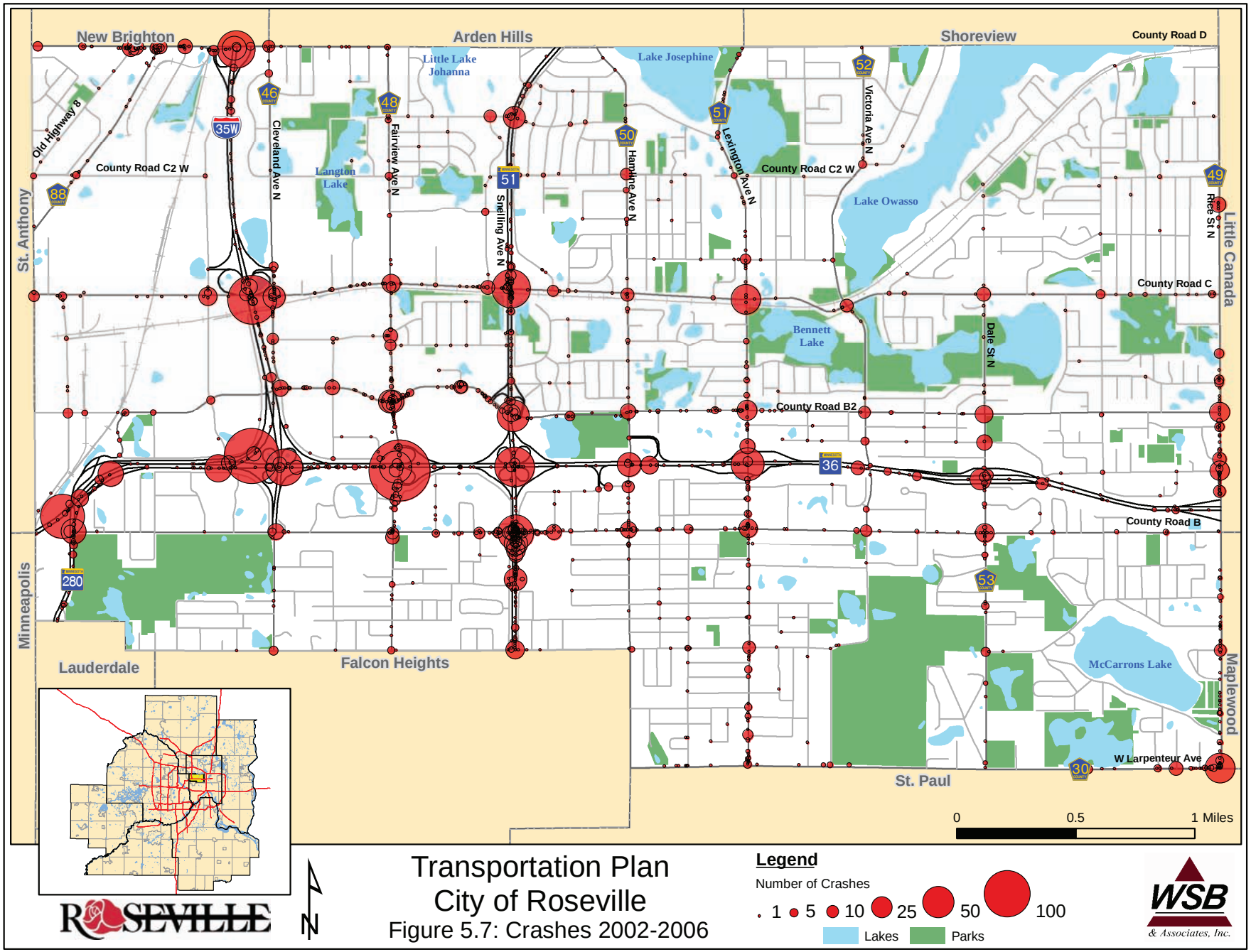
The locations and frequencies of crashes during this time frame for Roseville are depicted in Figure 5.7 (Crashes 2002-2006), using data obtained from MnDOT. However, it is often more useful to consider crash rates, which account for the number of vehicles passing through a certain segment or intersection. Figure 5.8 (Crash Rates 2002-2006) displays the crash rates for each major roadway segment and each major roadway intersection. Segment-based crash rates are displayed as the number of crashes per million vehicle

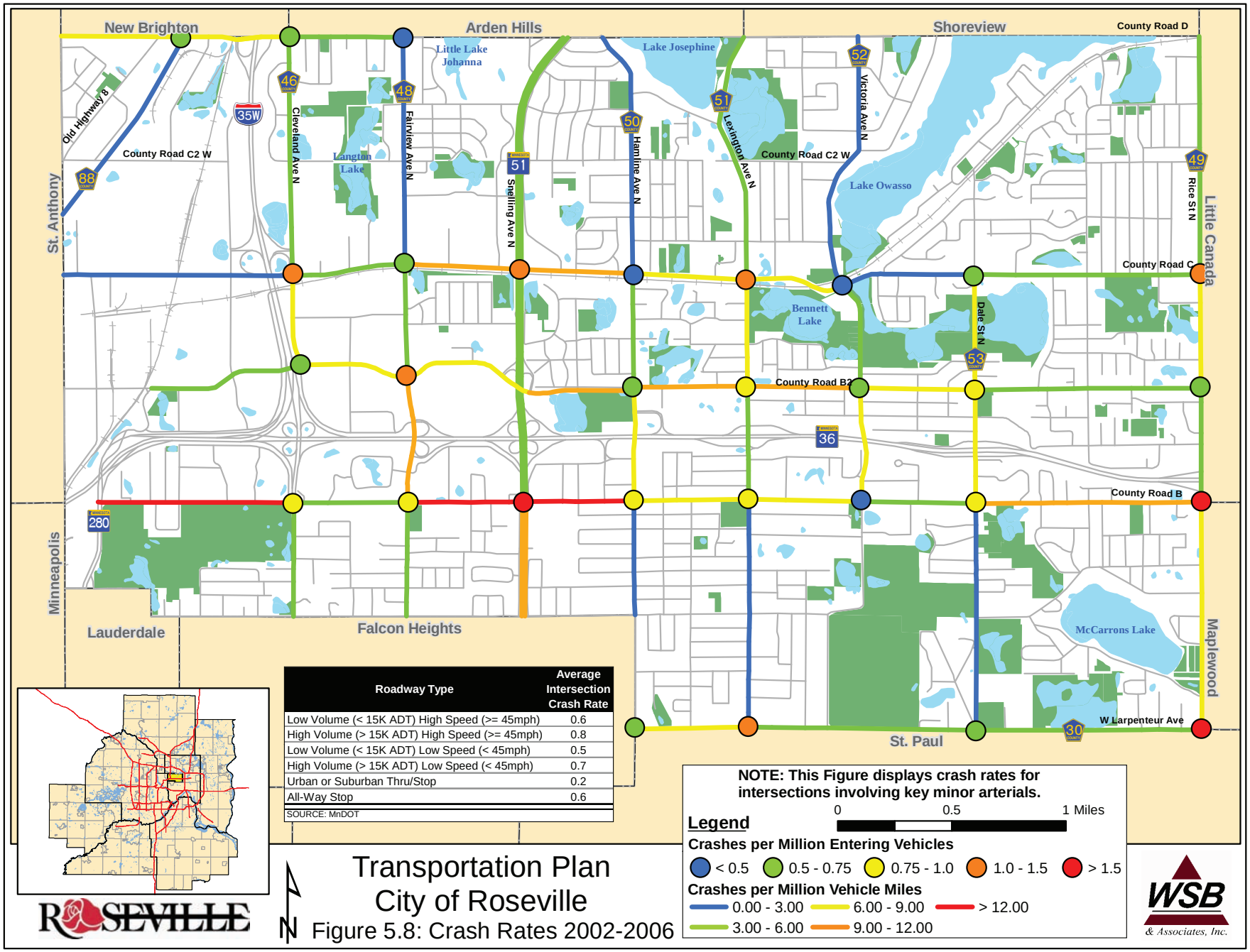
Roadway Type	Average Segment Crash Rate
4-lane; undivided	7.3
4-lane; divided	5.3
3-lane	6.0
5-lane	5.9
2-lane; 1,500 < ADT < 4,999	2.3
2-lane; 5,000 < ADT < 7,999	2.6
2-lane; ADT > 8,000	3.3

SOURCE: MnDOT

Average Crash Rates for Urban Roadways in Metro District

Table 5.15


New Brighton
Arden Hills
Shoreview
County Road D
Little Lake Johanna
Lake Josephine
Old Highway 8
35W
Cleveland Ave N
Fairview Ave N
Snelling Ave N
Hamline Ave N
Lexington Ave N
Victoria Ave N
County Road C2 W
Langton Lake
Lake Owasso
Rice St N
St. Anthony
Little Canada
County Road C
Bennett Lake
Dale St N
County Road B2
36
County Road B
280
Minneapolis
Lauderdale
Falcon Heights
McCarrons Lake
Maplewood
W Larpenteur Ave
St. Paul
0
0.5
1 Miles
Transportation Plan
City of Roseville
Figure 5.7: Crashes 2002-2006
Legend
Number of Crashes
1
5
10
25
50
100
Lakes
Parks
ROSEVILLE
WSB & Associates, Inc.



Roadway Type	Average Intersection Crash Rate
Low Volume (< 15K ADT) High Speed (>= 45mph)	0.6
High Volume (> 15K ADT) High Speed (>= 45mph)	0.8
Low Volume (< 15K ADT) Low Speed (< 45mph)	0.5
High Volume (> 15K ADT) Low Speed (< 45mph)	0.7
Urban or Suburban Thru/Stop	0.2
All-Way Stop	0.6

SOURCE: MnDOT

NOTE: This Figure displays crash rates for intersections involving key minor arterials.

0 0.5 1 Miles

Legend

Crashes per Million Entering Vehicles

< 0.5 | 0.5 - 0.75 | 0.75 - 1.0 | 1.0 - 1.5 | > 1.5

Crashes per Million Vehicle Miles

0.00 - 3.00 | 3.00 - 6.00 | 6.00 - 9.00 | 9.00 - 12.00 | > 12.00

Transportation Plan
City of Roseville
Figure 5.8: Crash Rates 2002-2006

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miles traveled on each minor arterial roadway segment. A crash occurring within an intersection is included in the crash rate calculations for each of the roadway segments leading into the intersection. Intersection-based crash rates are displayed as the number of crashes per million vehicles entering the intersection. Table 5.15 lists the average crash rates calculated by MnDOT for each roadway type within the Metro District.

The following general observations can be made from this information:

- The largest numbers of crashes are occurring along I-35W and TH 36. Freeways are typically frequent crash locations. This is not surprising, given the high traffic volumes through these areas and the merge/weave maneuvers required.
- The highest three intersection crash rates are at the intersections of Rice Street and Larpenteur Avenue, Rice Street and County Road B, and County Road B and Snelling Avenue. The interchange of Fairview Avenue N with TH 36 has also experienced a large number of crashes.
- The roadway segments with the highest crash rates are County Road B between TH 280 and Cleveland Avenue and County Road B between Fairview Avenue and Hamline Avenue.

The MnDOT crash data files are such that individual intersections, areas, or corridors can be analyzed in detail. For each given study area, crashes can be sorted/analyzed in terms of severity of accident and other factors. For severity, the categories range from fatality to property (vehicle) damage only. The primary types of intersection conditions and/or deficiencies will lead to different patterns of crash types.

Non-Motorized Transportation

Non-motorized transportation facilities are considered a vital part of the City's transportation system. For the purposes of this Transportation Plan, non-motorized transportation is defined as walking, jogging, and cycling. While special consideration should be given to the accommodation of those who wish to use a different form of non-motorized transportation, it is believed that walking, jogging, and cycling are the most dominant modes.

The City's non-motorized transportation network consists of nearly 102.57 miles of on- and off-road pathways. Pathways are broken into the following types: foot paths, sidewalks, trails, and striped shoulder. To see the locations of these pathways, see Figure 5.9. The system has been designed and coordinated to provide connections with neighboring cities and regional corridors.

The non-motorized transportation network serves a variety of purposes and users, including recreational, commuter, and shopping trips. The network simultaneously serves walkers, joggers, cyclists, and persons with disabilities. Commuting bicyclists can play an important role in helping to reduce congestion during several months of the year. In addition, many of the users of the pathway system may be young children for whom additional safety measures may be desired. To ensure the highest level of efficiency and safety in the network, it is critical to consider the needs of all users.

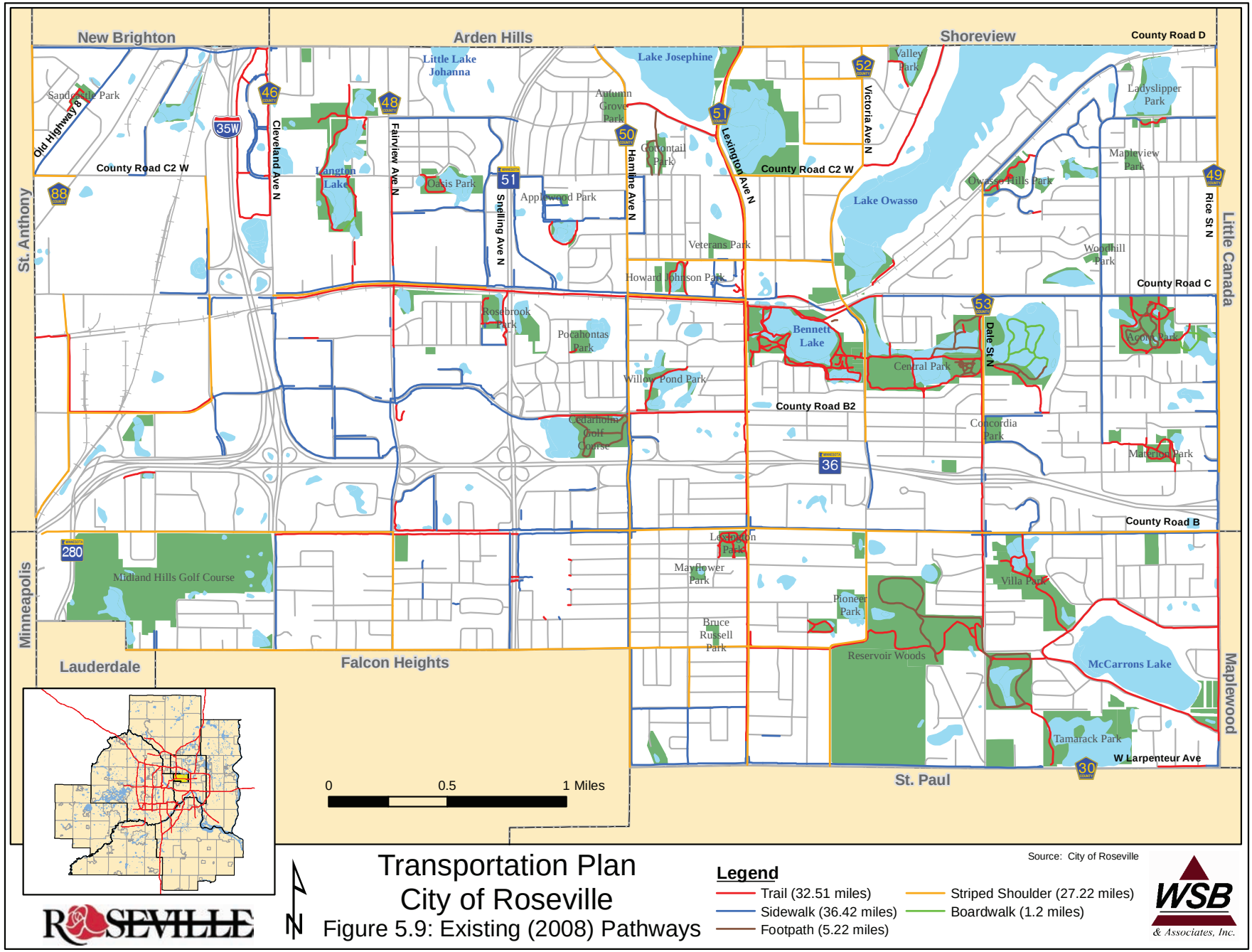
The need is for a congruent system that links the existing non-motorized facilities with each other, creating a grid not unlike the street network. The goal is to provide a safe alternative to the automobile that can provide access as conveniently and efficiently as that allowed for the automobile. Every street within the city should have a facility that provides safe travel for light traffic, i.e. pedestrians, cyclists and in-line skaters, whether it's a shared on-road facility or separated off-road facility.

The City's pathways can be classified into various functional categories based on their design and intended purpose. However, the classification system is not as rigid as the system applied to roadways.

Roseville has 75.35 miles of off-road pathways. These pathways are broken into three types: foot path, sidewalk, and trail. There are 6.42 miles of foot paths within city parks. These are constructed of woodchips, aggregate, and boardwalks. They meander through natural areas and are well suited for recreational use.

Roseville also has 36.4 miles of sidewalks, most of which are adjacent to roadways and within commercial areas. These are likely to be utilized primarily by those walking or by inexperienced cyclists. Nearly every walking or jogging trip whether recreational, utilitarian, or both, is likely to rely on sidewalks for a portion of the trip. In addition to recreational use by walkers and joggers, these facilities are likely to be used to access specific destinations for work or shopping purposes. They are not likely, however, to be attractive routes for experienced cyclists who may prefer more direct routes, smooth riding surfaces, or the ability to travel faster than is reasonably safe on sidewalks.

Roseville also has 32.5 miles of off-street trails that may be attractive routes for cyclists in addition to walkers and joggers. Some trails are better suited to recreational cyclists while others are attractive facilities for bicycle commuters or other utilitarian bicycle trips. These



Transportation Plan
City of Roseville
Figure 5.9: Existing (2008) Pathways

Legend

- Trail (32.51 miles)
- Sidewalk (36.42 miles)
- Footpath (5.22 miles)
- Striped Shoulder (27.22 miles)
- Boardwalk (1.2 miles)

Source: City of Roseville

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trails may range in attractiveness to bicycle commuters depending on the directness of route, pavement quality, and the number of street and driveway crossings. The trail along the south side of County Road C is a good example of a trail likely to attract bicycle commuters because of the directness of route and limited street and driveway crossings.

Many experienced cyclists prefer to cycle in the roadway because it does not require them to surrender the right of way to opposing traffic at each intersection. To accommodate these users, Roseville also has on-road pathways. These pathways are classified as bike route, bike lane, striped shoulder, and shared lane. There are currently no bike routes or bike lanes within Roseville. However, there are 27 miles of striped shoulder on the City's higher-volume roads. Sections of Hamline Avenue and Larpenteur Avenue have shoulders clearly delineated from the traffic lanes by striping or colored concrete that provide an attractive on-street alternative for cyclists.

The purpose of the Roseville Pathway Master Plan is to provide a set of guidelines for use in the development of a pathway network. These guidelines provide policies and standards for the planning, design, construction, maintenance, promotion, and regulation of the community's pathway facilities. The plan is used to assist decision makers on the strategic use of public funds to improve the non-motorized transport network. As new pathways are constructed, a citizen advisory committee updates the Pathway Master Plan. This plan is updated as needed and at least every five years. The plan was developed using the following guiding principles:

- Develop a pathway system that provides linkages to and between neighborhoods, educational facilities, churches, business centers, transit stops, parks and open space.
- Develop safe pathway connections throughout the city, as well as around, between, and among the major shopping centers.
- Develop a pathway system that is accessible from all areas of the city, enabling residents to reach a pathway connection within a quarter mile of their home.
- Work to fill in gaps, providing continuous pathways that connect destinations and to the larger regional pathway system.
- All arterial roads and collectors should provide some accommodation for non-motorized transportation users. Consider construction of non-motorized pathways when roads and parking lots are designed or reconstructed.
- Work with the County and State to ensure that freeway and highway reconstruction projects provide accommodations for non-motorized transportation users.
- Work to improve the safety of pathway street crossings with signage, striping and lighting. Enhance pathways by using them to demonstrate strong programs of environmental protection such as native plantings, reforestation, and general beautification.
- Require pathways and connections to the existing system to be constructed as a part of all new developments and redevelopments.

Existing Transit Service

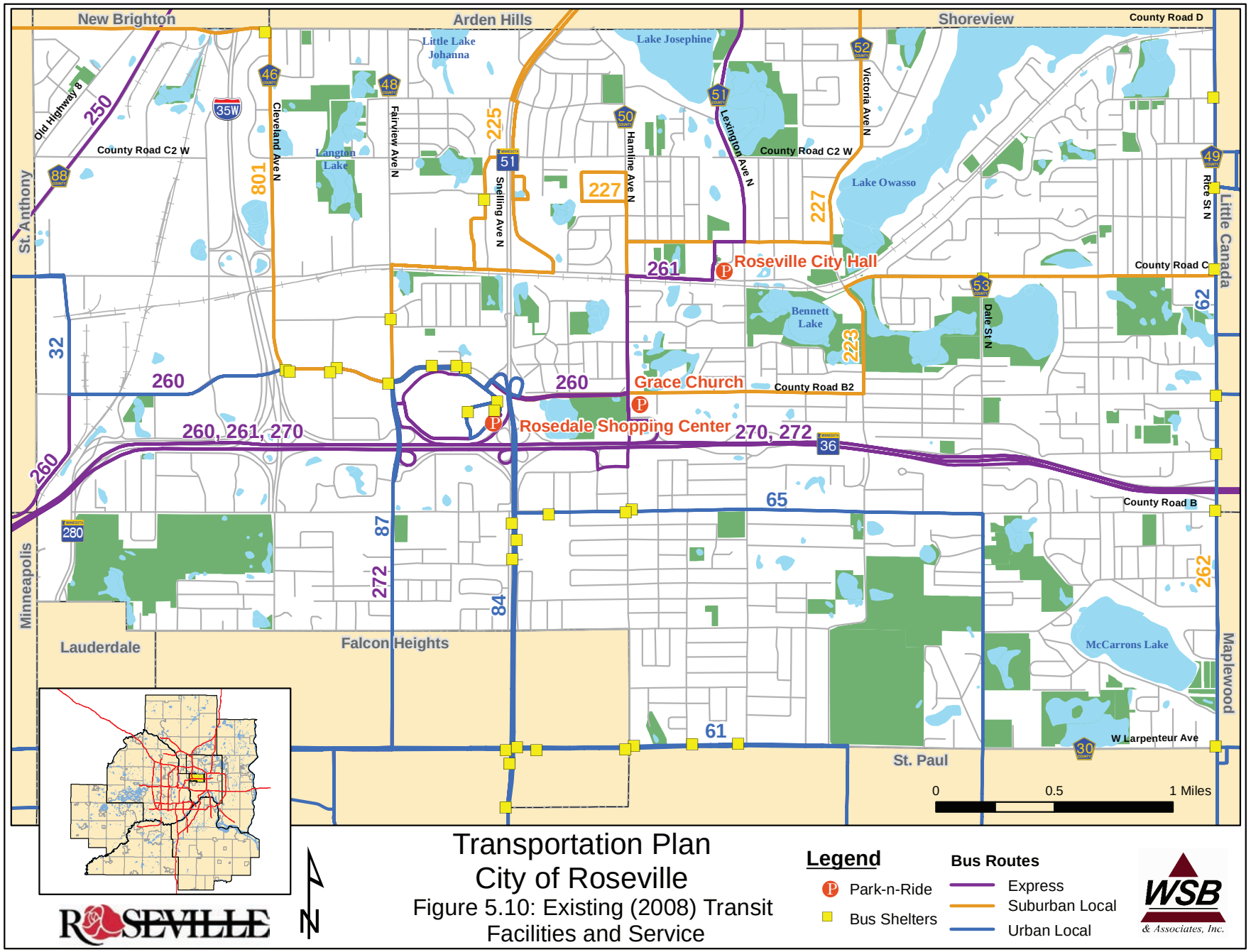
Transit has been and continues to be an important element of the transportation system within Roseville. As the cost of operating a vehicle continues to increase, transit is becoming a more attractive alternative to driving alone. Transit also supports the economic growth of the area by providing access to labor markets, economic centers, and employment, as transit is often the only means of transportation for some people. Transit can also help to reduce automobile trips, help to conserve energy, slow the growth in energy use, and increase the carrying capacity of existing roadways.

Roseville is within the Metropolitan Transit Taxing District and is within Market Areas II and III. Service options for Market Area II include regular-route locals, all-day expresses, small-vehicle circulators, special-needs paratransit (ADA and seniors), and ridesharing. Service options for Market Area III include peak-only express, small-vehicle circulators, mid-day circulators, special-needs paratransit, and rideshare.

The following sections describe the various components of transit service and facilities in Roseville.

Fixed-Route Transit Service and Facilities

The Rosedale Transit Hub, located adjacent to the Rosedale Shopping Center, serves as a major transit hub for the fixed-route transit services in Roseville. The hub was created by the City at the initiative of the Regional Transit Board (RTB), which is now part of the Metropolitan Council. The Rosedale hub is a focal point for suburban transit services north of Roseville and links these services to the two downtowns and to other suburban areas in the regional transit system. Figure 5.10


New Brighton
Arden Hills
Shoreview
County Road D
Little Lake Johanna
Lake Josephine
Old Highway 8
250
County Road C2 W
35W
Cleveland Ave N
Fairview Ave N
Snelling Ave N
Hamline Ave N
Lexington Ave N
Victoria Ave N
Rice St N
Langtin Lake
801
225
227
Lake Owasso
St. Anthony
Little Canada
261
Roseville City Hall
County Road C
Bennett Lake
Dale St N
223
62
32
260
Grace Church
County Road B2
260, 261, 270
Rosedale Shopping Center
270, 272
36
65
County Road B
280
87
272
84
262
Minneapolis
Lauderdale
Falcon Heights
McCarrons Lake
Maplewood
61
W Larpenteur Ave
St. Paul
0
0.5
1 Miles
ROSEVILLE
N
Transportation Plan
City of Roseville
Figure 5.10: Existing (2008) Transit Facilities and Service
Legend
Park-n-Ride
Bus Shelters
Bus Routes
Express
Suburban Local
Urban Local
WSB & Associates, Inc.

Route Number	Limited Stop	Rush Hours	Midday	Evening	Saturday	Sunday/ Holiday	Roseville Route	Other Service Areas
32		30	30-60	-	-	-	Rosedale Transit Center, County Road B2, Terminal Drive, Walnut Street, County Road C	Robbinsdale - Robbinsdale Transit Center, North Memorial Medical Center; Minneapolis - Lowry Avenue; St. Anthony - St. Anthony Shopping Center
61		30	30	60	30	-	Larpenteur Avenue W	Downtown Minneapolis, St. Paul - Larpenteur Ave, Arlington Ave, Arcade Street, 7th St. E; Downtown St. Paul
62		30	30	60	30	60	Rice Street N	Shoreview - Shoreview Community Center, Vadnais Heights, Little Canada Transit Center, Rice Street, Downtown St. Paul
65		30	30	60	60	60	Dale Street N, County Road B, Snelling Avenue N, Rosedale Transit Center	Downtown St. Paul; St. Paul - Dale Street, Selby Avenue
84		15	15	30	15	30	Snelling Avenue N, Rosedale Transit Center	St. Paul - Snelling Avenue, Midway Shopping Center, Highland Park Neighborhood, Highland Village, Ford Avenue; Minneapolis - 46th Street Station
87		30	30	-	-	-	Fairview Avenue, Rosedale Transit Center	U of M St. Paul Campus, Raymond Ave., Cleveland Ave. in St. Paul
223	Yes	60	60	-	60	-	Rosedale Transit Center, County Road B2, Victoria Avenue N, County Road C	Little Canada Transit Center, County Road D in Maplewood, Maplewood Mall, White Bear Lake - Century College West, Mahtomedi - Century College East
225	Partial	30	30	-	30	-	Snelling Avenue N, County Road C, Fairview Avenue N, Rosedale Transit Center	Arden Hills - Northwestern College
227		-	60	-	60	-	Rosedale Transit Center, County Road B2, Hamline Avenue N, Woodhill Avenue, Victoria Avenue N	Shoreview - Shoreview Community Center, Deluxe, SuperTarget; Arden Hills - Land O'Lakes
260-261	Partial	5-31	60	-	-	-	Terminal Road, County Road B2, Rosedale Transit Center, Hamline Avenue N, County Road C, Lexington Avenue N	Minneapolis - 4th St. SE, University Ave. SE, Central Ave. SE, Downtown Minneapolis; Shoreview Community Center
262	Yes	30	-	-	-	-	Rice Street N	Lino Lakes - St. Joseph's Church Park & Ride; Circle Pines; Lexington; Blaine - 95th Ave. Park & Ride; Shoreview - Hogson Road; St. Paul - Rice Street; Downtown St. Paul
272	Yes	1-2 trips	-	-	-	-	Fairview Avenue N, Rosedale Transit Center, TH 36	Downtown Minneapolis, U of M Minneapolis Campus
801		60	60	-	-	-	Rosedale Transit Center, County Road B2, Cleveland Avenue N, County Road D	Brooklyn Center - Brooklyn Center Transit Center, Brookdale Shopping Center; Columbia Heights Transit Center; St. Anthony - Silver Lake Village

SOURCE: Metro Transit, WSB & Associates, Inc.

Existing (2008) Transit Service
Table 5.16

(Existing (2008) Transit Facilities and Service) lists the fixed-route transit options within Roseville. Table 5.16 lists each Metro Transit route within Roseville and the scheduled headways and destinations for each route. Although it is not located within Roseville city limits, the Little Canada Transit Hub, located near TH 36 and Rice Street, is convenient for many Roseville residents. Many residents of the northeastern portions of Roseville are closer to the Little Canada Transit Hub than the Rosedale Transit Hub.

In 1989, Roseville and the RTB established the Roseville Circulator, the first suburban circulator system in the metropolitan region, as a prototype for a new type of suburban transit service where neighborhood circulators act as feeder routes to the regional system and serve short, localized trips. In 1991, the RTB converted the system from a "demonstration" service to regular route service. In 2001, Metro Transit restructured the bus service into and around Roseville as part of the Sector 2 Restructuring Study.

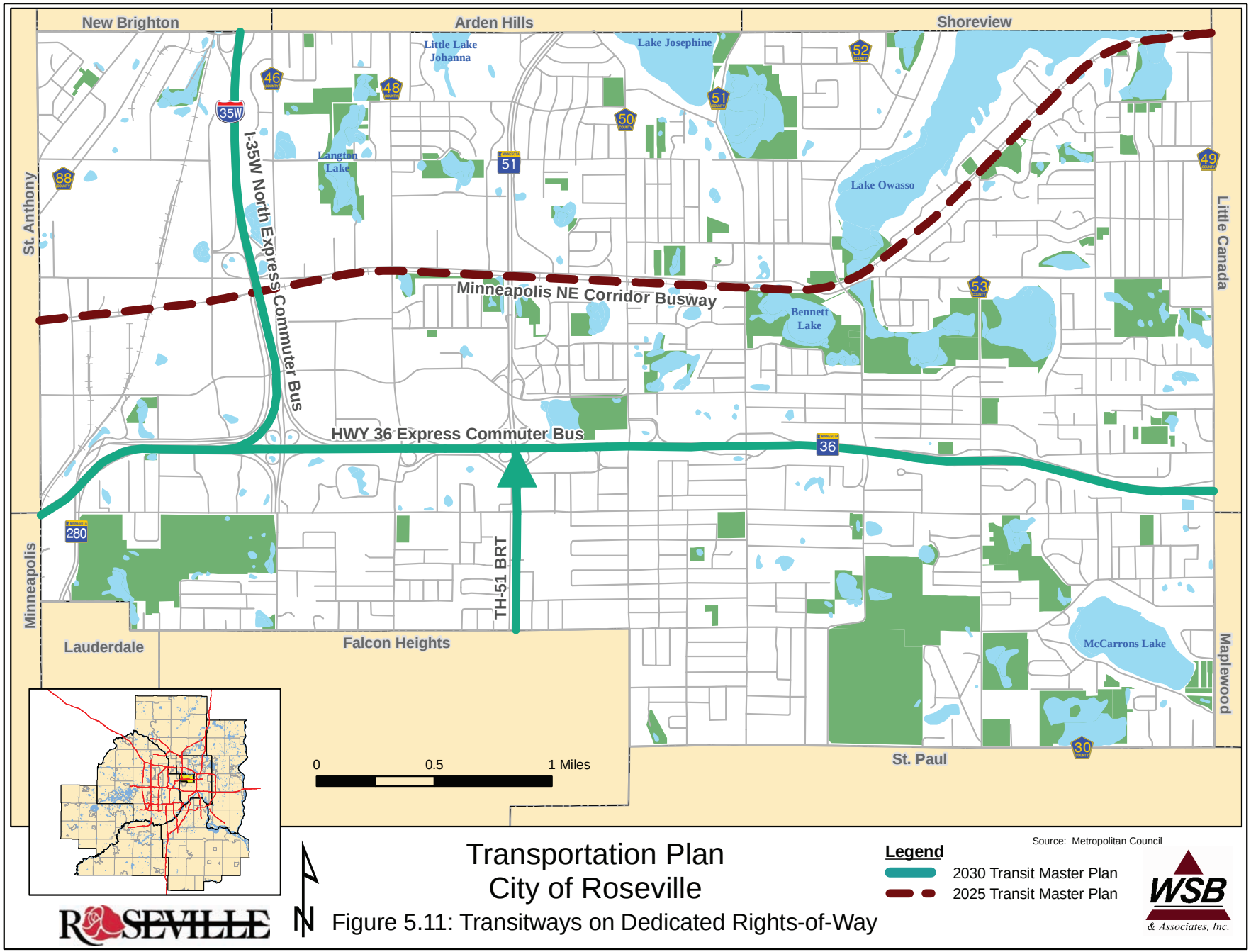
Additional measures are currently under way to increase the availability of fixed-route transit in Roseville. The

Type of Fare		Non-Rush Hours	Rush Hours*
Adults (Ages 13-64)	Local Fare	**$1.75**	**$2.25**
	Express Fare	**$2.25**	**$3.00**
Seniors (65+), **Youth** (6-12) & Medicare Card Holders	Local Fare	**$0.75**	**$2.25**
	Express Fare	**$0.75**	**$3.00**
Persons with disabilities	Any Trip	**$0.75**	**$0.75**

**Rush hours: Monday-Friday 6:00-9:00 am & 3:00-6:30 pm.*

SOURCE: Metro Transit (2008)

Existing (2008) Metro Transit Fare Schedule
Table 5.17


New Brighton
Arden Hills
Shoreview
St. Anthony
Little Canada
Minneapolis
Lauderdale
Falcon Heights
Maplewood
St. Paul
Little Lake Johanna
Lake Josephine
Langton Lake
Lake Owasso
Bennett Lake
McCarrons Lake
I-35W North Express Commuter Bus
Minneapolis NE Corridor Busway
HWY 36 Express Commuter Bus
TH-51 BRT
35W
46
48
50
51
52
49
88
53
36
280
30
0
0.5
1 Miles
N
Legend
2030 Transit Master Plan
2025 Transit Master Plan
Source: Metropolitan Council
Transportation Plan
City of Roseville
Figure 5.11: Transitways on Dedicated Rights-of-Way
ROSEVILLE
WSB & Associates, Inc.

Metropolitan Council had identified the Northeast Diagonal (NED) Corridor as a potential busway and included it in the 2025 Transit Master Plan. However, when this plan was updated in 2004 this corridor was removed. Roseville believes that the NED corridor is an important fixed route link and will continue to work with Ramsey County Regional Rail Authority and the other communities along this rail corridor to promote this link. The Metropolitan Council has also identified I-35W and TH 36 as potential candidates for Fixed Guideway bus operations. Another project that is included within the 2030 Transportation Policy Plan as a bus rapid transit (BRT) study corridor is Snelling Avenue, which would link Roseville with the planned Central Corridor light rail transit service between Minneapolis and St. Paul. Roseville is in support of additional transit service within the city as well as the overall metropolitan area. Roseville recognizes the benefit that it has on the environment such as reducing vehicle emissions, particularly by slow-moving or idling cars at busy intersections, as well as for potentially minimizing traffic growth in the city. Figure 5.11 (Transitways on Dedicated Right-of-Way) displays the dedicated right-of-way being considered for future transit operation.

Park-and-Ride Facilities

Since 1999, the Twin Cities Metropolitan Region has expanded park-and-ride capacity by 177%, but the number of users has grown by 223%. The system has grown from about 7,000 spaces and 4,700 users in 1999 to 19,400 spaces and 15,200 users in 2006. To address this increase in demand, the Metropolitan Council has been exploring potential options to continue to increase park-and-ride capacity, including the leasing of space as well as constructing additional facilities.

In Roseville, there are three park-and-ride lots, all of which have seen an increase in use in recent years. In the three current park-and-ride lot facilities serving the city, there are currently a total of 540 spaces. On a typical day in 2007, it was determined that 476, or 88%, of these spaces were occupied. As fuel costs rise, it is anticipated that the usage of these park-and-ride lots will increase. Roseville has been very supportive of the use of park-and-ride lots. Metro Transit has projected a need for 800 park-and-ride spaces in Roseville. To address this need, Metro Transit is currently looking to develop two new facilities including a 400-space lot as part of the Twin Lakes development as well as another 400 spaces at a yet to be determined location near TH 36 in eastern Roseville. The City will continue to be an active participant in the promotion of park-and-ride lots as as well as overall transit usage in the metropolitan region.

Table 5.18 lists the three park-and-ride lots serving Roseville as well as their capacity and 2007 level of utilization.

Non-Fixed Route Transit

Residents of Roseville have several non-fixed route transit options offering door-to-door services at reasonable prices. However, each program has eligibility requirements that will exclude much of the population of Roseville. The non-fixed route transit options are currently available to riders who are either unable to use fixed-route transit services because of disability or health condition or are of age 60 or above.

Metro Mobility is an ADA Paratransit program operated by Metro Transit and available to all. Residents within Roseville who are unable to use non-fixed-route transit because of disability or health condition. Riders may be eligible for Metro Mobility if they are physically unable to get to the regular fixed-route bus system, they are unable to navigate the regular fixed-route bus system once they are on board, or they are unable to board and exit the bus at some locations. Details regarding eligibility can be found on the Metro Transit website. Rides are provided for any purpose, but riders must have completed an ADA Paratransit Application

Park and Ride Lot	Location	Capacity	Utilization
Rosedale Transit Center	Rosedale Mall	375	99%
Grace Church	Hamline Ave. and CR B2	115	50%
Skating Center	Lexington Ave. and CR C	50	92%

SOURCE: 2007 Annual Park and Ride Lot System Survey Report, Metro Transit.

Park and Ride Lot Locations and Characteristics
Table 5.18

Form. Rides cost between $2.50 and $3.50 depending on the time of day.

The Roseville Area Senior Program is available to all residents of the Roseville Area School District 623 who are of age 60 or above. The program has two forms of transport: shuttle buses and volunteer rides. A shuttle bus ride is available for $3.00, but riders must be flexible as to when the trip is completed. The volunteer ride program utilizes community volunteers to provide door-to-door service to the rider for medical or dental appointments at any time. The program costs $13.00 each way.

The American Red Cross provides rides to all Ramsey County residents aged 60 or older to medical or dental appointments or for grocery shopping. The suggested donation is $3.75 each way.

Other Transportation Sectors

Freight/Rail

There are currently two existing railroad tracks within Roseville. The Burlington Northern (BN) track runs roughly parallel to County Road C from the western city limits through Lexington Avenue. At this point, the track turns northward along the southern edge of Lake Owasso before leaving the city limits where the northern and eastern city limits meet. The Minnesota Commercial (MC) track runs north-south from the southwestern corner of the city and exits the northern edge of the city between New Brighton Boulevard and I-35W. Both are local service tracks and not main lines.

The Northeast Diagonal Land Use/Transit Study Report completed in 2002 considered the feasibility of transit operating along the BN track. Ramsey and Hennepin Counties have recently purchased a portion of the track from the western city limits to Walnut Street. Additionally, in 2007, a multi-use pathway was constructed along the newly purchased right-of-way, which connects into the city of Minneapolis bicycle network.

The MC track currently has at-grade crossings at the following locations: Terminal Road, County Road C, County Road C2, and County Road D. A service spur line from the MC track has an at-grade crossing at Long Lake Road. The BN track has at-grade crossings at Walnut Street, Long Lake Road, Cleveland Avenue N, Fairview Avenue N, Snelling Avenue N, Hamline Avenue N, Lexington Avenue N, Victoria Street N, Dale Street N, S Owasso Boulevard, and numerous private drives along the alignment. The BN track has grade-separated crossings at I-35W, County Road C, and Rice Street N.

Aviation

Roseville neither contains nor is the city adjacent to any metropolitan system airports. However, Roseville's air space is used by aircraft operating from metropolitan area airports and other airports as well as certain public water bodies within the metropolitan area. The operation of all aircraft within the city must conform to Minnesota Administrative Rules Chapter 8800 and Minnesota Statutes Chapter 360, which regulate Airports and Aeronautics in the state of Minnesota. All structures in the city are required to conform to the Metropolitan Council's Transportation Policy Plan, which reflects Federal Regulation Title 14, Part 77 and establishes standards and notification requirements for objects affecting navigable airspace. Roseville must confirm compliance with the Federal Aviation Agency notification requirements using Form 7460. A permit from Mn/DOT may be required for any structure more than 500 feet above ground level anyplace in the state, or when the structure is more than 200 feet above ground level within three nautical miles of an airport and increasing by 100 feet for each additional mile out to six miles and 500 feet.

Roseville currently has no existing structures of 200 feet or more in height, and has no plans to permit such

Minnesota Statute 360

Under Minnesota Statute 360, the state regulates the height of structures as they are defined and enforced under Aeronautics Rules and Regulations 8800.1200 Criteria for Determining Air Navigation Obstructions. Subparagraph 4(B) states that a general obstruction is:

Objects more than 200 feet above the ground or more than 200 feet above the established airport elevation, whichever gives the higher elevation, within three nautical miles of the nearest runway of an airport, and increasing the proportion of the 100 feet for each additional nautical mile of distance from the airport but not exceeding 500 feet above ground.

Notification to MnDOT Aeronautics is required when any object, as defined under this statute, would affect general airspace.

Local reporting is in addition to any federal permitting/review process (FAA Form 7460-1) involving a sponsor/proposal.

structures in the future. Any sponsor who proposes any construction or alteration that would exceed a height of 200 feet above ground level at site shall notify the Commissioner of Minnesota Department of Transportation at least 30 days in advance as required by Aeronautics Rule 14, MCAR 1.3015, Subdivision C, and shall present a certified copy of such notification to the City at least ten days before any building permit is issued.

Seaplane operations are currently permitted on Lake Owasso under Aeronautics Rule 14, MCAR 1.3018. Such operations are prohibited from 11:00 a.m. until 6:00 p.m. on Saturdays, Sundays, and holidays between June 1 and September 15, except for the holder of a Personal Use Seaplane Base License operating to and from a licensed base. At the present time, seaplane operations do not constitute a hazard. However, the City should continue to monitor seaplane use of the lake and may request review of the seaplane operations by the Aeronautics Division of MnDOT on a periodic basis.

There are no heliports in Roseville. Future proposals for heliports should be considered only in areas where they would not disrupt adjoining land uses.

Planning Context - Studies, Projects, and Issues

TH 36 Configuration Changes

Recently, MnDOT has been discussing the reconstruction of TH 36 to provide more travel lanes. As part of this reconstruction project, there has been a focus on interchange access, particularly at Hamline Avenue (CSAH 50). This interchange serves an important role in providing access to Roseville's primary commercial district (Rosedale Mall area). Furthermore, the removal of this access point would result in putting additional pressure on the adjacent interchanges at Snelling Avenue North (TH 51) and Lexington Avenue North (CSAH 51). Although not part of the configuration plans for TH 36, there has been some interest on behalf of residents for the construction of a pathway connection over the freeway between the HarMar Mall and Rosedale Mall areas. This connection would improve non-motorized access between the areas north and south of TH 36, which bisects Roseville. Furthermore, this connection would make walking a much more attractive option for students living south of TH 36.

TH 280 Configuration Changes

After the collapse of the I-35W bridge over the Mississippi River in August 2007, TH 280 became the designated detour route for rerouted trips. MnDOT made several emergency modifications to TH 280 within Roseville to increase the capacity of that roadway. Just south of the city boundaries in the city of Lauderdale, the intersections of TH 280 with Roselawn Avenue and Broadway Avenue were closed. MnDOT also closed the intersections at Walnut Street and County Road B within Roseville. In addition, MnDOT expanded the ramp between north-bound TH 280 and north-bound I-35W from one lane to two lanes.

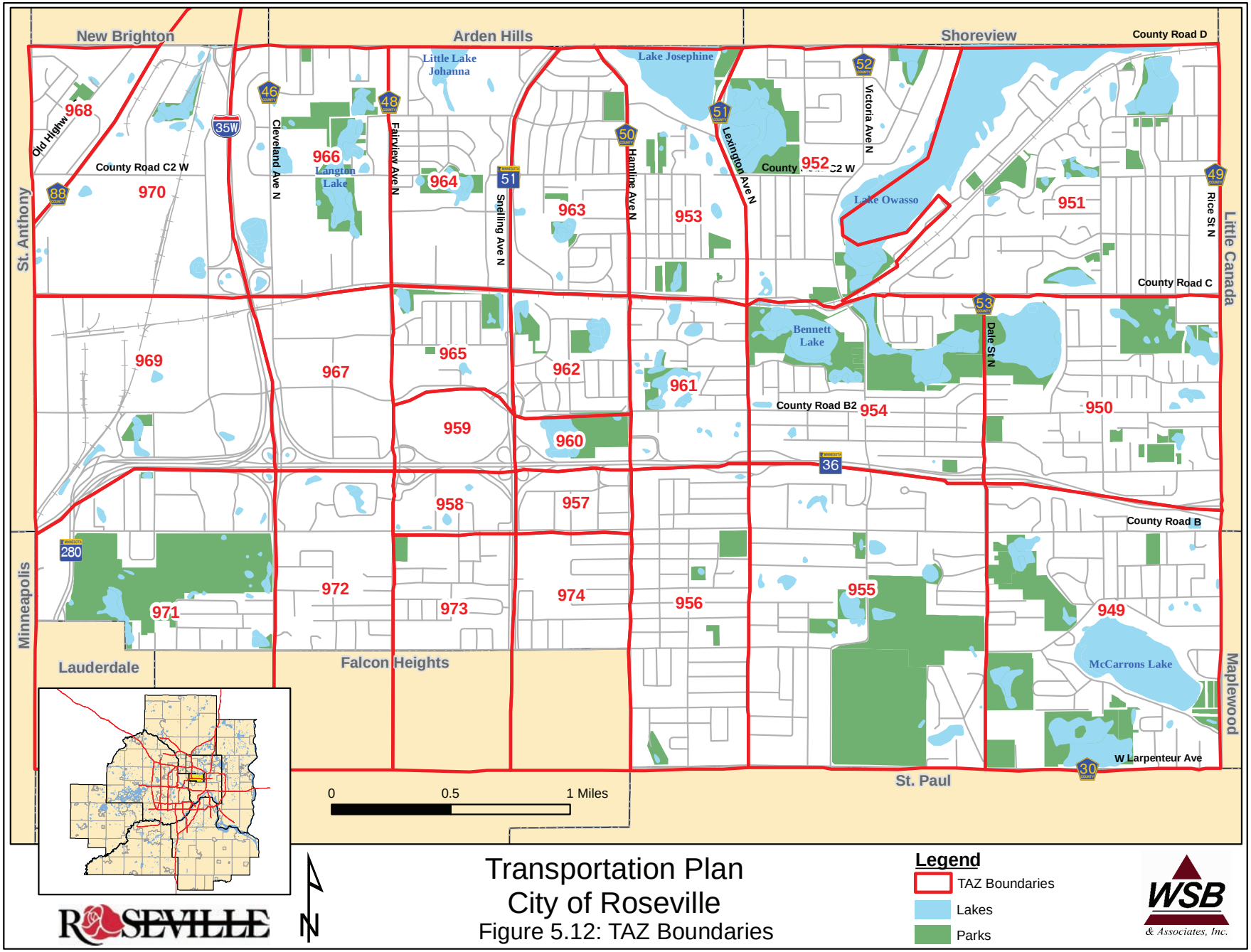
There are ongoing discussions regarding the future of these emergency modifications. MnDOT has indicated that they plan to make some of the changes permanent. It is expected, however, that there will continue to be partial access provided to the commercial property on the west side of TH 280 at County Road B.

Twin Lakes Redevelopment

Roseville has plans to redevelop 46 parcels dispersed within a 275-acre area over the next 20 years. The Twin Lakes redevelopment area contains most of the nonresidential areas north of County Road C between Cleveland Avenue and Snelling Avenue. The redevelopment of these parcels will replace existing trucking, outdoor storage, and industrial uses with new multilevel office, medical, high-tech, showroom, multifamily housing, and supporting commercial uses. As part of the redevelopment strategy, a new road–Twin Lakes Parkway–will be constructed in stages. According to the 2007 Alternative Areawide Review (AUAR) Update, the road will be transit- and pedestrian-friendly, and will include walking and biking trails, safety, lighting, ponding, and landscaping enhancements.

The Twin Lakes redevelopment proposal includes aggressive growth in residential and commercial land use. In the most intense scenario under consideration, the proposal would add an additional 2,330,505 square feet of new office space, 919 new residential units, 618,319 square feet of service industry space, and a 466,583-square-foot hospital within the next 20 years. The Final Twin Lakes AUAR adopted on October 15, 2007, includes an analysis of the traffic impacts of the proposed redevelopment. The proposed increases in land-use intensity have not yet been incorporated into the Metropolitan Council travel demand model, and thus are not considered in the capacity analysis in this section.

The 2007 AUAR update included additional traffic study to model the operational impacts (intersection delay, queue length, etc.) of this redevelopment. This study was used to determine deficiencies at existing


New Brighton
Arden Hills
Shoreview
St. Anthony
Little Canada
Minneapolis
Maplewood
Lauderdale
Falcon Heights
St. Paul
County Road D
County Road C2 W
County Road C
County Road B2
County Road B
Old Highway 8
Cleveland Ave N
Fairview Ave N
Snelling Ave N
Hamline Ave N
Lexington Ave N
Victoria Ave N
Rice St N
Dale St N
W Larpenteur Ave
Little Lake Johanna
Lake Josephine
Langton Lake
Lake Owasso
Bennett Lake
McCarrons Lake
968
966
964
970
963
953
951
969
967
965
962
961
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950
958
957
972
973
974
956
955
971
949
0
0.5
1 Miles
N
Transportation Plan
City of Roseville
Figure 5.12: TAZ Boundaries
Legend
TAZ Boundaries
Lakes
Parks
ROSEVILLE
WSB & Associates, Inc.

intersections in the Twin Lakes Area and identified potential mitigation measures.

Cut-Through Traffic

Cut-through traffic, while affecting most parts of the city, is particularly problematic for the areas adjacent to TH 36 and I-35W. The entire city lacks good east-west roadway connectivity, which accentuates the impact of cut-through traffic on the limited east-west routes that exist in the community. Aside from TH 36, the only other roadways that fully traverse the city are County Roads B, B2 , and C and Larpenteur Avenue. As TH 36 has become more congested, local residents have become concerned over the increase in traffic on these and other east-west roadways such as Roselawn Avenue located south of TH 36. It is hoped that the planned addition of travel lanes on TH 36 will help alleviate some of this traffic. Other measures that could assist in alleviating traffic include the addition of more park-and-ride lots, particularly east of Roseville. With the addition of these lots, as well as increased transit in general, more commuters will use transit as part of their trip, which will reduce peak hour travel through the city.

Future Transportation System

Future Roadway Needs

Traffic forecasts are estimated using a computerized travel demand model. The Metropolitan Council Travel Model was used to estimate future travel conditions on Roseville roadways by dividing the metropolitan area into 1,201 Transportation Analysis Zones (TAZs) and estimating the socioeconomic and demographic characteristics of the residents of each TAZ. The Metropolitan Council Travel Model was calibrated to year 2000 average daily trips (ADT) volumes and subsequently used to predict 2030 travel conditions. The travel demand forecasting model estimates the amount of travel that can be expected in a future scenario. Modeling provides the analyst with the ability to test multiple scenarios and estimate the future impacts of transportation and land-use policies and network modifications.

Four-Step Modeling Process

Traditional transportation demand modeling involves four steps: trip generation, trip distribution, mode choice, and traffic assignment. The four-step modeling process is described in the following sections:

- Trip Generation. The first step in forecasting travel is trip generation. In this step, information about land-use, population, and economic forecasts are used to estimate how many person-trips will be made to and from each TAZ. Trip generation is estimated by applying complex equations involving land-use, economic, and demographic data for each TAZ. For example, the model estimates the number of trips expected to begin within a TAZ using data such as the average household size and the number of vehicles available. Similarly, the number of trips estimated to end in each TAZ is estimated using expected employment levels.
- Trip Distribution. The second step, trip distribution, links the trips generated in each TAZ during step one with an appropriate destination TAZ. These linked trip ends form an origin-destination trip matrix summarizing how many trips begin in each TAZ, and where the trips end. Trip distribution is based on the idea that the number of trips between two points is dependent upon their attractiveness for a given trip purpose and the separation (in terms of distance or travel time) between the points. The number of trips between a given origin-destination zone pair decreases with increasing travel time between the origin zone and the destination zone.
- Mode Choice. The third step, mode choice, is the step where trips between a given origin and destination are separated into different modes of travel including public transit and personal vehicles. The attractiveness of travel by different modes based on various characteristics are estimated to determine their relative usage.
- Traffic Assignment. The fourth step, traffic assignment, uses an iterative process to assign trips to specific roadways. The particular routes used to travel from each origin to each destination are first determined based on the shortest travel times. Because travel time varies greatly depending on congestion levels, the assigned trip volumes are then compared to the capacity of each link to see which links, if any, are congested. If a roadway is congested, the travel speed will decrease, resulting in increased travel time on that roadway. During the next iteration, trips in the model shift to less congested links as drivers seek to minimize travel time. This process continues until there is a balance between travel demand and travel supply on the network and each driver is utilizing the quickest path between their origin and destination.

2030 Land Use

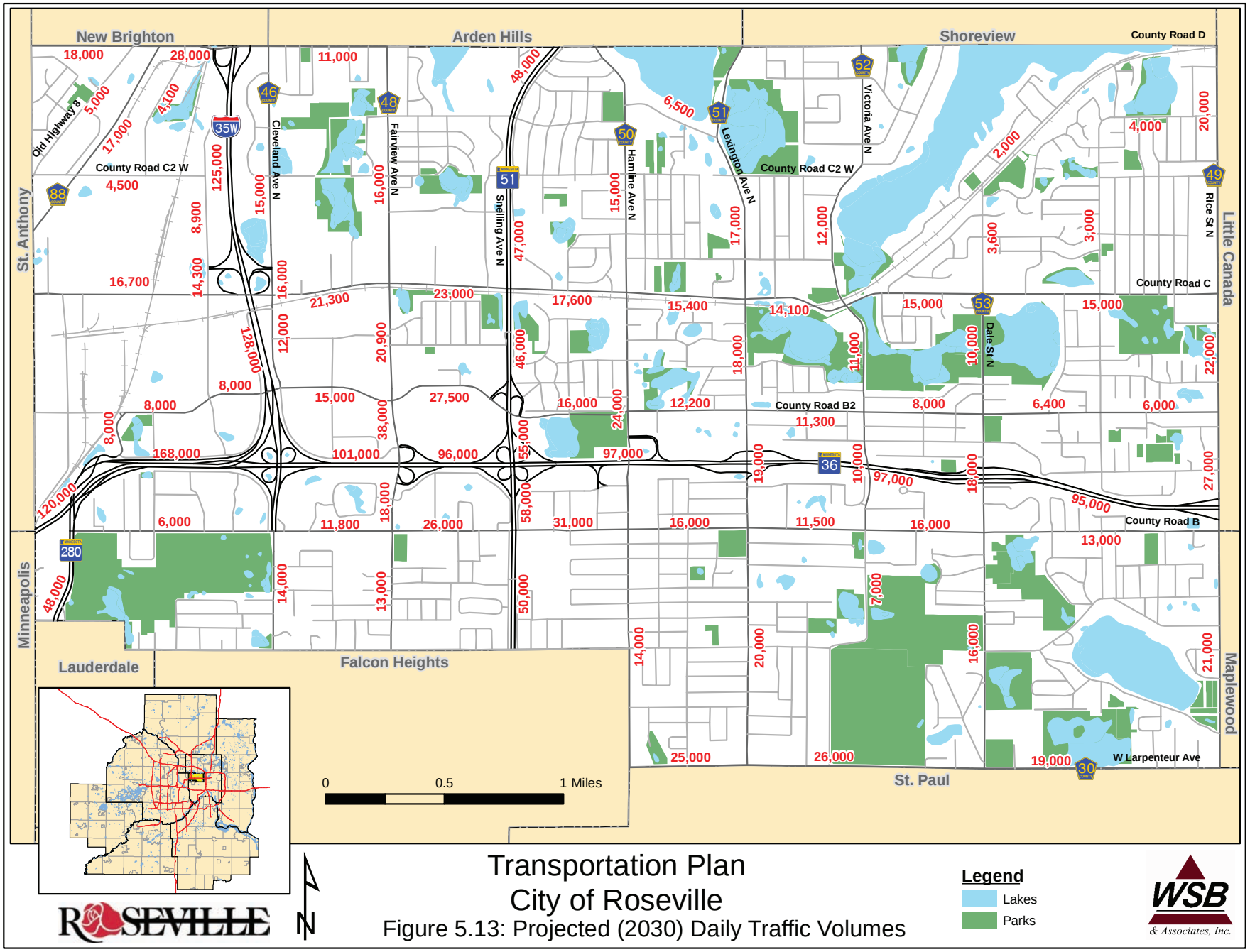
Future year land use requires the allocation of population and employment data to individual TAZs. Discussions with the City regarding future land-use plans and development proposals were used to assign future

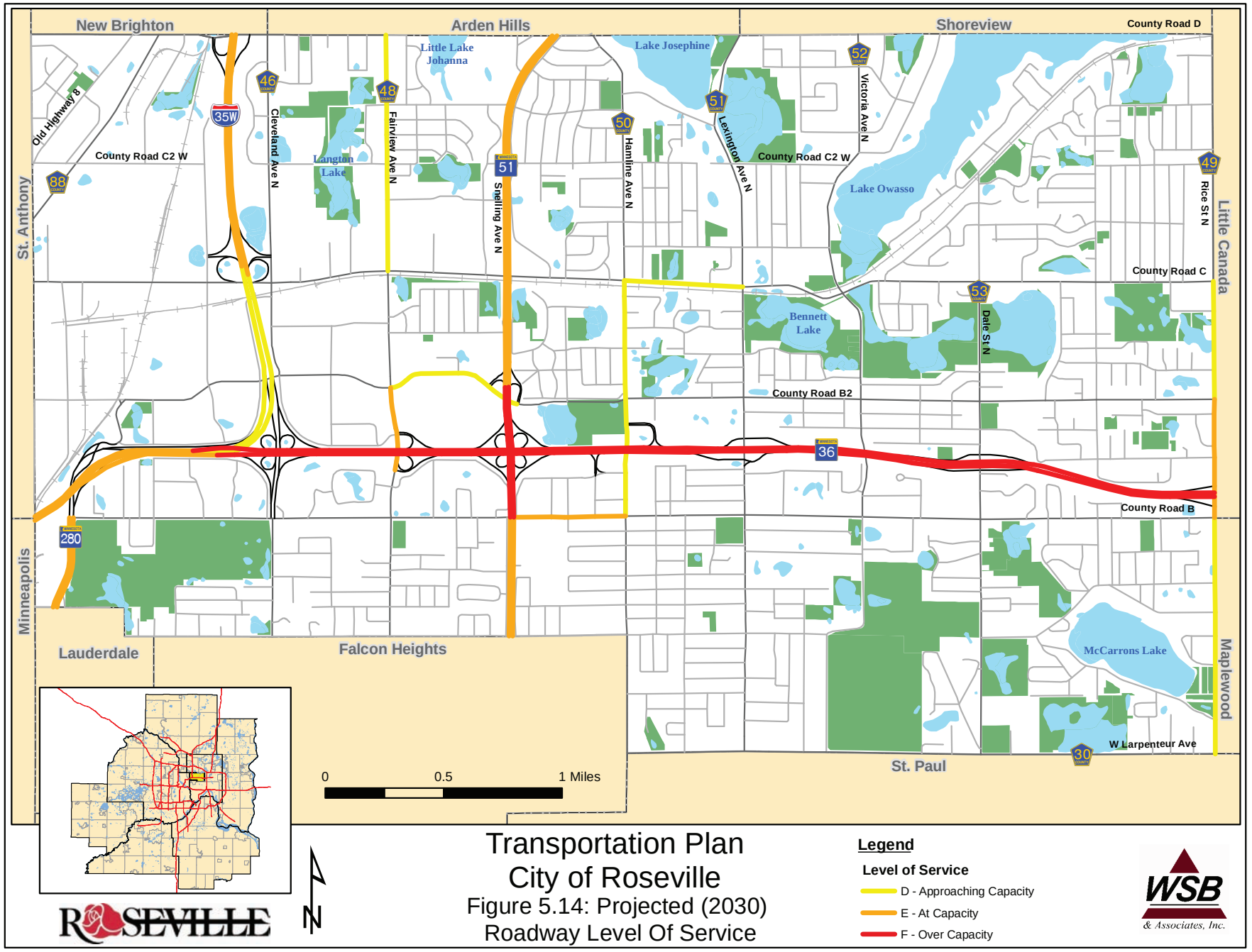
TAZ	Population			Households			Total Employment			Retail Employment			Non-Retail Employment		
	2000	2030	Change	2000	2030	Change	2000	2030	Change	2000	2030	Change	2000	2030	Change
949	3,299	3,750	451	1,596	1,804	208	555	654	99	108	128	20	447	526	79
950	2,600	2,956	356	1,044	1,180	136	1,217	1,435	218	197	235	38	1,020	1,200	180
951	4,531	5,151	620	1,975	2,232	257	164	193	29	15	18	3	149	175	26
952	2,116	2,406	290	912	1,031	119	563	664	101	15	19	4	548	645	97
953	1,389	1,579	190	657	743	86	436	514	78	9	12	3	427	502	75
954	2,051	2,332	281	883	998	115	215	254	39	0	1	1	215	253	38
955	2,730	3,104	374	1,208	1,365	157	928	1,094	166	251	298	47	677	796	119
956	2,653	3,016	363	1,114	1,259	145	1,338	1,577	239	423	501	78	915	1,076	161
957	450	512	62	190	215	25	1,075	1,267	192	825	973	148	250	294	44
958	537	610	73	351	397	46	3,301	3,856	555	554	659	105	2,747	3,197	450
959	0	0	0	0	0	0	2,355	2,736	381	2,236	2,636	400	119	100	(19)
960	62	70	8	49	55	6	21	25	4	0	0	0	21	25	4
961	785	892	107	346	391	45	186	219	33	0	0	0	186	219	33
962	813	924	111	406	459	53	901	1,062	161	450	531	81	451	531	80
963	2,059	2,341	282	1,007	1,138	131	2,320	2,735	415	715	847	132	1,605	1,888	283
964	1,832	2,083	251	466	527	61	3,302	3,881	579	938	1,112	174	2,364	2,769	415
965	445	506	61	174	197	23	1,098	1,295	197	921	1,087	166	177	208	31
966	685	779	94	206	233	27	3,557	4,182	625	483	577	94	3,074	3,605	531
967	0	0	0	0	0	0	4,005	4,714	709	1,629	1,927	298	2,376	2,787	411
968	813	924	111	374	423	49	230	271	41	30	36	6	200	235	35
969	4	4	0	2	2	0	5,280	6,210	930	113	146	33	5,167	6,064	897
970	177	201	24	103	116	13	4,040	4,758	718	987	1,171	184	3,053	3,587	534
971	778	884	106	308	348	40	212	250	38	0	0	0	212	250	38
972	1,184	1,346	162	517	584	67	319	376	57	50	59	9	269	317	48
973	896	1,019	123	407	460	53	531	626	95	56	67	11	475	559	84
974	801	911	110	303	343	40	1,062	1,252	190	669	790	121	393	462	69
TOTAL	33,690	38,300	4,610	14,598	16,500	1,902	39,211	46,100	6,889	11,674	13,830	2,156	27,537	32,270	4,733

SOURCE: Metropolitan Council, City of Roseville, WSB & Associates, Inc.

TAZ Population and Employment Projections

Table 5.19


New Brighton
Arden Hills
Shoreview
County Road D
St. Anthony
Little Canada
Minneapolis
Lauderdale
Falcon Heights
St. Paul
Maplewood
Old Highway 8
County Road C2 W
Cleveland Ave N
Fairview Ave N
Snelling Ave N
Hamline Ave N
Lexington Ave N
Victoria Ave N
Rice St N
County Road C
Dale St N
County Road B2
County Road B
W Larpenteur Ave
18,000
28,000
11,000
48,000
6,500
4,000
20,000
5,000
4,100
17,000
4,500
125,000
15,000
16,000
47,000
15,000
17,000
12,000
2,000
3,600
3,000
8,900
16,700
14,300
16,000
21,300
23,000
17,600
15,400
14,100
15,000
15,000
128,000
12,000
20,900
46,000
18,000
11,000
10,000
22,000
8,000
8,000
15,000
27,500
16,000
12,200
8,000
6,400
6,000
11,300
8,000
168,000
101,000
96,000
55,000
97,000
19,000
10,000
18,000
27,000
120,000
6,000
11,800
18,000
26,000
58,000
31,000
16,000
11,500
16,000
97,000
95,000
13,000
48,000
14,000
13,000
50,000
7,000
14,000
20,000
16,000
21,000
25,000
26,000
19,000
0
0.5
1 Miles
N
Transportation Plan
City of Roseville
Figure 5.13: Projected (2030) Daily Traffic Volumes
Legend
Lakes
Parks
ROSEVILLE
WSB & Associates, Inc.


New Brighton
Arden Hills
Shoreview
St. Anthony
Little Canada
Minneapolis
Lauderdale
Falcon Heights
St. Paul
Maplewood
Little Lake Johanna
Lake Josephine
Langton Lake
Lake Owasso
Bennett Lake
McCarrons Lake
Old Highway 8
County Road C2 W
Cleveland Ave N
Fairview Ave N
Snelling Ave N
Hamline Ave N
Lexington Ave N
Victoria Ave N
Rice St N
Dale St N
County Road D
County Road C
County Road B2
County Road B
W Larpenteur Ave
35W
51
36
280
0
0.5
1 Miles
Transportation Plan
City of Roseville
Figure 5.14: Projected (2030)
Roadway Level Of Service
Legend
Level of Service
D - Approaching Capacity
E - At Capacity
F - Over Capacity
ROSEVILLE
WSB
& Associates, Inc.

Roadway	From	To	Daily Traffic Volumes 2030	Volume/Capacity (V/C) Traffic Volume Range*		Existing Range of LOS (2006)	
				Lower	*Upper*		
I-35W	West City Limits	TH 280	120,000	1.14	only 1 count	E	(At Capacity)
I-35W	TH 280	Cleveland Ave. (CSAH 46)	168,000	1.20	only 1 count	E	(At Capacity)
I-35W	TH 36	County Road C	128,000	0.91	only 1 count	D	(Approaching Capacity)
I-35W	County Road C	County Road D	125,000	1.19	only 1 count	E	(At Capacity)
TH 280	South City Limits	I-35W	48,000	1.14	only 1 count	E	(At Capacity)
TH 36	I-35W	Fairview Ave. (CSAH 48)	101,000	1.44	only 1 count	F	(Over Capacity)
TH 36	Fairview Ave. (CSAH 48)	Snelling Ave. (TH 51)	96,000	1.37	only 1 count	F	(Over Capacity)
TH 36	Snelling Ave. (TH 51)	Lexington Ave. (CSAH 51)	97,000	1.39	only 1 count	F	(Over Capacity)
TH 36	Lexington Ave. (CSAH 51)	Dale St. (CSAH 53)	97,000	1.39	only 1 count	F	(Over Capacity)
TH 36	Dale St. (CSAH 53)	Rice St. (CSAH 49)	95,000	1.36	only 1 count	F	(Over Capacity)

* When the roadway segment has more than one count location, the V/C is provided for both volumes (low and high).
SOURCE: Mn/DOT and WSB & Associates, Inc.

Projected 2030 LOS - Principal Arterials
Table 5.20

Roadway	From	To	Daily Traffic Volumes 2030	Volume/Capacity (V/C) Traffic Volume Range*		Existing Range of LOS (2006)	
				Lower	Upper		
Snelling Ave. (TH 51)	Roselawn Ave.	County Road B	50,000	1.19	only 1 count	E	(At Capacity)
Snelling Ave. (TH 51)	County Road B	TH 36	58,000	1.38	only 1 count	F	(Over Capacity)
Snelling Ave. (TH 51)	TH 36	County Road B2	55,000	1.31	only 1 count	F	(Over Capacity)
Snelling Ave. (TH 51)	County Road B2	County Road C	46,000	1.10	only 1 count	E	(At Capacity)
Snelling Ave. (TH 51)	County Road C	North City Limits	47,000	1.12	only 1 count	E	(At Capacity)
Lexington Ave. (CSAH 51)	Larpenteur Ave. (CSAH 30)	County Road B	20,000	0.56	0.74	B to C	(Below Capacity)
Lexington Ave. (CSAH 51)	County Road B	County Road B2	19,000	0.70	only 1 count	C	(Below Capacity)
Lexington Ave. (CSAH 51)	County Road B2	County Road C	18,000	0.67	only 1 count	C	(Below Capacity)
Lexington Ave. (CSAH 51)	County Road C	North City Limits	17,000	0.63	only 1 count	C	(Below Capacity)
Larpenteur Ave. (CSAH 30)	Hamline Ave. (CSAH 50)	Lexington Ave. (CSAH 51)	25,000	0.69	only 1 count	C	(Below Capacity)
Larpenteur Ave. (CSAH 30)	Lexington Ave. (CSAH 51)	Dale St. (CSAH 53)	26,000	0.72	only 1 count	C	(Below Capacity)
Larpenteur Ave. (CSAH 30)	Dale St. (CSAH 53)	Rice St. (CSAH 49)	19,000	0.53	only 1 count	B	(Below Capacity)
County Road D	West City Limits	New Brighton Blvd. (CSAH 88)	18,000	0.50	only 1 count	B	(Below Capacity)
County Road D	New Brighton Blvd. (CSAH 88)	I-35W	28,000	0.78	only 1 count	C	(Below Capacity)

SOURCE: Mn/DOT and WSB & Associates, Inc. ** When the roadway segment has more than one count location, the V/C is provided for both volumes (low and high).*

Projected 2030 LOS - A Minor (Reliever) Arterials
Table 5.21

population and employment estimates to the TAZs within Roseville. Table 5.19 lists the year 2000 and projected 2030 population and employment estimates for Roseville. In every TAZ, the population and/or employment are expected to increase. It should be noted that land-use changes proposed in the Twin Lakes redevelopment area are not included in the population or employment estimates.

2030 Conditions and Deficiencies

The analysis of 2030 traffic conditions assumes no new roadways are constructed, and no roadways are expanded to increase capacity. Using the Metropolitan Council Travel Demand Model, forecast 2030 traffic volumes were developed for the future roadway system as depicted in Figure 5.13 (Projected (2030) Daily Traffic Volumes). These forecast volumes were then compared with the roadway capacity to determine the LOS. The roadway segments LOS is presented in Figure 5.14 (Projected (2030) Roadway Level of Service).

Principal Arterials

The analysis of 2030 congestion conditions determined that all of the roadways within Roseville are projected to experience an increase in congestion. All but one of the principal arterial roadway segments are projected to operate either at or above capacity. All of TH 36 is projected to experience over-capacity conditions. The results of the traffic projections are listed in Table 5.20.

A Minor (Reliever) Arterials

The analysis of 2030 congestion conditions determined that Snelling Avenue will experience over-capacity conditions and will operate at LOS F between County

Roadway	From	To	Daily Traffic Volumes 2030	Volume/Capacity (V/C) Traffic Volume Range* Lower	Upper	Existing Range of LOS (2006)	
New Brighton Blvd. (CSAH 88)	West City Limits	North City Limits	17,000	0.40	only 1 count	B	(Below Capacity)
County Road B	Cleveland Ave. (CSAH 46)	Fairview Ave. (CSAH 48)	11,800	0.33	only 1 count	A	(Below Capacity)
County Road B	Fairview Ave. (CSAH 48)	Snelling Ave. (TH 51)	26,000	0.72	only 1 count	C	(Below Capacity)
County Road B	Snelling Ave. (TH 51)	Hamline Ave. (CSAH 50)	31,000	0.86	1.15	D to E	(At Capacity)
County Road B	Hamline Ave. (CSAH 50)	Lexington Ave. (CSAH 51)	16,000	0.62	only 1 count	C	(Below Capacity)
County Road B	Lexington Ave. (CSAH 51)	Victoria Ave. N	11,500	0.44	only 1 count	B	(Below Capacity)
County Road B	Victoria Ave. N	Dale St. (CSAH 53)	16,000	0.62	only 1 count	C	(Below Capacity)
County Road B	Dale St. (CSAH 53)	Rice St. (CSAH 49)	13,000	0.38	0.76	A to C	(Below Capacity)
St. Croix Street	TH 280	Terminal Road	8,000	0.24	only 1 count	A	(Below Capacity)
Terminal Road	St. Croix Street	Long Lake Road	8,000	0.24	only 1 count	A	(Below Capacity)
County Road B2	Long Lake Road	Cleveland Ave. (CSAH 46)	8,000	0.24	only 1 count	A	(Below Capacity)
County Road B2	Cleveland Ave. (CSAH 46)	Fairview Ave. (CSAH 48)	15,000	0.44	only 1 count	B	(Below Capacity)
County Road B2	Fairview Ave. (CSAH 48)	Snelling Ave. (TH 51)	27,500	0.81	only 1 count	D	(Approaching Capacity)
County Road C	Cleveland Ave. (CSAH 46)	Fairview Ave. (CSAH 48)	21,300	0.59	only 1 count	B	(Below Capacity)
County Road C	Fairview Ave. (CSAH 48)	Snelling Ave. (TH 51)	23,000	0.64	only 1 count	C	(Below Capacity)
County Road C	Snelling Ave. (TH 51)	Hamline Ave. (CSAH 50)	17,600	0.52	0.68	B to C	(Below Capacity)
County Road C	Hamline Ave. (CSAH 50)	Lexington Ave. (CSAH 51)	15,400	0.45	0.91	B to D	(Approaching Capacity)
County Road C	Lexington Ave. (CSAH 51)	Victoria St. (CSAH 52)	14,100	0.41	only 1 count	B	(Below Capacity)
County Road C	Victoria St. (CSAH 52)	Dale St. (CSAH 53)	15,000	0.44	only 1 count	B	(Below Capacity)
County Road C	Dale St. (CSAH 53)	Rice St. (CSAH 49)	15,000	0.44	only 1 count	B	(Below Capacity)
Cleveland Ave. (CSAH 46)	Roselawn Ave.	County Road B	14,000	0.54	only 1 count	B	(Below Capacity)
Cleveland Ave. (CSAH 46)	County Road C	County Road D	16,000	0.47	only 1 count	B	(Below Capacity)
Rice St. (CSAH 49)	Larpenteur Ave. (CSAH 30)	County Road B	21,000	0.81	only 1 count	D	(Approaching Capacity)
Rice St. (CSAH 49)	County Road B	County Road B2	27,000	1.04	only 1 count	E	(At Capacity)
Rice St. (CSAH 49)	County Road B2	County Road C	22,000	0.85	only 1 count	D	(Approaching Capacity)
Rice St. (CSAH 49)	County Road C	North City Limits	20,000	0.77	only 1 count	C	(Below Capacity)

SOURCE: Mn/DOT and WSB & Associates, Inc.

** When the roadway segment has more than one count location, the V/C is provided for both volumes (low and high).*

Projected 2030 LOS - A Minor (Augmentor) Arterials

Table 5.22

Road B and County Road B2. The remainder of Snelling Avenue is projected to experience LOS E. The results of the 2030 projections are listed in Table 5.21.

A Minor (Augmentor) Arterials

The 2030 congestion analysis determined that most A minor (augmentor) arterials will operate under capacity. County Road B between Snelling Avenue and Hamline Avenue is projected to experience LOS E, and several other segments are projected to experience LOS D. The results of the congestion analysis are listed in Table 5.22.

B Minor Arterials

The 2030 congestion analysis determined that all B minor arterials will operate under capacity. The results of the congestion analysis are listed in Table 5.23.

Roadway Network Planning

Roadway Improvements

The City's 2008 10-year Capital Improvement Plan (CIP) includes only roadways associated with the Twin Lakes redevelopment proposal. Because these roads are still in early planning stages, they are not included in the capacity analysis of this transportation plan. These roadways, which are planned to be functionally classified as collectors, are conceived to be constructed in segments corresponding with adjacent redevelopment. Figure 5.15 (2030 Planned Roadway Improvements – 2008 10-year CIP) displays the planned roadways as designated in the 2008 10-year CIP.

Roadway Jurisdictional Classification

The jurisdictional assignment of a roadway describes the level of government that owns and maintains it. Based on an evaluation of the current transportation system, there does not appear to be a need for jurisdictional transfers within Roseville.

Functional Classification

Determining the appropriate functional class for a roadway involves a wide range of factors. According to MnDOT guidelines, the criteria measures deemed most useful include service to urban activity centers, system continuity, land-use considerations, route spacing, trip length, traffic volume, and control of access. Naturally, none of these can be applied independently, or to the exclusion of all others, in developing functional systems. Considering only one portion of the dynamic interactions between transportation and land use, the projected traffic volumes do not appear to warrant any changes to the current functional classification of roadways at this time. Additional insight regarding the appropriate functional classification for each roadway will be gained by establishing a long-range vision for each roadway corridor regarding the type of adjacent land uses desired and the levels of mobility and accessibility desired.

Roadway	From	To	Daily Traffic Volumes 2030	Volume/Capacity (V/C) Traffic Volume Range* Lower	Upper	Existing Range of LOS (2006)	
Fairview Ave. (CSAH 48)	County Road B	TH 36	18,000	0.50	only 1 count	B	(Below Capacity)
Fairview Ave. (CSAH 48)	TH 36	County Road B2	38,000	1.06	only 1 count	E	(At Capacity)
County Road B	TH 280	Cleveland Ave. (CSAH 46)	6,000	0.35	only 1 count	A	(Below Capacity)
County Road B2	Snelling Ave. (TH 51)	Hamline Ave. (CSAH 50)	16,000	0.47	only 1 count	B	(Below Capacity)
County Road B2	Hamline Ave. (CSAH 50)	Lexington Ave. (CSAH 51)	12,200	0.72	only 1 count	C	(Below Capacity)
County Road B2	Lexington Ave. (CSAH 51)	Victoria St. (CSAH 52)	11,300	0.66	only 1 count	C	(Below Capacity)
County Road B2	Victoria St. (CSAH 52)	Dale St. (CSAH 53)	8,000	0.47	only 1 count	B	(Below Capacity)
County Road B2	Dale St. (CSAH 53)	Western Ave.	6,400	0.38	only 1 count	A	(Below Capacity)
County Road B2	Western Ave.	Rice St. (CSAH 49)	6,000	0.35	only 1 count	A	(Below Capacity)
County Road C	West City Limits	Cleveland Ave. (CSAH 46)	16,700	0.49	only 1 count	B	(Below Capacity)
County Road D	Cleveland Ave. (CSAH 46)	Fairview Ave. (CSAH 48)	11,000	0.65	only 1 count	C	(Below Capacity)
Cleveland Ave. (CSAH 46)	County Road B2	County Road C	12,000	0.35	0.46	A to B	(Below Capacity)
Fairview Ave. (CSAH 48)	Roselawn Ave.	County Road B	13,000	0.76	only 1 count	C	(Below Capacity)
Fairview Ave. (CSAH 48)	County Road B2	County Road C	20,900	0.49	0.61	B to C	(Below Capacity)
Fairview Ave. (CSAH 48)	County Road C	County Road D	16,000	0.47	0.94	B to D	(Approaching Capacity)
Hamline Ave. (CSAH 50)	Larpenteur Ave. (CSAH 30)	County Road B	14,000	0.54	only 1 count	B	(Below Capacity)
Hamline Ave. (CSAH 50)	County Road B	County Road C	24,000	0.92	only 1 count	D	(Approaching Capacity)
Hamline Ave. (CSAH 50)	County Road C	North City Limits	15,000	0.58	only 1 count	B	(Below Capacity)
Victoria St. (CSAH 52)	County Road B	County Road B2	10,000	0.29	0.59	A to B	(Below Capacity)
Victoria St. (CSAH 52)	County Road B2	County Road C	11,000	0.32	0.65	A to C	(Below Capacity)
Victoria St. (CSAH 52)	County Road C	North City Limits	12,000	0.71	only 1 count	C	(Below Capacity)
Dale St. (CSAH 53)	Larpenteur Ave. (CSAH 30)	County Road B	16,000	0.47	only 1 count	B	(Below Capacity)
Dale St. (CSAH 53)	County Road B	County Road B2	18,000	0.53	only 1 count	B	(Below Capacity)
Dale St. (CSAH 53)	County Road B2	County Road C	10,000	0.59	only 1 count	B	(Below Capacity)

SOURCE: Mn/DOT and WSB & Associates, Inc. ** When the roadway segment has more than one count location, the V/C is provided for both volumes (low and high).*

Projected 2030 LOS - B Minor Arterials

Table 5.23

Access Management

Proper access management is a key component of providing a roadway system that effectively balances mobility and access needs. Access management is based on the proper spacing of roadways and/or driveways that are allowed to access a given roadway. According to the Metropolitan Council guidelines, arterial roadways should primarily serve a mobility function and should have only limited access so as not to disrupt the flow of traffic and not create safety concerns for drivers. At the other end of the spectrum, the primary function of local streets is to provide access to local land uses, so there are fewer restrictions on these roadways. However, there are important considerations regarding access control and design on local streets as well.

Numerous studies have demonstrated the safety and operational benefits of managing access in an appropriate manner. The government agency having jurisdiction over a given roadway has the applicable access management guidelines for that facility. MnDOT has access management guidelines that apply to Trunk Highways such as TH 36, TH 51, and TH 280. A substantial portion of the roads in Roseville are county roadways, and Ramsey County does not publish access management standards. Recommended City access management guidelines are summarized in Table 5.24.

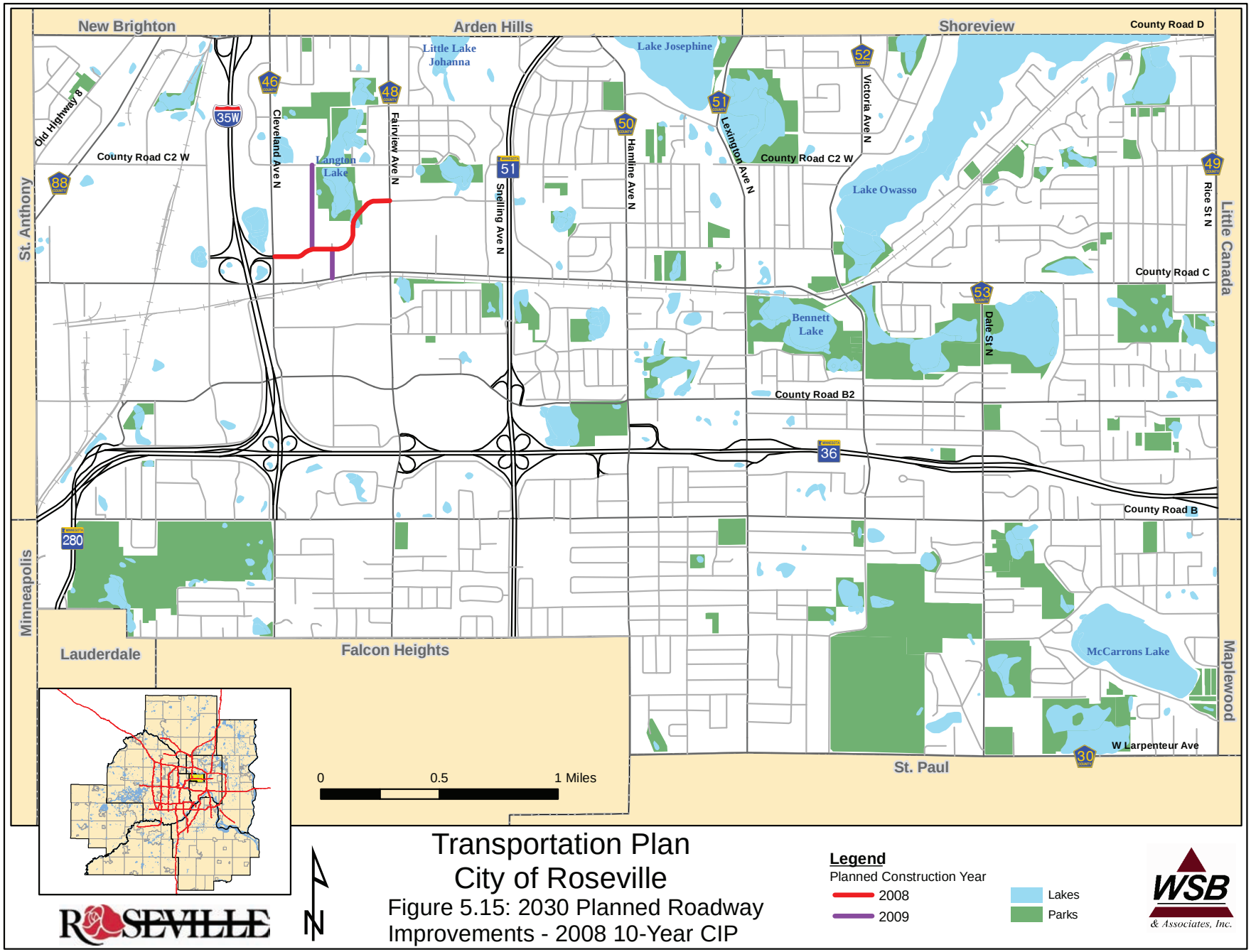
In addition, whenever feasible, the following policy guidelines should apply for access design:

- In general, access to a specific parcel should be limited to a single driveway unless the front footage is 200 feet or greater.
- In residential areas, no residential driveway should be placed closer than 40 feet to an intersection.
- The location of any driveway or access should be consistent with sight distance along the roadway. Where sight distance is not adequate, an alternate access location should be evaluated.
- Explore the development of common driveways in commercial areas when feasible.
- The use of medians should be considered to control multiple access locations and provide appropriate geometry for higher volume turning movements.

2030 Transit Plan

Service and Facilities

As identified in Section 4.5 (Existing Transit Service), Metro Transit is responsible for the provision of transit service in Roseville, under the broader transit policies identified by the Metropolitan Council. In addition, Ramsey County has played an increased role in planning and facilitating enhanced transit facilities and services. In general, transit and transit planning are subject to the constraints of existing funding levels and the uncertainties associated with future funding. Funding levels are determined to a large extent on decisions made at the State legislature.


New Brighton
Arden Hills
Shoreview
County Road D
Little Lake Johanna
Lake Josephine
Old Highway 8
County Road C2 W
Cleveland Ave N
Fairview Ave N
Snelling Ave N
Hamline Ave N
Lexington Ave N
Victoria Ave N
Rice St N
Langton Lake
Lake Owasso
St. Anthony
Little Canada
County Road C
Bennett Lake
Dale St N
County Road B2
County Road B
Minneapolis
Lauderdale
Falcon Heights
McCarrons Lake
Maplewood
W Larpenteur Ave
St. Paul
0
0.5
1 Miles
Transportation Plan
City of Roseville
Figure 5.15: 2030 Planned Roadway Improvements - 2008 10-Year CIP
Legend
Planned Construction Year
2008
2009
Lakes
Parks
ROSEVILLE
WSB & Associates, Inc.

The Metropolitan Council has established a series of Transit Market Areas throughout the metropolitan area as a guide for the provision of appropriate transit service. There are four market areas, I through IV, based on the propensity to use transit, or the likelihood of high transit ridership. The ranking is based primarily on four factors: population density, employment concentration and job density, trip volumes and patterns, and transit-dependent segments of the population.

With higher population and job density, high trip volumes, and relatively high percentages of transit-dependent individuals, more ridership is anticipated and higher levels of transit service are thus justified. Market Area I has the highest transit potential for transit ridership and associated justification for extensive service, and Market Area IV has the lowest potential for transit ridership.

Roseville is split between Market Areas II and III. Roughly, the area between Cleveland Avenue N and Hamline Avenue N has been designated Transit Market Area II, while the rest of Roseville is Transit Market Area III. As identified by the Metropolitan Council, appropriate service options for Market Area II include regular-route local (suburb to suburb) service, all-day express (via freeways to employment centers such as downtown Minneapolis or St. Paul), small vehicle circulators, special needs paratransit, and ridesharing. Service options for Market Area III include peak-only express, small vehicle circulators, midday circulators, special needs paratransit, and ridesharing.

As was shown on Figure 5.10 (Existing 2008 Transit Facilities and Service), the provision of transit service in Roseville is generally consistent with the Market Area designations identified above. Local and express service is more concentrated on the center portion of the city, converging on the Rosedale Transit Hub. The positioning of the Rosedale Transit Hub near the intersections of TH 36 and Snelling Avenue N allows express bus services to easily access the highway system. The park-and-ride element of the Rosedale Transit Hub is currently heavily utilized and is likely to continue to be the most successful element of transit services in Roseville.

Roseville will work with Metro Transit, Ramsey County, and the Metropolitan Council to support transit initiatives that will increase the transit mode share within Roseville. Because of the low-density housing and land-use pattern throughout most of the city, increasing park-and-ride capacity and express bus service to regional employment centers is likely to be the most effective strategy. Initiatives towards this goal include the following:

- Local promotion of the benefits of transit use
- Working with Metro Transit and Ramsey County to increase parking capacity at the Rosedale Transit Hub as demand dictates
- Support and facilitate I-35W, TH 51, and TH 36 transit improvements where possible
- Support and promote transit initiatives such as the Northeast Diagonal Busway and the Snelling Avenue Busway proposals
- Support and promote increased frequency of express service, including mid-day service
- Support and promote increased park-and-ride lot capacity within the city as well as across the metropolitan area

Proposed City of Roseville Access Management Guidelines
Table 5.24

Type of Access	Minor Arterial	Collector	Local
Single Family Residential Driveways	No Direct Access	No Direct Access	As Required
Commercial/ Multi-Family Residential/ Mixed Use Driveways	Based on: Speed, Traffic Volume, Sight Distances, etc. (1/8 to 1/4 mile)	Based on: Speed, Traffic Volume, Sight Distances, etc. (min 330 ft.)	Based on: Speed, Traffic Volume, Sight Distances, etc. (min. 100 ft.)
Low Volume Streets	Full Access - 1/8 mile	Full Access - 1/8 mile	Full Access - 330 ft.
	Partial Access - 330 ft.	Partial Access - 330 ft.	Partial Access - 330 ft.
High Volume Streets < 10,000 ADT	Full Access 1/4 mile	Full Access - 1/8 mile	Full Access - 330 ft.
	Full Access - 1/8 mile	Partial Access - 330 ft.	Partial Access - 330 ft.
Collector Streets	Full Access - 1/2 mile	Full Access - 1/4 mile	Full Access 1/8 mile
	Partial Access 1/4 mile	Partial Access 1/8 mile	Partial Access - 330 ft.

SOURCE: WSB & Associates, Inc.

- Promote redevelopment projects to assume a transit-supportive form
- Promote reverse commute and suburb to suburb bus service

Transit-Oriented Development

A transit-oriented development (TOD) is a mixed-use residential and/or commercial area designed to promote, support, and facilitate access to mass transit. In addition, TOD patterns typically incorporate design principles that encourage walking and bicycling. Common elements of TOD neighborhoods often include a mix of land uses that encourages street activity at all times of the day, increased residential densities, and more compact development. TOD design elements are becoming increasingly popular in the Twin Cities area. Some of the core principles of TOD neighborhoods are summarized below.

Compact Development: Medium-to high-density development in proximity to a transit station allows more people and activities to be within a walkable distance from the transit service. The Metropolitan Council considers approximately one-quarter mile to be a comfortable walking distance for most transit riders.

Mix of Land Uses: Mixing residential, retail, and office land uses within walking distance of the transit stop allows the neighborhood to become an origin and a destination for trips at the station. From a broader perspective, mixed land use should have the effect of reducing the need for vehicular trips by those who live, work, or pass through the neighborhood by allowing more opportunities to be accessed while covering less distance.

Pedestrian Orientation: A central component of TOD neighborhoods is walkability – the attractiveness of an area for those who choose to walk. A TOD neighborhood allows safe, efficient, and attractive pedestrian passage to and from the transit stop as well as between all buildings within the neighborhood. TOD design features intended to increase the walkability of a neighborhood include street-facing buildings on a network of pedestrian-scaled streets, attractive streetscaping, and appropriate motorized traffic control at pedestrian crossing points.

Transportation Interfaces: Different travel modes need to be effectively linked for TOD neighborhoods to be successful. The efficient integration of transit, motorized vehicle, bicycle and pedestrian networks is critical to the success of TOD neighborhoods. While the purpose of TOD neighborhoods is to reduce the use of private automobiles, those who choose to drive must still be safely and appropriately accommodated. Some TOD neighborhoods incorporate park-and-ride facilities.

TOD Opportunities in Roseville: As parcels become available for redevelopment, serious consideration should be given to whether TOD design characteristics would be appropriate for the specific location. In general, Roseville will have more success encouraging transit ridership if TOD design characteristics are implemented in areas adjacent to existing bus lines. Currently, Route 84, which travels on Snelling Avenue N between the south city limits and the Rosedale Transit Hub, features 15 minute headways and provides the most frequent transit service within Roseville.

Currently, the commercial areas surrounding the intersection of Snelling Avenue N and County Road B are configured in an automobile oriented configuration. From the standpoint of increasing transit ridership, redevelopment in a more transit-supportive fashion could increase the walkability of the neighborhood and increase transit ridership. However, there are also major obstacles to overcome in this area before it can become a transit-oriented neighborhood. In 2006, this portion of Snelling Avenue N, part of the state trunk highway network, was estimated to carry approximately 38,000 vehicles per day. The current configuration, with Snelling Avenue situated within a wide right-of-way and frequent use of frontage/service roads to provide access to adjacent land, would require significant modifications before it would maximize its transit supportive potential.

Roseville should also encourage transit supportive development in other areas, even if the area currently is not served by transit. Metro Transit regularly reviews the routes and timetables of each route and expands service to areas where it will be most successful. By creating walkable neighborhoods with transit-supportive development, Roseville will be well prepared for future transit service. In addition, dedicated right-of-way transit lines provide opportunities for creating transit-supportive development. In particular, Roseville should proactively plan station areas where appropriate in anticipation of transit additions in the Northeast Diagonal Corridor.

To increase transit ridership, Roseville will need to retrofit its suburban pattern for urban level densities and traffic. To a limited extent, the City can develop and implement TOD guidelines and design criteria for local projects. However, because so many of the transportation corridors are under the control of

other agencies and jurisdictions, Roseville will need to advocate for improvements by other agencies as well.

2030 Non-Motorized Transportation Plan

The development of a pathway network in Roseville is essential in moving people to and from various destinations as well as providing additional recreational opportunities. Roseville utilizes an ad-hoc Citizen Pathway Advisory Committee to update the Pathway Master Plan approximately every five years. The most recent update was completed in 2008. The intent of the plan is to provide guidance for the future development of pathways throughout Roseville.

To increase the number of trips completed by walking or cycling, Roseville should provide safe, efficient, and attractive routes between destinations. Potential improvements to the non-motorized network include additional off-road pathways and on-road bicycle accommodations. The development of a master plan helped in identifying how the City can implement a complete pathway network. After studying the existing conditions of Roseville and outlining goals for a pathway network the City's Pathway Master Plan defined these issues as most relevant to Roseville.

1. Safety

- Improve transportation facilities for children, senior citizens, people with disabilities, pedestrians, bicyclists, students within school walking areas, all light traffic
- Design pathway facilities that can provide a safe alternative to the school busing program
- Encourage the use of traffic management techniques at intersections and along boulevards especially on the arterial roadways

2. Connectivity

- Improve the ability to safely travel from one location to the next
- Provide linkages between major destinations
- Extend system to connect to all dead-end pathways
- Develop pathway networks that relate to our neighboring communities' pathways
- Overcome barriers that deter pathway use:
  - TH 36, Snelling Avenue, Interstate 35W, arterials
  - Narrow bridge decks and underpasses
  - Poorly defined crosswalks at intersections
  - Intersections designed and engineered for vehicles, not young children or senior citizens
  - Traffic lights timed for vehicles, not children and senior citizens

3. Regional Links

- Expand pathway opportunities to the larger metropolitan area
- Create linkages to state trail facilities
- Utilize existing vehicular corridors to regional parks and pathways
- Redesign regional corridors to provide for pathway facilities

4. Maintenance

- Increase funding equipment and personnel to maintain a growing pathway network
- Meet the needs of a demanding public
- Reconstruct existing facilities that do not meet the current standards (primarily in parks)
- Redefine the pathway management program for maintenance and operations

5. Aesthetics

- Unify public design elements (i.e. signs, gateways, landscaping, lighting, and parking)
- Establish design criteria for private development (i.e. parking, lockers, and access)

6. Regulation and Enforcement

- Develop a consistent and appropriate signage program
- Expand signage program to include pathways beyond the parks
- Educate users about pathway etiquette and regulations
- Inform users through signage of destinations outside of the parks
- Increase policing of pathway system
- No consequences for violators

7. Education and Promotion

- Provide programs that are directed at teens and adults, as well as those for children
- Provide more programs that teach about safety and etiquette

- Continue to update the Pathway Map to make it user-friendly
- Make the Pathway Map readily available
- Create more pathway events like Tour de Roses
- Inform the local business community about our pathway goals
- Dispel common public myths about pathways
- Develop ways to count pathway users

Transportation Demand Management

Transportation Demand Management (TDM) is the application of strategies and policies to increase the efficiency of transportation systems by influencing traveler behavior. TDM strategies increase the efficiency of the transportation network through the redistribution of travel demand (both realized and latent) from congested modes and times to uncongested modes and times. At its most basic level, TDM strategies discourage the use of private-occupant vehicles during peak hours. Since many of these trips are commuter (work) trips, many TDM strategies involve workplace strategies and address travel associated with travel to and from employment centers. The primary methods or strategies typically employed are as follows:

- Transit
- Car/van-pooling
- Telecommuting
- Flex-time
- Non-motorized commuting (i.e. biking/walking)

TDM strategies must be implemented through a partnership of the City, State, region, and employers to encourage travelers change their behavior through incentives and enhanced services. The greatest motivations for behavior change are the opportunities for individual travelers to save time or money. For example, employers can provide monthly discounts or passes to employees to use transit or provide coordination services to match up individuals for car/van pooling activities. Employers can also allow or promote telecommuting, particularly in various industries for which face-to-face contact is not important for task performance. Similarly, employers can allow or promote flex-time, which enables employees to travel to/from work at non-peak travel times. Employers can also facilitate bicycle commuting by providing shower and changing facilities. The State and regional government entities can provide increased or specialized transit options or High-Occupancy Vehicle (HOV) lanes on principal arterials, metered freeway entrances, and meter bypass lanes for those who choose not to travel alone.

There are a number of reasons why employers may wish to promote TDM strategies. In areas where parking is expensive or scarce, employers may save money by reducing the demand for parking. Retail businesses may desire to preserve parking spaces for customers rather than employees. Probably the most significant reason why employees may implement any number of TDM strategies is simply to make their businesses a more attractive place to work by allowing employees greater freedom in choosing when and where they work.

Roseville can actively promote TDM strategies by encouraging major employers to implement TDM strategies. Roseville may require TDM plans for new developments if they are large enough to have significant traffic impacts. Roseville may also facilitate the formation of transportation management organizations (TMOs), groups of employers and organizations that may combine resources to have a larger influence in travel behavior. Roseville may wish to provide financial incentives to employers who actively promote TDM strategies. For example, new developments may be allowed to provide fewer parking spaces (thus lowering the cost of construction) if they are willing to actively promote TDM strategies.

The City can provide improved bicycle and pedestrian facilities between residential areas, work sites and transit facilities, and can put in place land-use controls that encourage development that encourages non-motorized transportation.

Implementation Plans and Recommendations

The previous section evaluated existing and future needs for transportation improvements in Roseville. The plan described below is recommended to address those needs using a wide range of innovative strategies and methods across all transportation modes.

Roadway Function and Jurisdiction

Roseville should continue to work with community residents, Ramsey County and the State of Minnesota to determine the most appropriate functional and jurisdictional classification for each roadway within Roseville. In making these decisions, a long-range plan should be developed for each corridor to simultaneously establish a vision incorporating goals for future land use, motorized and non-motorized transportation, transit, and urban design. Only after the community has established a comprehensive vision for the corridor should the appropriate functional and jurisdictional classification be determined.

Roadway Improvements

Expanding existing roadways within Roseville will be difficult or undesirable, and there are relatively few opportunities to construct new roadways. Thus, the City has established policies and objectives aimed at achieving maximum utilization of the existing infrastructure. Recommended roadway improvements can be divided into three overall categories: safety, preservation, and capacity.

Safety

The transportation network should be safe for all users of the roadway. The analysis of crash frequencies identified the intersections and roadway segments with the highest crash rates. While Snelling Avenue and County Road B was identified in this analysis as having a high crash frequency, it should be noted that this intersection was reconstructed in 2008. It is anticipated that the reconstruction will result in a reduced crash frequency because of improved roadway and intersection geometry. The following two intersections have high crash rates, with no programmed improvements:

- Larpenteur Avenue and Rice Street
- County Road B and Rice Street

These intersections should be evaluated to determine the cause of the crashes and identify appropriate measures to improve safety.

In addition, the analysis of segment crash rates indicated that there are two roadway segments on County Road B with high crash rates. Not surprisingly, the first segment, County Road B between Fairview Avenue and Hamline Avenue, corresponds with the high crash rate at the intersection of Snelling Avenue and County Road B. Because of the 2008 geometric improvements at the Snelling and County Road B intersection, it is anticipated that the safety of this segment will improve. The second segment is County Road B between TH 280 and Cleveland Avenue. However, as a part of the conversion of TH 280 to freeway operation, access to County Road B has been disconnected. With a reduction in traffic on this segment, it is likely that the number of crashes will be greatly reduced.

Preservation

Roseville should continue to implement its Pavement Management Program to ensure that residential streets remain in good repair In addition, the City should work with Ramsey County to monitor the need for pavement renovation or replacement on the roads under County jurisdiction. Although expansion of the system is not always feasible or desirable, roadway reconstruction and maintenance will allow the fullest and most efficient use of roadways.

Capacity

The City should work with Ramsey County to accommodate non-motorized transportation users on county roads at the time the road is reconstructed.

The City should work with MnDOT and other agencies to implement a staged reconstruction program to replace the bridges at Rice and Lexington to allow implementation of a high-occupancy vehicle (HOV) lane on TH 36. Increasing the capacity of TH 36 with the replacement of these bridges would also allow improvements to be made to the intersecting arterials at TH 36 to allow adequate turn lanes and queuing areas for vehicles waiting at ramp meters. Most stretches of TH 36 also have sufficient right-of-way to incorporate a landscaping program to enhance the roadway.

The City should continue to work with Rosedale and the surrounding shopping centers to monitor traffic and potential improvements such as increased transit, IVHS, as well as additional roadway capacity.

The 2030 traffic forecast suggests that only County Road B from Snelling Avenue to Hamline Avenue will experience at-capacity conditions (other than roadways under State jurisdiction). Roseville should continue to monitor this roadway segment, carefully considering expansion while also considering the potential impacts the expansion would have on adjacent land uses, non-motorized transportation, and urban design.

As redevelopment occurs in the western part of the city, the need for new or improved roadways should be monitored.

Transit and Travel Demand Management

The Metropolitan Council should be encouraged to maintain the existing level of transit service in Roseville. Potential improvements include the addition of a new circulator route in the Twin Lakes/Centre Pointe area, mid-day service to the two downtowns and service connecting Rosedale to other suburban hubs. Additional park-and-ride lots are needed.

The City should work with the Metropolitan Council, the Ramsay County Rail Authority, and adjacent units of government to advance the Northeast Diagonal and Snelling Corridor.

The City should also work to ensure good pedestrian access to bus stops and shelters where necessary. In

addition, the City should provide improved bicycle and pedestrian facilities between residential areas, work sites, and transit facilities, and should put in place land-use controls that encourage development that is transit- and pedestrian-friendly.

In Roseville, the local sensitivities to expanding roads are reflected in the goals expressed in the Imagine Roseville 2025 report as well as this plan. Therefore the City should support travel demand management such as the HOV lane on TH 36.

Non-Motorized Transportation

Roseville updates the pathway master plan on a regular basis. The plan recognizes the following principles:

- Different types of facilities are appealing to different users, particularly when considering the individual experience levels. The Roseville pathway plan should address the needs of all users.
- Pathways are needed along all minor arterials and collectors, since they usually provide the most direct route for travelers.
- All development and redevelopment proposals should be reviewed for pathway connections or reservation of future pathway links.
- To provide the greatest benefit, Roseville's pathways should connect with neighboring communities and the regional system.
- Regular maintenance to non-motorized pathways is critical to ensuring their usefulness and attractiveness. Roseville should continue to support the pathway-management program that programs pathway rehabilitation and reconstruction.

6 Housing and Neighborhoods

Housing and Neighborhoods is the primary chapter of the Comprehensive Plan that guides future development and improvements to the City's housing and neighborhoods. This chapter contains the following elements:

- Introduction
- Goals and Policies
- Housing Age and Tenure
- Housing Types and Trends
- Future New Housing Needs, Potential Sites, and Unit Projections
- Housing Programs and Agencies

Introduction

Housing is a basic human need and an essential component of the quality of life in a community. Maintaining diverse, safe, and affordable housing is one of the most critical matters facing the city of Roseville over the next twenty years. The availability of a variety of housing types, styles, and price ranges, which allows residents to move through the life-cycle housing chain, is a key factor in maintaining a community's ability to thrive well into the future. Roseville has had numerous conversations regarding the type of housing that should be developed in order to continue to make the community a desirable place to live.

Diverse, affordable, and high-quality housing and neighborhoods are critical components in defining Roseville, maintaining a healthy tax base, and attracting and retaining residents and businesses. Neighborhoods are the building blocks of the larger community, and many people identify with the social and physical

aspects of their neighborhood. Because of the shared community connections within neighborhoods, they often foster grass-roots civic discourse. Healthy neighborhoods bring vitality and promote investment in the larger community, providing a firm foundation to plan for Roseville's future.

Goals and Policies

The following goals and policies are established to guide future development and decision making relating to housing and neighborhoods in the city:

Goal 1: Provide a wide variety of housing options in order to retain and attract a diverse mix of people and family types with varying economic statuses, ages, and abilities.

Policy 1.1: Promote the development of housing stock that is appealing to persons of varying economic means.

Policy 1.2: Regularly review official controls to ensure opportunities for development of new housing stock, enhancement of existing housing stock, and ability to provide a diversity of housing choices.

Policy 1.3: Encourage the development of market-rate, intergenerational rental housing.

Policy 1.4: Partner with the Roseville Housing and Redevelopment Authority (HRA) to provide programs that encourage a range of housing choices for all residents in Roseville.

Policy 1.5: Partner with regional, state, and federal agencies, other cities/HRAs, nonprofit groups, and private-sector developers to provide high-quality, affordable housing to accommodate the City's share of regional affordable-housing needs.

Policy 1.6: Integrate housing plans and policies with other City planning initiatives.

Goal 2: Maintain and enhance Roseville as a community with strong, desirable, and livable neighborhoods.

Policy 2.1: Promote and maintain neighborhoods through official controls supporting design elements that create safer streets, facilitate social interaction between neighbors, and enhance neighborhood connectivity, such as sidewalks or pathways, streetscaping, traffic-calming strategies, and open or green space.

Policy 2.2: Provide programs for rehabilitating and upgrading existing housing stock.

Policy 2.3: Support housing renovation, redevelopment, and/or infill projects that complement existing neighborhood character and improve neighborhood desirability and longevity.

Policy 2.4: Maintain and encourage a mix of housing types in each neighborhood based on available amenities, transportation resources, and adjacent land uses.

Policy 2.5: Encourage the integration of affordable housing in new and existing neighborhoods.

Policy 2.6: Prevent neighborhood decline by supporting ongoing code-compliance inspections and neighborhood reinvestment strategies.

Policy 2.7: Encourage communication channels between residential and commercial property owners/managers to resolve potential neighborhood issues.

Policy 2.8: Identify and encourage the preservation of historic homes and neighborhoods.

Goal 3: Encourage the development of neighborhood identities that build a sense of community and foster neighborhood interaction, as appropriate.

Policy 3.1: Foster the creation of individual neighborhood identities through the promotion of each neighborhood's unique attributes and amenities.

Policy 3.2: Assist residents in developing and maintaining neighborhood organizations and forums.

Policy 3.3: Create two-way paths of communication between the City and neighborhood organizations regarding overall citywide information and specific issues of concern and interest to individual neighborhoods.

Policy 3.4: Encourage neighborhood-based planning processes that rely heavily on resident participation.

Policy 3.5: Consider involvement of neighborhood residents in further development of area plans for the 16 planning districts (Land Use Chapter 4) within the framework of the Roseville 2025 Vision and the Comprehensive Plan.

Policy 3.6: Partner with neighborhood organizations to provide forums for residents to participate in the achievement of the housing and neighborhood goals.

Goal 4: Integrate environmental stewardship practices into the housing stock and neighborhoods.

Policy 4.1: Support official controls and programs that incorporate state-of-the-art technology for new construction or rehabilitation of existing homes that promotes innovative and sustainable building methods.

Policy 4.2: Encourage the use of high-quality, durable, and energy-efficient building materials and home products in renovations of existing and construction of new housing to promote decreased energy and land consumption, resource efficiency, indoor environmental quality, and water conservation, and to lessen site, neighborhood, and community impacts.

Policy 4.3: Encourage third-party certification, such as Leadersin in Energy, Environmental Design (LEED), MNGreenstar, and EnergyStar, of "green" building practices for new and renovated housing units and developments.

Policy 4.4: Create ongoing resources to educate the community about "green" renovation and healthy building techniques.

Policy 4.5: Encourage the use of low-impact landscaping, such as no-mow yards, native landscaping, and rain gardens, to reduce the consumption of natural resources in yard maintenance.

Policy 4.6: Encourage housing development on sites that have access to multiple modes of transportation, including transit, biking, walking, and to sites that efficiently utilize land in a sustainable manner.

Goal 5: Continue support of housing and neighborhood programming provided by the HRA that address community needs.

Policy 5.1: Work in partnership with the HRA to identify housing issues, provide resources for housing programs, and educate Roseville residents on housing-related topics.

Policy 5.2: Coordinate with the HRA on implementation of housing-related activities identified within the Comprehensive Plan.

Housing Age and Tenure

Roseville experienced a significant housing boom between the 1940s and 1970s with 83% of all owner-occupied units and 74% of all rental units being constructed during this period (see Table 6.1). This rapid development of housing over a relatively short time period has resulted in housing stock and neighborhoods that are reaching the age when they will concurrently require significant investment.

The ratio of owner-occupied housing to rental housing has remained consistent over the last two decades. According to the 1990 and 2000 U.S. Censuses, approximately two-thirds of the housing stock is owner-occupied and one-third are rental units (see Table 6.2). This balance continued through 2007 based on the number and type of new-construction building permits issued by the City.

In the last several years, the community expressed concern regarding conversion of owner-occupied, single-family homes to rental housing. The Census data shows a consistent number of single-family rentals over time, with 218 units in 1990 and 206 units in 2000. Anecdotal information has suggested that the rate of conversion of older single-family homes from owner occupancy to rental has increased. The City will continue to monitor housing tenure trends over time.

Housing Costs and Affordability

The U.S. Department of Housing and Urban Development defines housing affordability as requiring no more than 30% of household income for housing costs. According to Census 2000, the owners of 86% of Roseville's single-family, owner-occupied households paid less than 30% of their household incomes toward

selected monthly owner costs, such as mortgage payments, property taxes, insurance, utilities, fuels, condominium fees, or mobile home costs. Sixty-two percent (62%) of renters meet the federal housing affordability threshold.

The median single-family house value has increased by 81% over the last eight years, rising from $130,500 in 2000 to $237,200 in 2008. This upward trend is anticipated to level over the next few years due to current market conditions; however, with wages increasing at a slower rate, the overall affordability of single-family housing in Roseville may decrease.

Housing Types and Trends

In 2008, Roseville is home to approximately 34,000 residents living in a variety of housing styles including single-family homes, duplexes, apartments, condominiums, townhomes, manufactured homes, and senior housing complexes. The community also supports a variety of types of group living facilities, including nursing homes, dormitories, and group homes. The map in Figure 6.2 shows a distribution of the various housing types throughout the community. Table 6.6 contains the number of units (in 2008) for each housing type.

Years Built	Owner-Occupied		Rental		Total	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**
1939 or earlier	460	5%	93	2%	553	4%
1940s/50s	4,484	46%	646	14%	5,130	35%
1960s	2,239	23%	1,272	27%	3,511	24%
1970s	1,455	15%	1,641	34%	3,096	21%
1980s	492	5%	596	12%	1,088	7%
1990s	718	7%	536	11%	1,254	9%
Total	9,848	100%	4,784	100%	14,632	100%

Source: 2000 U.S. Census

Age of Housing Stock

Table 6.1

Tenure	1990		2000		2007 (est)***	
	Number of Units	Percent	Number of Units	Percent	Number of Units	Percent
Owner-Occupied*	9,343	65.7%	9,942	66.6%	10,427	66.8%
Renter-Occupied**	4,775	33.6%	4,870	32.6%	5,059	32.4%
Unknown	98	0.7%	112	0.8%	112	0.7%
Total Housing Units	14,216	100%	14,924	100%	15,598	100%

Source: U.S. Census and Roseville Building Permit Data

**Sum of occupied, owner-occupied and vacant, for sale data*

***Sum of occupied, renter-occupied and vacant, for rent data*

****Sum 2000 Census data and new building permits for owner-occupied and rental 2000-2007*

Owner and Renter Occupied Housing Units - 1990-2007

Table 6.2

Type of Unit	1990			2000		
	Owner	Renter	Vacant	Owner	Renter	Vacant
1-unit, detached	8,076	218	75	8,143	206	94
1-unit, attached	36	175	13	848	174	40
2-unit	19	66	1	25	90	5
3- or 4-unit	11	22	0	20	29	-
5 or more units	683	3,753	561	752	4,226	172
Mobile home	92	14	3	60	32	8
Other	40	32	1	-	-	-
Total	9,282	4,280	654	9,848	4,757	319
Grand Total	**14,216**			**14,924**		

Source: U.S. Census

Housing Units by Type and Tenure 1990-2000

Table 6.3

Percent of Income	With Mortgage		Without Mortgage		Total	
	Number	Percent	Number	Percent	Number	Percent
Less than 20 percent	2,991	54.0%	2,653	85.5%	5,644	65.3%
20 to 24 percent	1,031	18.6%	149	4.8%	1,180	13.6%
25 to 29 percent	528	9.5%	94	3.0%	622	7.2%
30 to 34 percent	312	5.6%	88	2.8%	400	4.6%
35 percent or more	654	11.8%	120	3.9%	774	9.0%
Not computed	26	0.5%	0	0	26	0.3%
Total	5,542	100%	3,104	100%	8,646	100%

Source: U.S. Census

Owner-Occupied Housing Percent of Income in 1999

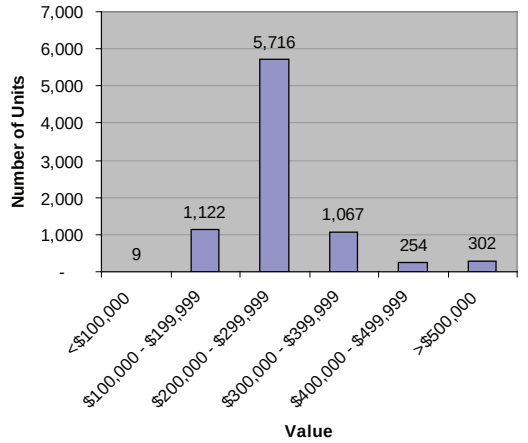
Table 6.4

Percent of Income	Number	Percent
Less than 15 percent	596	12.5%
15 to 19 percent	842	17.7%
20 to 24 percent	744	15.6%
25 to 29 percent	652	13.7%
30 to 34 percent	370	7.8%
35 percent or more	1,421	29.9%
Not computed	132	2.8%
Total	4,757	100.0%

Source: 2000 U.S. Census

Gross Rent as % of Household Income (1999)

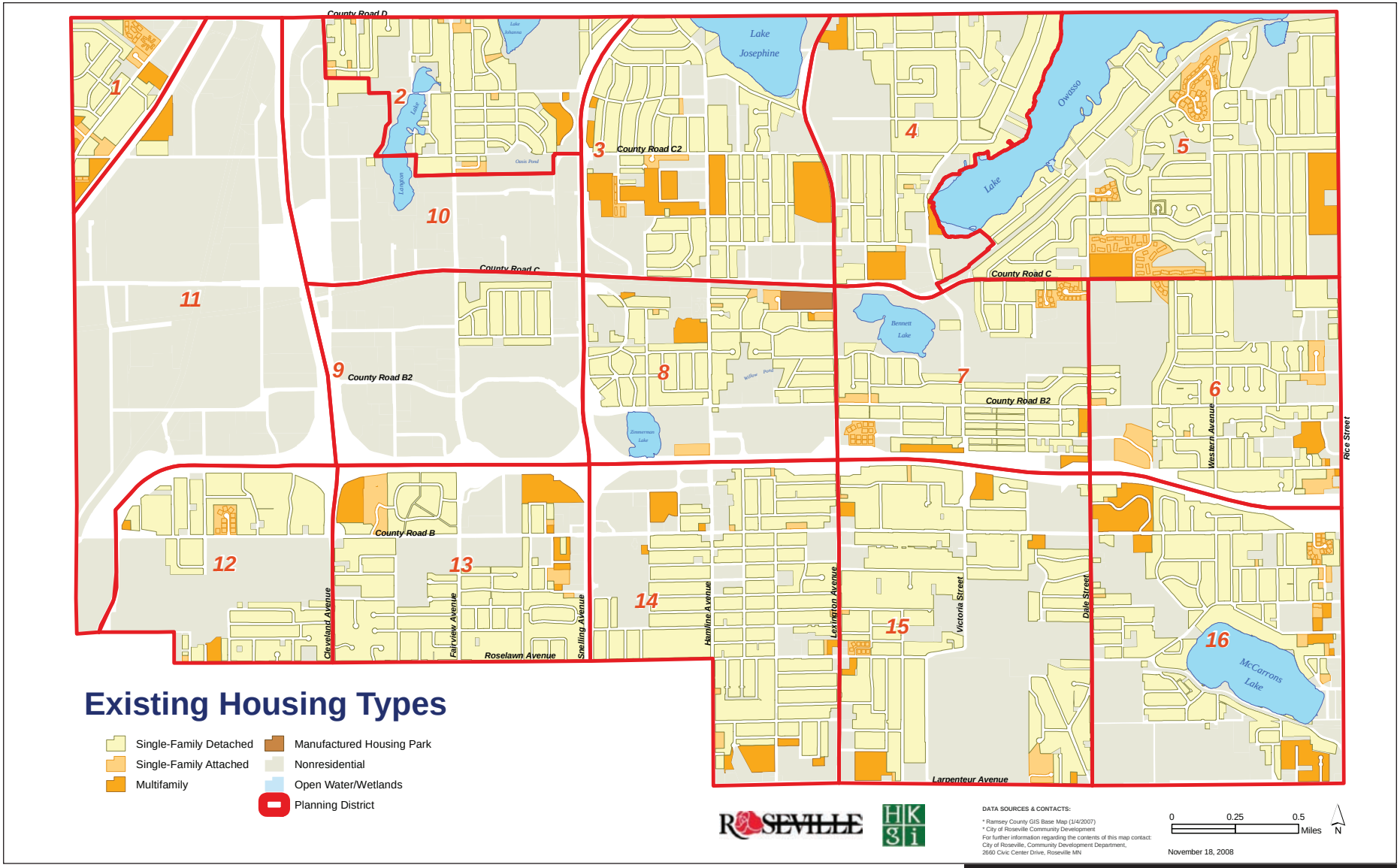
Table 6.5



Source: Ramsey County Parcel Data (April 2008)

2008 Assessed Value of Single-Family Homes

Figure 6.1



Existing Housing Types

Figure 6.2

Single-Family Houses

Roseville's neighborhoods of single-family homes are the building blocks of the community. In 2008, single-family housing represents 53% of the total available housing in the city. The median assessed value of these housing units is $237,400 and the average value is $264,389. The chart in Figure 6.1 shows the distribution of assessed value for single-family homes in Roseville.

Built predominately between the 1950s and 1970s, the size and style of these homes reflect the decades in which they were built. They are typically smaller in size (square feet) than new homes. Reinvestment in the community's homes has remained strong with an average of 930 building permits for home improvements issued each year over the last five years.

As described in Chapter 3 (Community Context), a large proportion of householders age 65 and over choose to continue living in single-family homes as they grow older. The single-story, bungalow, rambler, and ranch-style homes that are found throughout Roseville are very suitable for aging in place.

Type of Unit	2008	
	Number	Percent
Single-family houses (single-family detached)	8,470	53.0%
Apartments	3,468	21.7%
Condominiums	1,249	7.8%
Townhomes (single-family, attached)	1,053	6.6%
Senior Apartments	732	4.6%
Assisted Living/Nursing Homes	712	4.5%
Senior Cooperatives	196	1.2%
Manufactured Homes	107	0.7%
Total Number of Units	15,987	100.0%

Source: Ramsey County Tax Records (April 2008)

Housing Types in Roseville

Table 6.6

Because Roseville has limited land for new single-family residential development, the demolition of existing single-family homes is a viable means to obtain a lot for the construction of new single-family homes. According to the City's building inspectors, approximately three to four demolition permits are issued on single-family homes per year.

Apartments/Multifamily Rental Housing

Production of multifamily rental housing within the community, which in Roseville is predominately apartment complexes for rent, peaked during the 1970s, with three-quarters all of rental units being constructed prior to 1980. Since the majority of apartments are over 30 years old, they lack the modern amenities offered by new apartment buildings. These older apartments typically have little green space, lack playground equipment, and have no garages.

Roseville's multifamily rental housing is consistent with regional market trends characterized by low vacancies, slowly rising rents, and little new construction. Many of these complexes are in need of updates and reinvestment to remain viable housing options. The Roseville HRA has initiated a multifamily housing initiative to begin to work with multifamily rental property owners to address necessary improvements to their investments. With little in production of rental housing since the 1970s, the City may want to advocate the development of non-age-restricted, market-rate apartments.

Condominiums and Townhomes

In 2008, condominiums and townhomes represent nearly 8% and 7% of the total available housing in the city, respectively. The median value of these housing units is $114,600 and $228,100, respectively. Development of multifamily, owner-occupied housing has shifted from condominiums to townhomes as is evidenced by the average age of these units. The average age of condominiums is approximately 30 years and the average age of townhome units is approximately 20 years. Due to their age, it is anticipated that many of the

condominium complexes will require fairly significant maintenance over the next several years.

Because of their ownership structure, older condominiums face unique challenges related to ongoing property maintenance and large capital improvements. An individual owner is responsible only for upkeep of the interior of their individual unit, while a condominium association is responsible for the ongoing maintenance of the common areas, such as the exterior of the building, yard, and parking lot. Each individual owner is a member of the condominium association and is required to pay a monthly fee to fund common-area improvements. In some condominium complexes, the association has not set fees at a sufficient level to fund future capital improvements to the common areas, and they encounter difficulty obtaining traditional bank financing to assist with financing shortfalls because the common areas of a building are not considered collateral by banks. Without the ability to leverage the capital needed to make improvements to the common areas, maintenance is deferred. As conditions in the common areas deteriorate, values of individual units decrease, owners find it increasingly difficult to sell their units, and the complex falters.

Senior Housing: Senior Apartments, Senior Cooperatives, and Assisted Living/ Nursing Homes

Beyond single-family homes, Roseville has a wide variety of senior-housing options, including senior apartments, cooperatives, assisted-living facilities, and nursing-care facilities. In 2008, the city had 732 senior apartments and 712 assisted living/nursing home beds. One of the newer housing types to develop in Roseville is the senior-housing cooperative. From 2003 to 2008, two facilities have been constructed—Applewood Pointe and Greenhouse Village—that together total 196 housing units. As the population within Roseville and the surrounding metropolitan area continues to age, the senior-housing market in Roseville is expected to remain strong. However, a concern within the community is a future overabundance of age-restricted housing units. The City should monitor the proportion of this type of housing to other types within the community.

Manufactured Homes

The city has one manufactured-housing park within its borders. The park, located at the intersection of County Road C and Lexington Avenue, has a maximum capacity of 107 units.

Student Housing

Northwestern College is located on the border of Roseville and Arden Hills. The college currently has housing capacity for 1,061 students with 760 of those available in traditional residential halls and 301 students in college-owned apartments. The college is planning for future growth and is expected to construct another residence hall on its campus with capacity for an additional 550 students. Student housing places a unique demand on city services and residents. To forestall future conflicts, the City should continue to maintain an open dialogue with college administrators.

Future New-Housing Needs, Potential Sites, and Unit Projections

Future New-Housing Needs

Roseville's population has remained relatively stable since the post-war housing boom of the 1950s and 1960s. However, the number of households has changed drastically over the same time period due to the decreasing number of people per household. For example, between 1970 and 1980, the city's population grew by 3.7%, the number of households grew by 53%, and the household size decreased by 24%. It is anticipated that Roseville will continue to gain additional households; therefore, the City needs to plan where and how the community can accommodate these new households. (For a full discussion of population demographics, see Chapter 3 - Community Context.)

According to the Metropolitan Council 2030 Regional Development Framework, Roseville is designated as a "developed community" geographic planning area. The planning area designation sets overall densities that the community is expected to achieve by the regional planning agency. As part of this planning process, the Metropolitan Council projected Roseville's population to increase by 13% between 2000 and 2030, which translates into 4,610 new people or 1,902 new households. With new households projected to enter the community, the City must plan where new housing can be accommodated.

Potential Sites for New Housing

As a nearly built-out inner-ring suburb, the City is challenged as to how to accommodate housing for these projected incoming residents. The City has three primary mechanisms by which to provide for additional housing units: infill housing development, increased housing densities, and redevelopment of currently non-residential areas into housing.

The map in Figure 6.3 identifies sites that are planned for potential new housing units within the community, and each area of new housing has been classified as either infill, increased density, or redevelopment sites.

Infill Development

Infill development housing uses parcels that are currently vacant but have been guided for residential uses on the 2030 Land Use Map. Approximately 100 acres of land are designated as potential infill sites for housing development, which translates into approximately 400 to 1,000 new housing units.

Category	1960	1970	1980	1990	2000	2007(est.)
Populations	23,997	34,518	35,820	33,485	33,690	34,099
# of Households	5,991	8,439	12,876	13,562	14,598	15,068
Household Size	3.99	3.55	2.70	2.37	2.20	2.13

Source: U.S. Census and Metropolitan Council

Total Population, # of Households and Household Size, 1960-2000

Table 6.7

	2000	2010	% Change	2020	% Change	2030	% Change
Population	33,690	36,000	6.9%	37,000	2.8%	38,300	3.5%
# of Households	14,598	15,500	6.2%	16,000	3.2%	16,500	3.1%

Source: Metropolitan Council System Statement (2004)

Population Projections

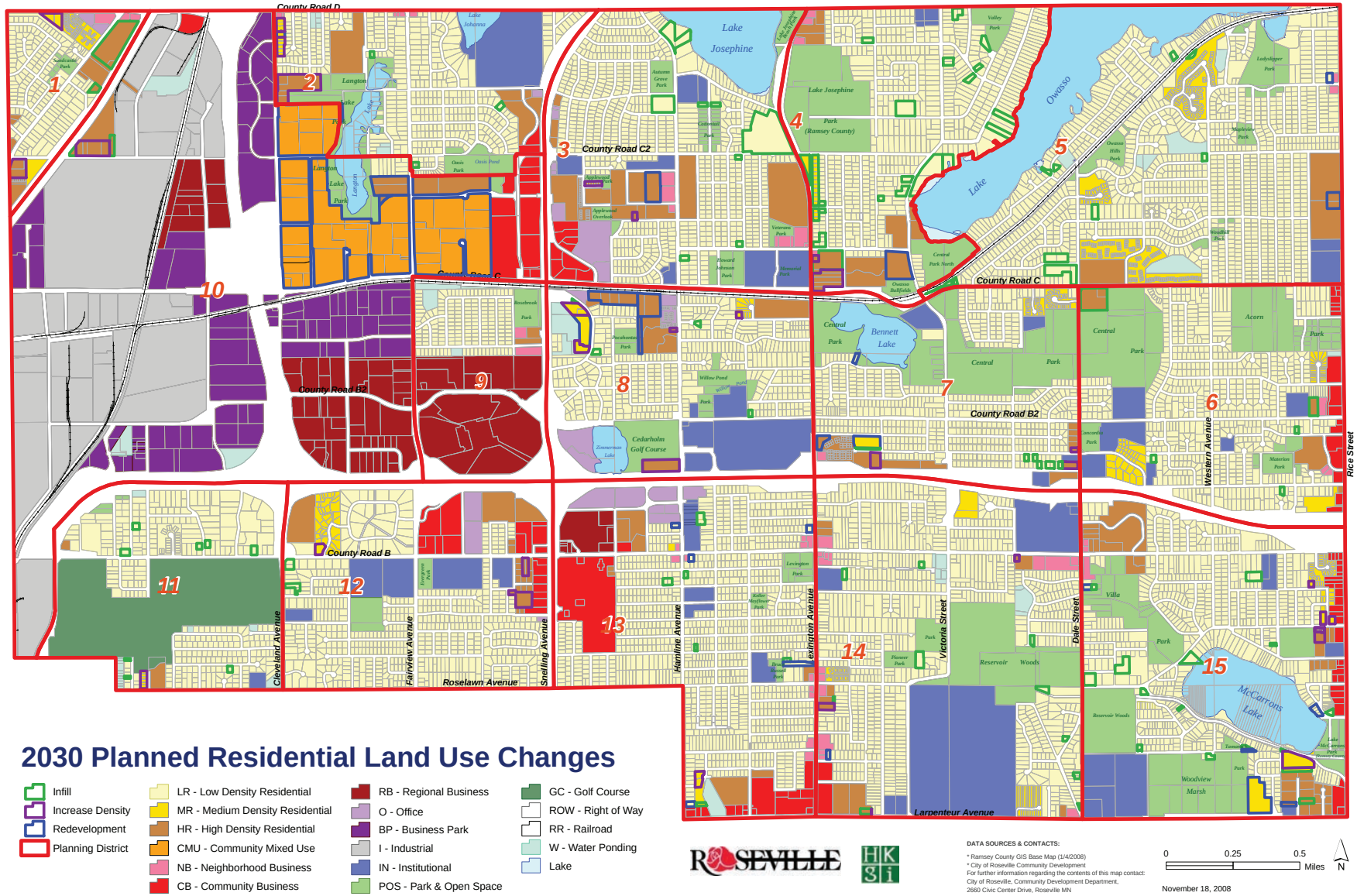
Table 6.8

Increasing Housing Density

The Future Land Use Plan does not redefine housing densities for the residential land-use categories beyond those that are allowable under the 2020 Roseville Comprehensive Plan. The parcels that are identified as "increased density" in Figure 6.3 are those where housing is currently located, but the density of the area increases with the future housing intensity (e.g. low-

As Roseville plans for current and future residents, it should focus on protecting natural resources, ensuring sufficient public infrastructure, and developing transition strategies to increase density and encourage infill development.

—Metropolitan Council's directive from System Statement



Future Housing Development Areas

Figure 6.3

density to medium-density). Forty-nine acres of land are planned to increase in housing density: 13 acres from low-density residential to medium-density residential, 26 acres from low-density to high-density residential, and 7.8 acres from medium-density to high-density residential. The projected additional housing units due to these increases in density could range from approximately 450 to 1,200 units.

Redevelopment

Parcels identified for housing redevelopment are those that will change from nonresidential uses to residential uses. There are approximately 240 acres identified as housing redevelopment parcels. Most of this acreage is located within the Twin Lakes Redevelopment Area and is designated on the 2030 Land Use Map as Community Mixed Use. Housing is intended to be a key component of this redevelopment area, but is not the sole use.

Housing Reduction

In addition to new-housing potential, Figure 6.3 also identifies parcels that are planned to convert from residential to nonresidential uses. There are approximately 24 acres of land that are planned to change from a residential use.

Affordable-Housing Needs

The Metropolitan Council periodically prepares projections of affordable-housing need for the seven-county metropolitan area. Using these metrowide projections, the Metropolitan Council establishes an affordable-housing goal for each community for both new affordable owner-occupied and rental units. Each community must annually report progress it has made in reaching its goal. Between 1996 and 2010, the Metropolitan Council asked the City to work toward the construction of 825 new affordable-housing units, including 607 owner-occupied units and 218 rental units. Through 2007, the City has reached 43% of its owner-occupied goal and 10% of its rental goal.

Although Roseville does not have an explicit affordable-housing implementation strategy, the City and the Roseville HRA have promoted the development of affordable housing by:

- Encouraging developers to develop new affordable-housing units.
- Partnering with organizations, such as Habitat for Humanity, to construct new single-family housing units within the community.
- Purchasing land for new affordable-housing development.
- Approving deviations from the zoning code to allow for new affordable-housing units.

The City should consider strengthening its strategies to promote the development of new affordable, rental units. As described above, the City has not attracted a significant number of new affordable, rental units over the past ten years. In addition, according to the 2000 Census, 38% of renters in Roseville lived in housing considered unaffordable for their income by federal housing standards compared to 14% of homeowners. This indicates that there may be an even greater demand for additional affordable, rental units in the community.

In its *Determining Affordable Housing Needed in the Twin Cities 2011 – 2020 Report*, the Metropolitan Council set Roseville's affordable-housing goal at 201 new affordable-housing units within this timeframe. As part of the City's planning for the development of its share of new affordable-housing units, the City has identified sites throughout the community that have the potential for development of new housing units, including the desired affordable housing units. Figure 6.3 shows these potential new housing sites and designates them as either infill, increased density, or redevelopment sites. These sites include land guided for all three types of residential land uses: low density, medium density, high density, and mixed use.

New Housing Unit Projections

Based on current projections for population and households, Roseville is projected to add 500 households between 2010 and 2020 and another 500 households between 2020 and 2030. Based on the most recent estimate of existing households, Roseville had 15,068 households in April 2007. Therefore, the total projected increase in households 2007-2030 is projected to be approximately 1,432.

Figure 6.3 identifies approximately 209 acres with the potential for development of new housing units. In addition, approximately 179 acres are guided for redevelopment to Community Mixed Use, essentially the Twin Lakes redevelopment area, which is intended to include substantial residential land uses, potentially 25%-50% of the total acreage. Table 6.9 summarizes acreages and potential housing units by residential land-use category and type of development site. The table shows that the identified housing sites could accommodate a minimum of 1,452 housing units based on the minimum density requirements for each residential land-use category, with a potential of substantially more housing units at higher densities allowed within each land-use category.

Land Use Category	Type of Development Site	Acres	Density Range (DU/Acre)	Potential Housing Units
Low Density Residential	Infill	70	1.5 - 4.0	104 - 278
	Redevelopment	5	1.5 - 4.0	8 - 21
	Total	75	1.5 - 4.0	112 - 299
Medium Density Residential	Increase Density	15	4.0 - 12.0	61 - 182
	Infill	7	4.0 - 12.0	26 - 77
	Redevelopment	12	4.0 - 12.0	49 - 148
	Total	34	4.0 - 12.0	136 - 407
High Density Residential	Increase Density	34	12.0 - no maximum*	406 - 1,014
	Infill	23	12.0 - no maximum*	284 - 709
	Redevelopment	43	12.0 - no maximum*	514 - 1,286
	Total	100	12.0 - no maximum*	1,204 - 3,009
Total Residential	Total	209		1,452 - 3,715
Total Medium/High Density Residential	Total	134		1,340 - 3,416
Community Mixed Use (40% Residential)	Redevelopment	72	4.0 - no maximum*	287 - 2,153

* Note: Maximum density of 30 DU/acre used to calculate high end of potential housing units.

Projected New Housing Units Based On 2030 Land Use Map

Table 6.9

In addition, the 179 acres of land guided for Community Mixed Use could accommodate a wide range of housing units, depending upon the percentage of the land that is ultimately developed with residential uses and the densities of the residential developments. Pursuing the three types of housing development sites will be necessary to achieve the community's projected housing needs through 2030.

With regard to the City's proposed share of the region's goal for new affordable-housing units. Table 6.9 shows that the City is guiding 134 acres of the potential housing sites land for medium- or high-density residential, which is projected to provide a minimum of 1,340 new housing units and significantly exceeds the proposed goal of 201 new affordable-housing units for Roseville for the 2010-2020 time period. Timing of the development of these additional housing units will be primarily dependent on the market's interest in pursuing specific infill and redevelopment housing projects in Roseville. In general, the City anticipates that the infill sites may be developed sooner than the redevelopment sites. However, the larger sizes of the redevelopment sites would allow larger development projects, so developers may be more attracted to some of these sites.

Affordable Housing Type	Established 1996-2010 Goal	Units Constructed through 2007	Percent Completed
Owner-Occupied	607	261	43%
Rental	218	22	10%
Total	825	283	34%

Affordable Housing Goal and Units Built

Table 6.10

Housing Programs and Agencies

Roseville Housing and Redevelopment Authority

The City created the Roseville Housing and Redevelopment Authority (HRA) on June 17, 2002. The HRA's mission is to plan, implement, and manage housing projects and activities for the citizens in the community by providing equal opportunities for high-quality, decent, safe homes and suitable living environments, and by strengthening partnerships among all levels of government, nonprofit, and for-profit organizations to maximize social and economic opportunities. One of the key objectives of the HRA is to provide housing programs and promote safe, decent, and affordable housing options for the community.

In 2007, the HRA adopted a Strategic Plan to help guide the organization over the next several years. The goals identified for this organization are:

- Provide a balance of housing in price and product type to meet life-cycle needs of the community.

- Ensure that funding sources are well-managed in order to provide housing options for residents within Roseville.
- Promote Roseville as a safe place with an enhanced quality of life and a sense of community.
- Establish zoning and building practices that help properly maintain the existing housing stock within Roseville.
- Maintain code enforcement as a central part in preserving housing within Roseville.
- Develop sustainable solutions to housing through green building initiatives.

The HRA undertakes a variety of housing programs in order maintain strong housing stock and neighborhoods in the community. Programming includes home-improvement financing, technical assistance, organizing an annual home and garden fair, and educational outreach.

Metropolitan Council Housing and Redevelopment Authority

The Metropolitan Council Housing and Redevelopment Authority (Metro HRA) administers Roseville's federally subsidized housing programs. Roseville currently has nearly 140 units, scattered over 45 different properties, in the Section 8 Program, a rental voucher program. Currently, Roseville only has three project-based Section 8 buildings, including Coventry Apartments with 103 senior/disabled units and 93 family townhome units, the Roselawn Village Apartments with 22 disabled units, and Roseville Senior Housing with 127 senior units. In addition, Roseville has one income-restricted facility Calibre Ridge, with 48 townhomes.

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7 Economic Development and Redevelopment

Introduction

Economic development and redevelopment are not required contents for the Comprehensive Plan. These aspects of community development are, however, critically important for the future of Roseville. Through this Comprehensive Plan, the City continues to place strong emphasis on the enhanced quality of life for its residents and businesses by promoting the creation of living-wage jobs, expansion of the property-tax base, prevention of blight, and enhancement of community image.

The Economic Development and Redevelopment chapter of the Comprehensive Plan contains the following components:

- Goals and Policies
- Implementation Strategies
  - Opportunity Areas
  - Facilitating Redevelopment
  - Tools for Public Actions
  - Keys to Implementation

The Economic Development and Redevelopment chapter works in conjunction with other chapters of the Comprehensive Plan:

- Land Use seeks to establish and maintain areas that enable Roseville to attract and retain high-quality businesses.
- Transportation creates and maintains a street system that makes Roseville a viable business environment. The transportation system provides the connections between businesses, employees, customers and the market.
- Utilities provide the wastewater treatment and water-supply systems required to operate a wide range of businesses.
- Housing and Neighborhoods help to ensure that Roseville has a suitable supply of housing to attract people that become the customers and employees of local businesses.

In a perfect world, the Comprehensive Plan would not include a separate economic development and redevelopment chapter, as the development needs of the

community would be met through the combination of market forces, land-use planning, and other City land-use controls. However, in reality, this approach may leave certain development needs and community objectives unmet. The purpose of the Economic Development and Redevelopment Chapter of the Comprehensive Plan is to identify gaps and reinforce policies in the other chapters of the Comprehensive Plan and provide a foundation for local decision making to guide economic development and redevelopment efforts in Roseville.

Goals and Policies

The following goals and policies guide City actions related to economic development and redevelopment.

Goal 1: Foster economic development and redevelopment in order to achieve Roseville's vision, create sustainable development, and anticipate long-term economic and social changes.

Policy 1.1: Use planning studies to evaluate options and to establish plans for reinvestment, revitalization, and redevelopment of key areas and corridors.

Policy 1.2: Ensure that local controls allow for contemporary retail, office, and industrial uses that are part of the community vision.

Policy 1.3: Encourage an open dialogue between project proposers, the surrounding neighborhood, and the broader community through individual and neighborhood meetings and use of technology.

Policy 1.4: Enhance communication of the community's objectives for promoting business development to enhance the quality of life in Roseville.

Policy 1.5: Where appropriate, use public-private partnerships to achieve the community's economic development and redevelopment goals.

Goal 2: Enhance opportunities for business expansion and development that maintains a diverse revenue base in Roseville.

Policy 2.1: Foster strong relationships with existing and prospective businesses to understand their needs and to maximize opportunities for business retention, growth, and development.

Policy 2.2: Support existing businesses and welcome new businesses to serve Roseville's diverse population and/or provide attractive employment options that encourage people to live within the community.

Policy 2.3: Improve the awareness of community assets and opportunities that Roseville offers prospective businesses through ongoing participation in regional economic development organizations and coordination with county and regional agencies.

Policy 2.4: Encourage locally owned and/or small businesses to locate or expand in Roseville.

Goal 3: Establish an infrastructure system to meet the needs of current businesses and facilitate future growth.

Policy 3.1: Work with local businesses and the Metropolitan Council to improve transit service to, from, and within Roseville.

Policy 3.2: Work with Ramsey County, MnDOT, and the Metropolitan Council to promote, coordinate, and facilitate regional improvements to the roadway system, as well as to communicate planned roadway improvements to the general public in advance of construction.

Policy 3.3: Ensure that adequate public utilities (e.g., sewer and water) will be available to serve future commercial and industrial development.

Policy 3.4 Encourage and promote the development of advanced, state-of-the-art telecommunication and information technology infrastructure to and within Roseville.

Policy 3.5: Work with service providers to ensure adequate supplies and reliable distribution systems for electricity and natural gas.

Goal 4: Encourage reinvestment, revitalization, and redevelopment of retail, office, and industrial properties to maintain a stable tax base, provide new living-wage job opportunities, and increase the aesthetic appeal of the city.

Policy 4.1: Encourage and facilitate infill commercial, industrial, and office development on vacant commercial parcels to ensure maximum efficiency of land use.

Policy 4.2: Encourage and facilitate redevelopment of or distressed commercial, industrial, and retail properties into viable developments by working with property owners and interested developers.

Policy 4.3: Foster environmental remediation of polluted property through partnerships with property owners and funding agencies.

Policy 4.4: Use inspections and code enforcement to promote the maintenance of property, identify ongoing issues, and prevent the spread of potential blighting factors.

Policy 4.5: Continue to give attention to creating and maintaining aesthetic quality in all neighborhoods and business districts.

Goal 5: Make effective use of available financial resources to facilitate community economic development and redevelopment objectives.

Policy 5.1: Establish a strong working knowledge of the type and purpose of available municipal, regional, state, and federal development incentive programs.

Policy 5.2: Review new and innovative economic development incentives for application in Roseville.

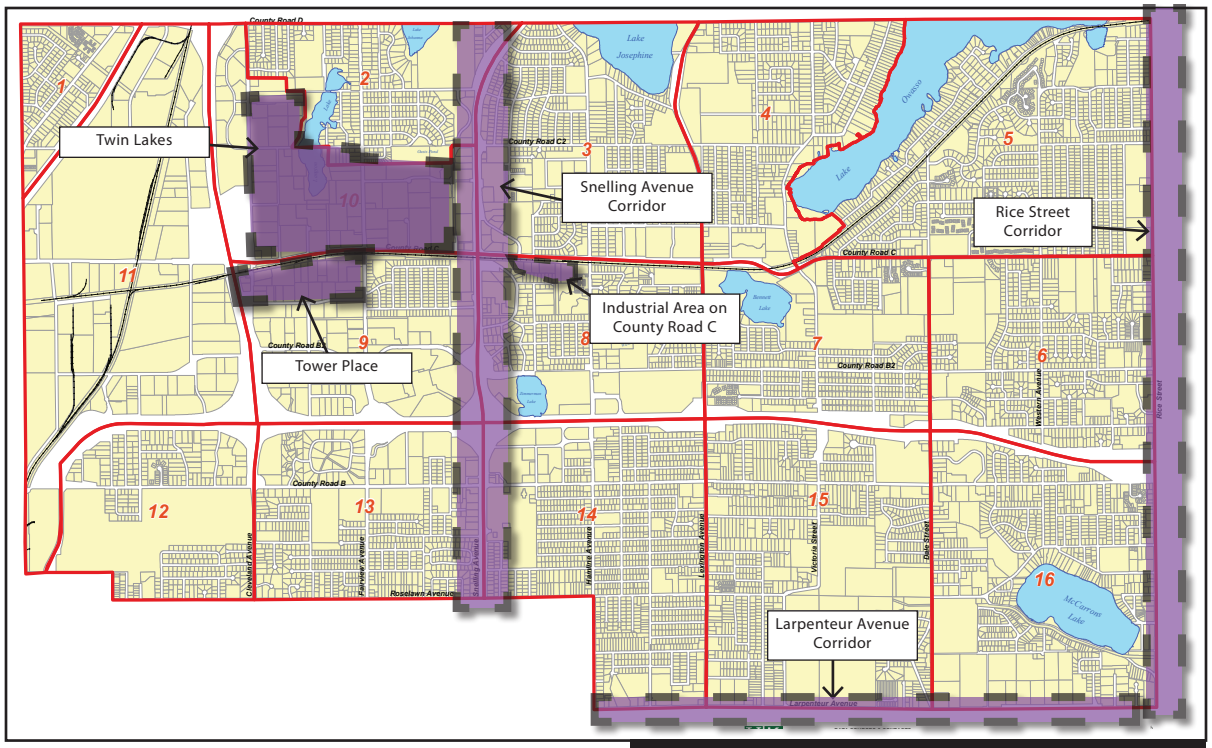
Policy 5.3: Establish guidelines for the use of financial incentives to promote the most effective use of limited resources, including tax revenues.

Goal 6: Integrate environmental stewardship practices into commercial development.

Policy 6.1: Foster transit-supportive development along existing and planned transit corridors.

Policy 6.2: Support official controls and programs that incorporate state-of-the-art technology for new construction or rehabilitation of existing commercial buildings that promotes innovative and sustainable building methods.

Policy 6.3: Encourage the use of high-quality, durable, and energy-efficient building materials and construction products in renovations of existing buildings and construction of new buildings to promote decreased energy and land consumption, resource efficiency, indoor environmental quality, and water conservation, and to lessen site and community impacts.



Opportunity Areas

Figure 7.1

Policy 6.4: Encourage third-party certification (e.g., LEED) of "green" building practices for new and renovated commercial structures.

Policy 6.5: Create ongoing resources to educate the development community about "green" renovation and "healthy building" construction techniques.

Policy 6.6: Encourage the use of low-impact and low-maintenance landscaping within commercial development to decrease natural resources consumed by landscape maintenance.

Policy 6.7: Encourage the reduction of impervious surfaces, including consideration of decreasing parking requirements in return for additional landscaping and pervious surfaces.

Implementation Strategies

The Economic Development and Redevelopment Chapter of the Comprehensive Plan creates a framework for public action. Many of the detailed plans and programs used to address economic development and redevelopment needs lie outside the Comprehensive Plan. This approach allows more flexibility in responding to changing market forces and development needs and opportunities.

Opportunity Areas

The Land Use chapter identifies a series of areas with particular opportunity for future redevelopment. A key to implementing the Comprehensive Plan will be understanding the development opportunities in these areas in order to create a plan for desired public improvements and to encourage the desired private investment. The map in Figure 7.1 highlights the location of these areas. The remainder of this section briefly describes the nature of the redevelopment opportunity in each area.

Rice Street Corridor

The Rice Street Corridor forms the eastern boundary of Roseville. The corridor is a complex setting with a wide range of land uses located in Roseville, Little Canada and Maplewood. It creates both the opportunity and the need for planned and coordinated redevelopment. The level of study conducted with the 2008 update did not allow for the planning needed to explore future land-use options in conjunction with the adjacent cities. The Rice Street Corridor is part of Planning Districts 5, 6 and 16 in the Land Use chapter.

Snelling Avenue Corridor

The Snelling Avenue Corridor is important to both transportation and development in Roseville. Snelling Avenue is the primary north/south corridor through Roseville. Only Interstate 35 and Highway 36 carry more traffic than Snelling Avenue. This corridor is a critical connection between Roseville and the region. The character of the roadway and the volume of traffic also physically divide the community. In the Land Use chapter, Snelling Avenue forms an edge for seven Planning Districts (2, 3, 8, 9, 10, 13 and 14). It is important to examine this corridor, including adjacent parcels, as a cohesive area and plan for future redevelopment possibilities, transit improvements, pedestrian connections, and landscaping improvements along this major entrance into Roseville.

Larpenteur Avenue Corridor

Another important corridor is Larpenteur Avenue from Hamline Avenue to Rice Street. The area west of Lexington Avenue has benefited from both public (streetscape) improvements and new private investment. The Comprehensive Plan seeks to extend these redevelopment initiatives along the corridor to the east. Additional planning will be needed to design and facilitate these changes.

Twin Lakes

The Twin Lakes area (see Planning District 10) has been a redevelopment focus of Roseville for many years. It is an excellent illustration of the long-term nature of redevelopment. Twin Lakes continues to be a redevelopment priority for Roseville. The Comprehensive Plan seeks to build on the foundation that has been laid by prior planning and environmental studies.

Tower Place

The Tower Place area lies in the northwest part of Planning District 9. The area continues to evolve as an employment center with office/warehouse and office developments. New opportunities may exist in the future if transit services are provided on the adjacent railroad corridor.

Isolated Industrial Area on County Road C

The Land Use chapter encourages the redevelopment of the existing industrial area south of County Road C and east of Snelling Avenue. The industrial uses exist on smaller parcels with constrained access in an area that is predominantly residential. Public involvement will be needed to facilitate this redevelopment and to provide needed access improvements.

Facilitating Redevelopment

The Comprehensive Plan seeks to create a place where land-use plans, policies, and controls work together with private investment to properly maintain all properties in Roseville. It is recognized that this approach may not succeed in all locations, as despite the best plans and intentions, properties may become physically deteriorated and/or economically unviable. In such places, the City may need to facilitate redevelopment and prevent the spread of blight and disinvestment. City involvement may include:

- Acquisition of land
- Preparation of sites for development
- Remediation of polluted land
- Construction or reconstruction of public improvements
- Provision of adequate parking

- Removal of other physical and economic barriers to achieve community objectives

These actions may require the use of a variety of financial tools available to the City.

Tools for Public Actions

In order to facilitate redevelopment, the State has provided cities with several tools to assist in financing improvements. These include:

- Tax Increment Financing
- Special Service District
- Tax Abatement
- Special Assessments
- Housing Improvement Area
- General Property Taxes
- Commercial Rehabilitation Loans and Grants

Keys to Implementation

The experience of Roseville shows that several factors are important to achieving goals and policies for economic development and redevelopment.

Patience: Many development goals cannot be met overnight. The time frame for implementation reflects its evolutionary nature; it looks forward over a period of years. The desired change often requires the patience to wait for the right things to happen, rather than making changes simply to be seen as doing something.

Commitment: Commitment to the Comprehensive Plan and patience go hand-in-hand. This Plan does not simply seek to attract development to Roseville; it also seeks to move Roseville toward a vision for the future. There is a difference. Commitment to the Comprehensive Plan means the willingness to actively promote public and private investments that achieve its goals, and to deter developments that do not fit. Not all of these decisions will be easy.

Public-Private Partnerships: These goals and policies require a continuation and strengthening of the public-private partnerships found in Roseville for many years. City government, neighborhoods, and businesses must actively collaborate to achieve the vision for the community.

Financial Reality: Achieving these goals and policies requires the careful investment of public funds, but the private side of the financial equation must not be overlooked. The Comprehensive Plan seeks to balance the investment in public initiatives with the creation of a financial environment that sustains businesses, provides employment, enhances the tax base, and results in sustainable development benefiting the community.

Strategic Investments: If financial support for the Comprehensive Plan was unlimited, the need for strategic decisions would be less important. With limited funds, though, every expenditure is crucial. Every investment must be evaluated for its impact on achieving the vision for the future of Roseville.

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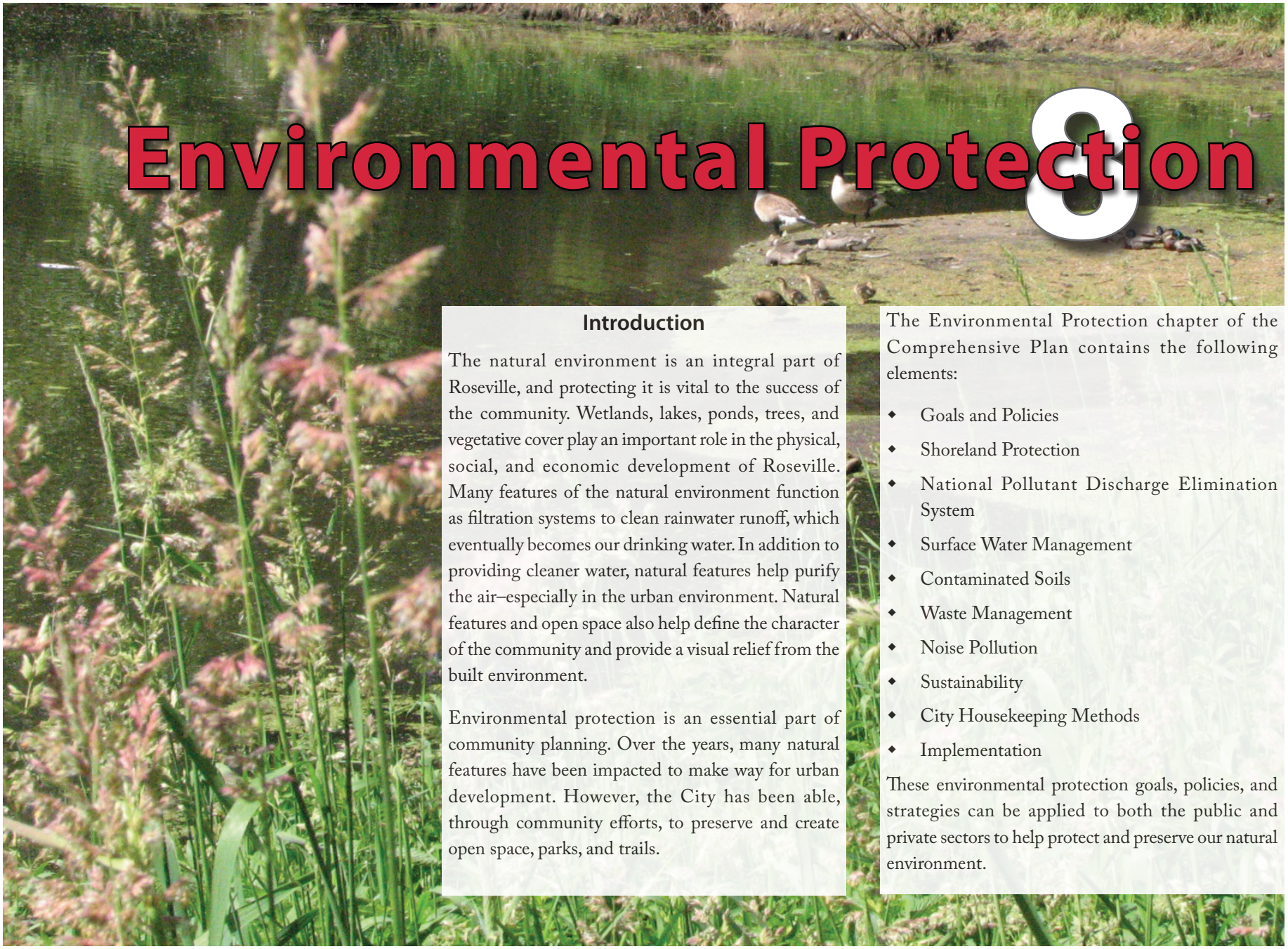
8 Environmental Protection



Introduction

The natural environment is an integral part of Roseville, and protecting it is vital to the success of the community. Wetlands, lakes, ponds, trees, and vegetative cover play an important role in the physical, social, and economic development of Roseville. Many features of the natural environment function as filtration systems to clean rainwater runoff, which eventually becomes our drinking water. In addition to providing cleaner water, natural features help purify the air–especially in the urban environment. Natural features and open space also help define the character of the community and provide a visual relief from the built environment.

Environmental protection is an essential part of community planning. Over the years, many natural features have been impacted to make way for urban development. However, the City has been able, through community efforts, to preserve and create open space, parks, and trails.

The Environmental Protection chapter of the Comprehensive Plan contains the following elements:

- Goals and Policies
- Shoreland Protection
- National Pollutant Discharge Elimination System
- Surface Water Management
- Contaminated Soils
- Waste Management
- Noise Pollution
- Sustainability
- City Housekeeping Methods
- Implementation

These environmental protection goals, policies, and strategies can be applied to both the public and private sectors to help protect and preserve our natural environment.

Goals and Policies

The preservation, protection, and enhancement of natural resources are vital a community's health and residents' quality of life. To accomplish this, the City has identified the following goals and policies:

Goal 1: Protect, preserve, and enhance Roseville's water, land, air, and wildlife resources for current and future generations.

Policy 1.1: Enforce all local, regional, and federal codes, ordinances, and laws that protect the environment.

Policy 1.2: Ensure that the natural environment is an integral part of the Roseville urban landscape.

Policy 1.3: Protect and enhance terrestrial and aquatic wildlife habitat, including grasslands, wooded areas, wetlands, ponds, shorelands, and lakes.

Policy 1.4: Preserve and enhance natural resources within public open space by implementing best-management-practices systems, including invasive-plant removal, rain gardens, biofiltration, and native-plant selection.

Goal 2: Maintain the functions and values of the City's drainage features (e.g. lakes, ponds, and wetlands).

Policy 2.1: Protect and improve surface water quality in the City's lakes, ponds, and wetlands to meet established standards.

Policy 2.2: Identify and plan means to effectively protect and improve surface and groundwater quality through good "housekeeping" methods, such as street sweeping sensitive areas and monitoring water quality.

Policy 2.3: Protect, preserve, and utilize surface- and ground-water storage and retention systems.

Policy 2.4: Work with the watershed districts to collect water-quality data on lakes within the city.

Policy 2.5: Promote groundwater recharge by reducing stormwater runoff.

Goal 3: Prevent erosion into the City's lakes, ponds, and wetlands.

Policy 3.1: Require storm-water management and erosion-control plans for urban development and redevelopment projects.

Policy 3.2: Enforce development controls to reduce non-point-source pollutant load in surface water runoff using best management practices, such as rain gardens, biofiltration, and ponding.

Policy 3.3: Continue to cooperate with the Minnesota Pollution Control Agency (MPCA) in enforcing non-point source discharge standards.

Goal 4: Minimize the public capital expenditures needed to correct flooding and water-quality issues.

Policy 4.1: Establish uniform local policies and controls for surface-water management.

Policy 4.2: Work with the watershed districts to enforce appropriate regulations to control surface-water runoff.

Goal 5: Ensure the City takes a leadership role in environmentally friendly property development, redevelopment, and maintenance practices.

Policy 5.1: Design new City facilities and renovate existing City facilities to minimize energy consumption, decrease negative environmental impacts, and encourage third-party certification (e.g. LEED) of these improvements.

Policy 5.2: Maintain and improve infrastructure, including parks, streets, and pathways, in an environmentally friendly manner.

Policy 5.3: Encourage the use of sustainable land treatment activities, such as no-mow grass, organic fertilizers, and native landscaping, on City properties.

Policy 5.4: Preserve, maintain, and increase the City's non-invasive tree stock, whenever possible.

Policy 5.5: Collaborate with other governmental units and groups to identify and help meet environmental targets.

Goal 6: Reduce negative human impacts on the environment through citywide energy conservation and reduction of pollution and waste.

Policy 6.1: Reduce local energy usage by educating community members about energy conservation and its impact on the city.

Policy 6.2: Support environmentally friendly energy options for residential, businesses, and governmental needs.

Policy 6.3: Improve air, water, soil, and sound quality by reducing pollution of all kinds, including traffic, noise, runoff, and excess light; enhance community awareness of environmental impacts.

Policy 6.4: Support citywide recycling, reduction, and reuse of waste materials for both residential properties and businesses.

Policy 6.4: Encourage expansion of items collected through the City's recycling program.

Goal 7: Increase community awareness of environmental-protection issues.

Policy 7.1: Partner with federal, state, and regional government agencies and local school districts to sponsor environmental education and stewardship programs.

Policy 7.2: Promote environmental stewardship through City-led communication avenues, such as the city newsletter, City website, and the local cable-access channel.

Shoreland Protection

The City of Roseville adopted the Shoreland, Wetland, and Storm Water Management Ordinance in 1994 pursuant to Minnesota Statutes. The purpose of the ordinance is to preserve and enhance the quality of surface waters, preserve economic and natural environmental values of shoreland, and provide for the wide utilization of waters and other land resources. The ordinance contains many criteria and standards to control the use of shoreland within the city of Roseville.

National Pollutant Discharge Elimination System

National Pollutant Discharge Elimination System permits regulate wastewater discharges to lakes, streams, wetlands and other surface waters. The Municipal Separate Storm Sewer System (MS4) general permit is mandated by the federal regulations under the Clean Water Act and administered by the Minnesota Pollution Control Agency. In general terms, MS4s are publicly owned or operated storm-water infrastructure, used solely for stormwater, and which are not part of a publicly owned wastewater treatment system. Examples of stormwater infrastructure include curbs, ditches, culverts, stormwater ponds, and storm sewer pipes. The City of Roseville is an MS4.

The MS4 general permit focuses on reducing the pollution that enters these public systems and discharges to wetlands, streams, and lakes (i.e., "waters of the state"). The MS4 permitting program gives owners or operators of municipal separate storm sewer systems approval to discharge storm water to lakes, rivers, and wetlands in Minnesota.

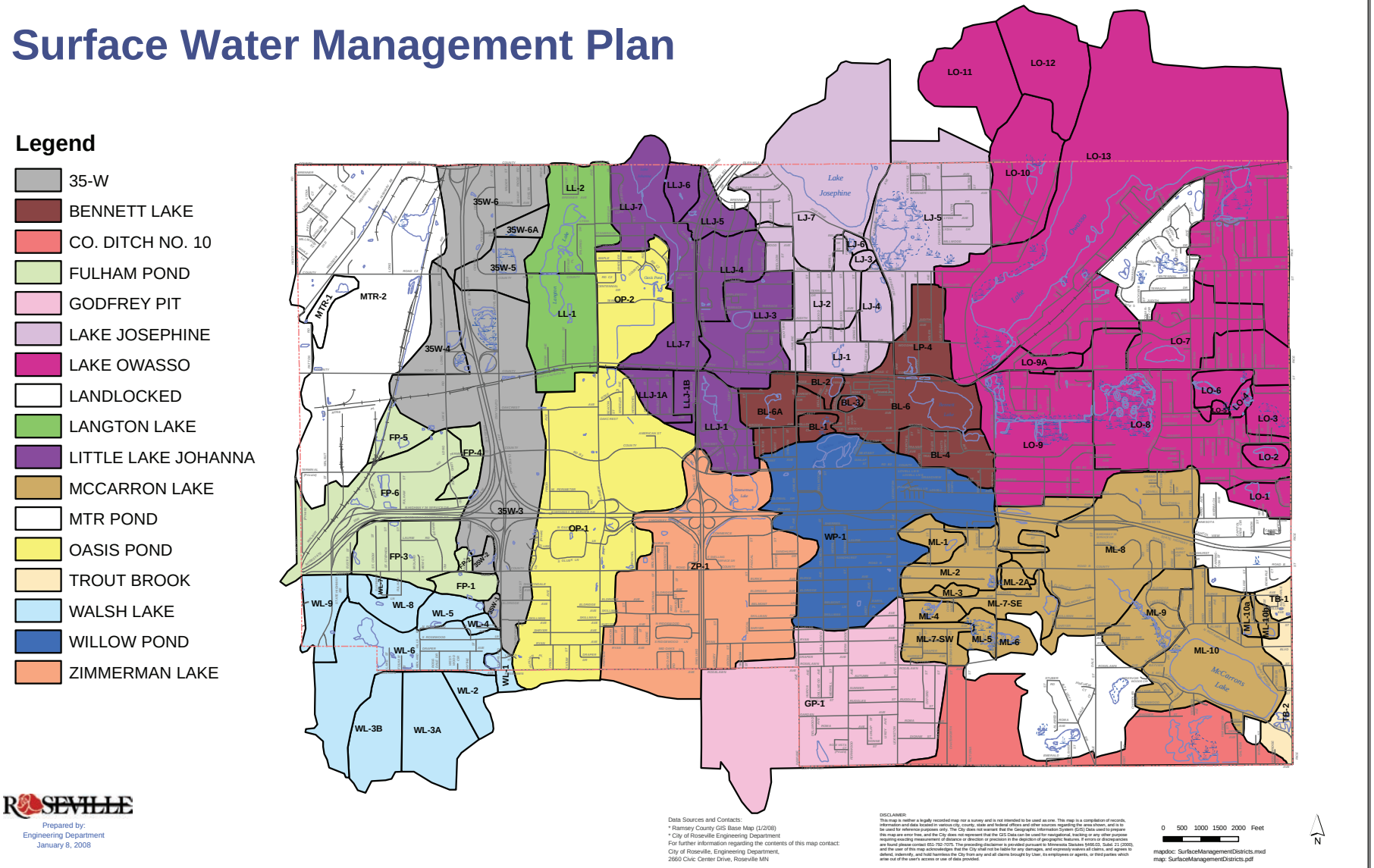
All owners or operators of MS4s are required to satisfy the requirements of the MS4 general permit. Basically, the MS4 general permit requires the MS4 operator or owner to create a Stormwater Pollution Prevention Program (SWPPP) with six important components:

1. Public education and outreach, which includes teaching citizens about better stormwater management
2. Public participation to involve citizens in solving stormwater pollution problems, requiring a public annual meeting and an annual report
3. Plans to detect and eliminate illicit discharges to the stormwater system, like chemical dumping and wastewater connections
4. Construction-site runoff control, including the implementation of an Erosion and Sedimentation Control ordinance
5. Post-construction runoff controls
6. Pollution prevention and municipal "good housekeeping" measures (e.g., covering salt piles and street sweeping)

Impaired Waters and TMDL's

The Minnesota Pollution Control Agency (MPCA) is required to publish a list of impaired waters–lakes and streams in the state that are not meeting federal water-quality standards. For each water body on the list, the MPCA is required to conduct a study to determine the allowable Total Maximum Daily Load (TMDL) for each pollutant that exceeds the standards. The 2006 MPCA list of impaired waters identifies 2,250 TMDL reports needed for 1,297 lakes, rivers and streams in

Surface Water Management Plan



ROSEVILLE

Prepared by:
Engineering Department
January 8, 2008

Data Sources and Contacts:
* Ramsey County GIS Base Map (1/2/08)
* City of Roseville Engineering Department
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mapdoc: SurfaceManagementDistricts.mxd
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Surface-Water Management Plan

Figure 8.1

the state. Local governments will be required to incorporate completed TMDL studies into their surface-water management plans and review their SWPPPs to determine if additional best-management practices (BMPs) are needed to comply with the TMDL waste load allocation.

The list of impaired waters is known as the 303(d) list from the applicable section of the Federal Clean Water Act. These waters are ones that do not currently meet their designated use because of the impact of a particular pollutant or stressor. The following water bodies are identified on the state list of impaired waters and receive water from the city of Roseville: Lake Bennett (excess nutrients), Little Lake Johanna (excess nutrients), Lake Josephine (mercury), Lake McCarrons (mercury), and Lake Owasso (mercury). No TMDLs have been developed for these water bodies at this time.

Surface-Water Management

Urbanization alters the natural drainage patterns of rainfall and melting snow. Increased impervious surface area restricts water from entering the soil, which causes more water to exit a site faster than when it was vegetated. If not properly managed, the cumulative effect of this phenomenon leads to increased flooding. Urbanization also adds pollutants to runoff water, which has a negative effect on our water bodies and the life forms that depend on them.

To reduce flooding and improve water quality, the City of Roseville has constructed a comprehensive surface-water-management system as development has occurred. This system relies on open drainage ways, drainage pipe, lift station pumps, private and publicly constructed retention and detention ponds, and natural wetlands and water bodies. Using these natural systems benefits the City by lowering costs, improving water quality in lakes and streams, saving valuable wildlife habitat, and retaining the beauty of the natural environment. Regulatory agencies, as well as the Metropolitan Council, share Roseville's view on the importance of surface-water management. The City's Comprehensive Surface-Water Management Plan (CSWMP) discusses local methods to further joint goals and policies regarding surface water management while assessing problems and proposing corrective actions.

The purpose of a CSWMP is to:

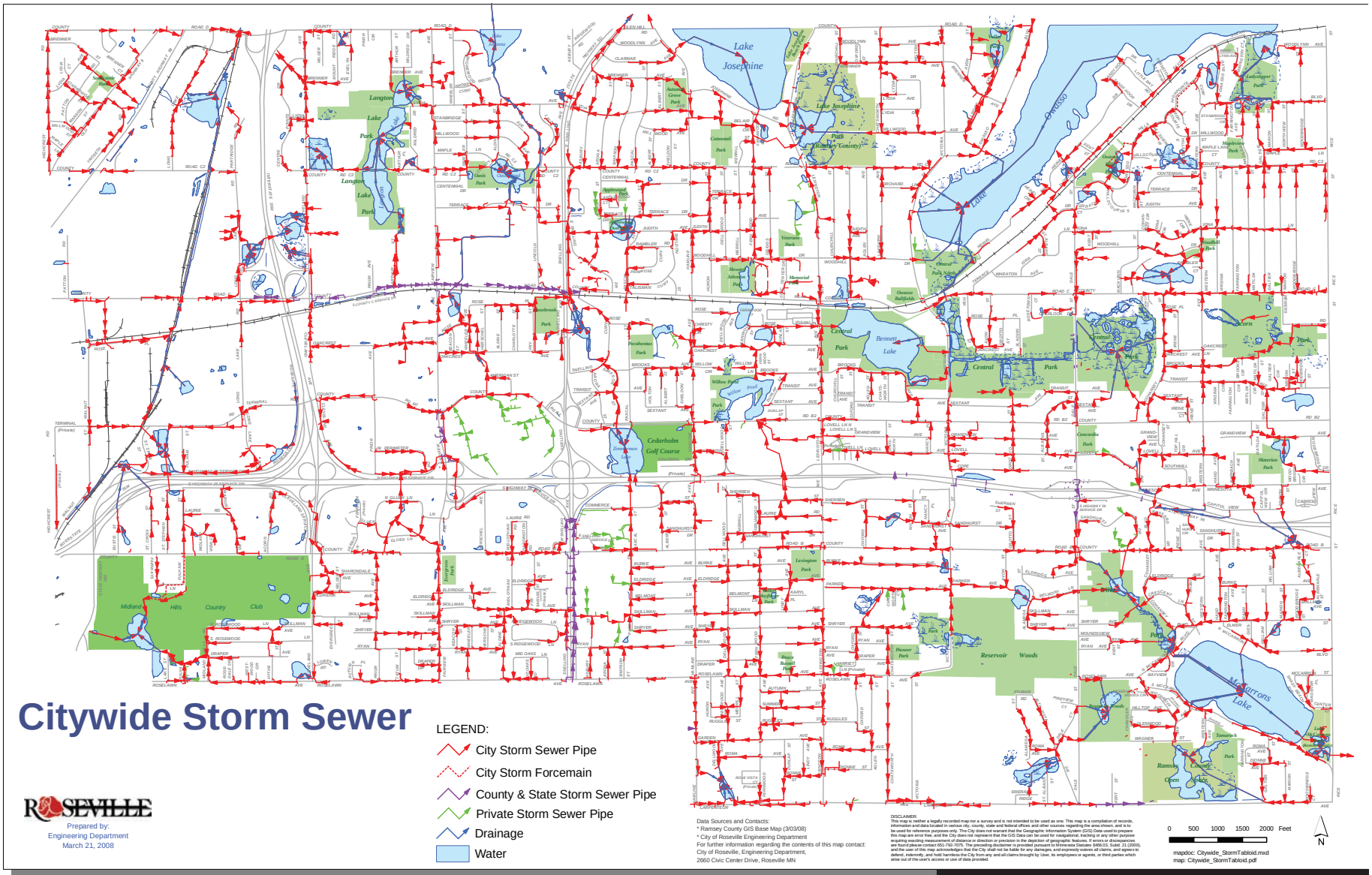
- Assess existing water quantity and quality issues
- Assess potential problems and opportunities for natural resource enhancement in light of anticipated development within each watershed
- Formulate practical strategies to correct existing problems, to prevent potential problems, and to take advantage of opportunities to enhance water-related natural resources

In order to better understand how the surface-water system works, the CSWMP divides the city into sub-watershed areas. The surface-water system and sub-watersheds is shown in Figure 8.1 (Surface-Water Management Plan).

The City's surface-water system is largely completed at this time. Future changes to the system will primarily be retrofitting to address flooding problems or incorporate water quality treatment or adjustments at the time of redevelopment.

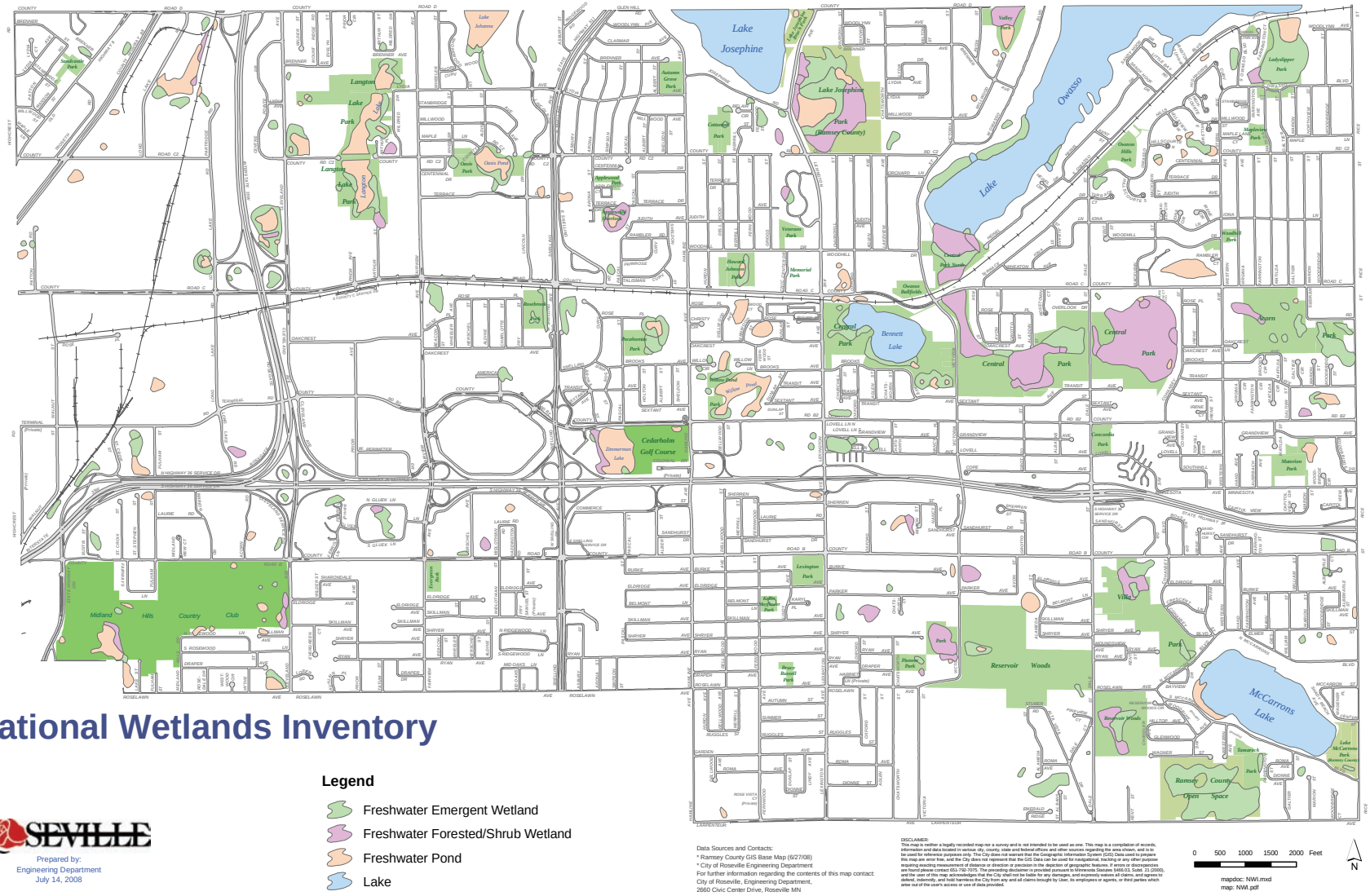
The City has completed an inventory of the surface water system within each of these sub-watersheds. This system consists of: 124.32 miles of pipe, 4719 catch basins, 2728 manholes, 128 ponds, 739 inlets and outlets, and six storm-sewer lift stations. The citywide storm-sewer map (Figure 8.2) shows the locations of these facilities and direction of flow.

The City charges property owners a storm-sewer-utility fee that funds the construction and maintenance of this system.



Citywide Storm Sewer

Figure 8.2



National Wetlands Inventory

National Wetlands Inventory

Figure 8.3

Water Resources

Roseville has within its boundaries a significant number of lakes, ponds, and wetlands. Some of the larger lakes are monitored either through the Metropolitan Council's Citizen Assisted Monitoring Program or MPCA monitoring program. In 2001, water quality sampling for Langton Lake was conducted as part of the development of the City's Natural Resources Inventory and Management Plan (June 2002). In addition, the Ramsey County Lake Management Program conducts annual water-quality sampling and provides data for lakes identified as Priority Lakes, which include Bennett, Josephine, Owasso, and McCarrons.

Key information on each of the priority lakes in the city is summarized in the Table 8.1.

Lake	DNR Identification Number	Watershed Area (Acres)	Surface Area (Acres)	Maximum Depth (Feet)	Mean Depth (Feet)
Bennett	62-0048	706	27.5	9	5
Little Johanna	62-0058	N/A	18	40	N/A
Josephine	62-0057	734	118	44	11
Langton	62-0049	212	23	5	3
McCarrons	62-0054	736	68.1	57	N/A
Owasso	62-0056	3022	384.1	37	N/A

Priority Lakes Data Summary

Table 8.1

Wetland Protection

The City of Roseville has lost many wetlands over the years to development. These resources are a valued portion of the city's aesthetics and stormwater retention system. The City intends to protect the remaining wetlands and other water bodies to the greatest extent possible and, where feasible, to restore or construct wetlands to increase the amount within the city.

In 1991, the State passed the Wetland Conservation Act (WCA). The intent of the act is to prevent the loss of wetlands within Minnesota. This law is implemented by a local governmental unit (LGU), which can be a city, watershed district, county, or soil and water conservation district. The LGU reviews each project that comes forward within its jurisdiction to ensure that it adheres to the no-net-loss policy. The LGU accomplishes this by applying a set of established steps and criteria to each project, assuring that the proper steps are followed for the selected alternative, and monitoring that the process is carried through in accordance with the WCA. The City acts as the LGU in the Grass Lake Watershed and Capitol Region Watershed areas of the city, while Rice Creek Watershed District is the LGU for the area of the city under its jurisdiction.

Figure 8.3 illustrates the National Wetland Inventory (NWI) for the city. In 2009, the City will build on the inventory to develop and maintain an inventory of wetlands within high-priority areas, such as parks and natural areas. Wetlands will be classified by type and function as well as susceptibility to stormwater impacts. Since 2006, the City has been collecting water quality monitoring data on Bennett Lake, Central Park Ponds and Willow Pond. This monitoring data will be used to develop numeric goals for these wetlands consistent with the Grass Lake Watershed Management Organization Plan in 2010.

Watershed Districts

In 1956, State law created watershed districts and empowered them to work with cities and property owners to improve flood storage capacity and to protect water quality. As depicted in Figure 8.1, Roseville shares land area with two watershed districts and a watershed management organization (WMO). The Rice Creek and Capitol Region Watershed Districts' watershed plans were approved by the Board of Water and Soil Resources (BWSR) in 1997 and 2000 respectively. The Grass Lake WMO watershed plan was approved by the BWSR in 2001.

The challenge with having three different agencies is that it is necessary for the City's local plan to be in compliance with all three of these organizations' plans. Roseville updated its local surface-water management plan in 2003. The City of Roseville's surface-water plan is in accordance with the requirements of the individual watershed district plans for the Roseville area.

Contaminated Soils

One of the issues facing potential developers of property these days is liability due to contaminated soils. Minnesota was one of the first states to address, through statutes, the liability issues associated with buying, selling, or developing property contaminated by hazardous substances. The Minnesota Land Recycling Act of 1992 provides statutory authority to quickly approve cleanup of contaminated properties and provide land owners and lenders assurances that minimize potential liability. The Minnesota Pollution Control Agency's Voluntary Investigation and Cleanup (VIC) program can streamline the time and expense of cleanup that may be required through a normal Super Fund process. The VIC program was established to provide standards for site investigation, MPCA review of the adequacy and completeness of investigation, and approve cleanup plans to address identified contamination. Depending on the type and degree of contamination, the MPCA will provide various levels of assurance to voluntary parties completing response actions, property owners, financial institutions, and future property owners.

The Minnesota Petroleum Release Compensation Fund program has been utilized at several gas stations in the community to clean up contamination from leaking underground fuel storage tanks. This program provides 90% reimbursement of eligible cleanup costs, which include investigation, development of remediation plans, and cleanup of contaminated soils and ground water. It does not cover the costs of tank removal or replacement, or cleanup of non-petroleum tank leaks and spills.

Tax increment financing (TIF) can be a financial tool to assist with cleanup of contaminated soils. The City has used TIF for soil cleanup in the Twin Lakes area, as well as the Gateway Business Center. Cities can also create a hazardous soil subdistrict within a tax increment district to assist in cleanup. Within subdistricts, the City can capture the frozen base taxes, which normally go to all the taxing districts, to enable the City to carry out a cleanup plan approved by the MPCA. The City currently has created one hazardous soil subdistrict in the Twin Lakes area.

Waste Management

Residential Curbside Recycling

Roseville has contracted for curbside recycling at single-family homes, duplexes, and townhomes since July 1987, and for centralized collection at apartments and condominiums since 2003. The City provides free recycling bins, lids, and wheel kits to residents to encourage participation. Residents are sent an annual mailing to further encourage full participation.

Roseville Cleanup Day

In conjunction with Earth Day, the City of Roseville sponsors a Cleanup Day. This event is held once a year with the intent to collect items that cannot go in regular trash. Items such as appliances, old furniture, batteries, electronics, mattresses, and tires are accepted for a nominal fee.

Household Hazardous Waste

Ramsey County contracts for drop-off sites for household hazardous waste (HHW). There is a year-round collection site in St. Paul and seasonal collection sites in various cities. One of those seasonal sites is on Kent Street in Roseville. It is open on Fridays and Saturdays in June. The Roseville site is the busiest of Ramsey County's six seasonal sites.

Residents may drop off HHW for free. The County pays for collection and processing of HHW. Waste collection and disposal is funded by the County Environmental Charge, which is assessed on garbage bills. Items considered HHW include fluorescent lamps, mercury vapor lamps, pesticides, mercury thermometers, used motor oil, used antifreeze, paint thinner, paint, wood preservatives and stains, and any other product labeled poisonous, flammable, or corrosive.

Yard Waste

Ramsey County operates seven yard-waste sites including two close to Roseville – one in Arden Hills and one in the Midway area of St. Paul. Residents may drop off yard waste for free. Yard waste includes leaves, grass clippings, and soft bodied plants. Four of the Ramsey County sites including the two closest to Roseville also accept brush for free. Brush includes all branches and tree trunks, but stumps and roots are prohibited.

Noise Pollution

The Roseville City Code addresses noise-control regulations. Because the language in the City Code is general in nature, the City has chosen to enforce noise-level standards established by the MPCA. The State noise rules are based on allowable exterior noise levels and are designed to protect the public by limiting the amount of noise that may occur beyond a property line. To accomplish this, a series of standards were established to control exterior noise levels. The standards have a range of applicability during daytime hours (7 a.m. to

	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7a.m.)
L10	65dB	55 dB
L50	60 dB	50 dB

Residential Land Use State Standards

Table 8.2

10 p.m.) and nighttime hours (10 p.m. to 7 a.m.). As established by State statute, noise levels are measured by decibels (dB) and weighted to represent the human ear's variable sensitivity to different frequencies.

The standards used by the State of Minnesota also define the amount of time a specific noise level can occur. In Minnesota, the L10 and L50 standards are used. Both represent that percentage of an hour that a noise level may be exceeded. An L10 value equals the noise level that may be exceeded for 10% of the monitoring period or 6 minutes out of an hour while the L50 is the noise level that may be exceeded for 50% of the monitoring period. Noise levels in residential areas must be in compliance with the State standards for residential land use shown in Table 8.2.

Sustainability

Sustainability represents the most efficient use of community resources. It is a complicated concept that includes many facets of City government and includes areas such as waste reduction, water conservation, and carbon-emission reduction. To demonstrate Roseville's commitment to sustainability, the City Council adopted a resolution on May 21, 2007, endorsing the U.S. Mayors Climate Protection Agreement. Under the agreement, Roseville has committed to take the following three actions:

- Strive to meet or beat the Kyoto Protocol targets in the community through actions ranging from anti-sprawl land-use policies to urban forest-restoration projects to public information campaigns.
- Urge the state and federal governments to enact policies and programs to meet or beat the greenhouse gas emission-reduction target suggested for the United States in the Kyoto Protocol, a 7% reduction from 1990 levels by 2012.
- Urge the U.S. Congress to pass the bipartisan greenhouse-gas-reduction legislation, which would establish a national emission trading system.

Some steps that the City has taken to date:

- The completion of an emissions inventory using the Clean Air Climate Protection software. This software was developed for the International Council for Local Environmental Initiatives and is an important tool that helps local governments create greenhouse gas inventories, quantify the benefits of reduction measures, and formulate local climate action plans. Establishing an emissions inventory and setting reduction goals is a part of an overall action plan.
- In 2008, the City converted the heating and cooling systems at the Roseville Indoor Skating Center and John Rose OVAL to a geothermal system. This system will reduce the use of fossil fuels by utilizing ground-source storage of waste heat from the ice rink refrigeration systems to heat and cool these buildings. As a part of this project, a Campus-wide Geothermal Master Plan was developed to position the City to convert the City Hall/Police Station and Public Works Facility to a geothermal system in the future. This system would capitalize on additional capacity of the Skating Center system to the benefit of other buildings on the campus.

Sustainability within the Plan

The issue of environmental responsibility and sustainability is discussed throughout Roseville's Comprehensive Plan. Please see the following chapters for more specific sustainability discussions:

- Land Use
- Housing and Neighborhoods
- Transportation
- Economic Development and Redevelopment

City Housekeeping Methods

The City is involved in many programs that benefit the environment.

- Annual Street-Sweeping Program: This consists of early spring sweeping of the streets to remove the sand and salt that has built up over the winter and prevents them from raching lakes and ponds through storm sewers.
- Leaf Pickup Program: This program takes place in the late Fall. City crews collect leaves from properties of homeowners that register for this program and rake the leaves to the boulevard, which are then transported to the City compost site on Dale Street.

- Compost Site: Roseville residents are allowed to drop off leaves from their yards at the City's compost site during spring and fall seasons. Materials brought to the site are then periodically turned and aerated to speed the composting process. Compost is then available for residents to pick up, free of charge, for use in gardens and for other landscaping activities.
- Tree Trimming: Each winter, City street crews perform an extensive tree-trimming program to maintain boulevard trees throughout the city. This work is completed through a cooperative effort between the maintenance crews and the City forester.

Implementation

In order to achieve the goals and policies discussed in this section, the City of Roseville should use the following strategies:

Foster Environmental Stewardship

One of the most cost-effective and efficient ways to protect the environment is through education. The City sponsors many programs and events on a lcoal and regionial level that focus on preserving and enhancing the environment. The City should focus on working with residents, businesses, and schools to identify ways that it can promote environmental awareness, such as developing an educational program that focuses on sustainability, waste reduction, and environmental stewardship.

Ordinances

As a regulatory tool, ordinances can provide standards that define areas or features that need protection or preservation. They can also introduce regulations to assist in achieving a desired end.

Comprehensive Surface Water Management Plan

The Comprehensive Surface Water Management Plan discusses local methods to further joint goals and policies regarding surface-water management while assessing problems and proposing corrective actions.

The Capitol Region Watershed District completed its Surface Water Management Plan in 2000, and the Rice Creek Watershed District completed its Water Resource Management Plan in 1997. Both watersheds are in the process of updating their watershed plans. Within two years after those plans are approved by the Board of Water and Soil Resources (BWSR), the City will need to prepare a new CSWMP.

Periodic amendments may also be required to incorporate changes in local practices.

Future TMDL Studies

The City recognizes that the responsibility for completion and implementation of the TMDL studies lies with the primary stakeholders contributing to the impairment. The City intends to cooperate with the watersheds in the development of the TMDL studies, acknowledging that the watersheds will take the lead on these studies. It is the intention of the City to fully implement the items/actions identified in future TMDL Implementation Plans, funding the implementation items/actions as necessary.

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9 Parks, Open Space, and Recreation

The Parks, Open Space, and Recreation chapter guides future development and improvements to the City's parks, open space, and recreation system. This chapter contains the following elements:

- Introduction
- Goals and policies
- Park classification system
- Designations of individual parks, open spaces, and recreation facilities
- Issues and potential improvements

Introduction

Parks, open spaces, and recreation facilities serve a number of important functions in Roseville. Parks provide citizens with attractive and convenient recreation opportunities that ultimately enhance the living environment of the City's neighborhoods and the community as a whole. Access to high-quality recreational facilities can enhance the physical, social, and economic health of the community. Parks also serve as neighborhood and community gathering places and often provide a major focal point and sense of identity for individual neighborhoods.

Park and open space land contribute to the environmental health of the community. By properly locating and designing parks and open spaces, these areas can also help control flooding, improve the quality of surface water, replenish the ground water supply, reduce air pollution, and preserve significant natural resources.

The parks, open spaces and recreation system can also function as connection and transition areas within the community. The system of recreation areas, including the pathways system, is intended to connect neighborhoods with other neighborhoods and with major community destinations, particularly schools, civic facilities, and shopping areas. Parks and open spaces can also be used effectively to create a "buffer"

between different land uses, particularly residential and nonresidential.

The City must plan for a suitable amount of park and open space areas. These lands must be located in the proper locations and contain the appropriate recreational facilities for each area and its anticipated park users. Population and age of residents, as well as changes in such matters as attitude toward the environment, amount of leisure time available, and the type of recreational activities preferred should determine the type and location of individual park, open space, and recreation facilities that are needed.

The City's existing parks, open spaces, and recreation facilities are shown on Figure 9.1 (Existing Parks and Open Spaces) including the type and jurisdictional responsibility for each park.

The City's Parks and Recreation System Plan requires updating. The City is anticipating a major update of the System Plan in 2008-2009. The System Plan will provide more detailed guidance for the parks, open space, and recreation facilities system. The update process will most likely involve an intensive evaluation of the existing system, a community-needs assessment, revised vision and goals, and a revised system plan map. This major update of the System Plan will involve the community and may result in necessary amendments to the Comprehensive Plan.

The Parks and Recreation System Plan is primary tool for guiding the operation and maintenance of Roseville's park system. The City uses individual park and facilities master plans as tools for implementing the System Plan. The System Plan must also connect and coordinate with other municipal plans including the Comprehensive Plan, Pathways Master Plan and Transportation Plan. The Comprehensive Plan reinforces goals, policies and plans in the System Plan and seeks to guide land use in a manner consistent with the System Plan.

This updated Plan, along with the Parks and Recreation Strategic System Plan and Park Improvement Program, will provide the basis for developing the Capital Improvements Plan (CIP) for parks and recreation expansion and improvements. The CIP is a ten-year plan that is used to set long-term and short-term (annual) budgets for development of parks and recreation facilities. The CIP is updated annually.

Goals and Policies

The following goals and policies are established to guide future development and decision-making relating to parks, open spaces, and recreation facilities:

Goal 1: Provide a high-quality, financially sound system of parks, open spaces, trails, and multigenerational recreation facilities that meets the recreation needs of all city residents and enhances the quality of life in Roseville.

Policy 1.1: Evaluate and refurbish parks, as needed, to reflect needs related to changes in population, age of nearby residents, recreational activities preferred, amount of leisure time available, and contemporary park designs and technologies.

Policy 1.2: Evaluate the maintenance implications of potential park land acquisitions and capital improvements.

Policy 1.3: Research, develop, and recommend funding programs in order to carry out the proposed park and recreation system needed within Roseville.

Policy 1.4: Partner with adjacent communities, agencies, and school districts to leverage resources available to optimize open space, fitness and recreation programming, and facility options.

Policy 1.5: Develop park and recreation facilities that minimize the maintenance demands on the City by emphasizing the development of well-planned parks, high-quality materials and labor-saving maintenance devices and practices.

Policy 1.6: Promote and support volunteerism to encourage people to actively support the City's parks and open spaces.

Goal 2: Maintain an ongoing parks and recreation planning process that provides timely guidance for maintaining the long-term, sustained viability of the City's parks, open spaces, and recreation facilities system.

Policy 2.1: Re-evaluate, update, and adopt a Park and Recreation System Plan at least every five years to reflect new and current trends, changing demographics, new development criteria, unanticipated population densities, and any other pertinent factors that affect park and recreation goals, policies, and future directions of the system.

Policy 2.2: Develop and implement park master plans.

Policy 2.3: Support involvement of the Park and Recreation Commission in the parks and recreation planning process.

Policy 2.4: Monitor progress on the Parks and Recreation System Plan on an annual basis to ensure that it provides actionable steps for maintaining, improving and expanding the system.

Policy 2.5: Annually recommend the adoption of a ten-year Capital Improvements Plan (CIP) for Parks and Recreation.

Policy 2.6: Involve a diverse group of participants in the parks and recreation planning process.

Goal 3: Add new park and recreation facilities to achieve equitable access in all neighborhoods, accommodate the needs of the City's redeveloping areas, and meet residents' desires for a broad range of recreation opportunities serving all age groups.

Policy 3.1: Determine potential locations and acquire additional park land in neighborhoods that are lacking adequate parks and recreation facilities.

Policy 3.2: Determine potential locations for new park facilities in redevelopment areas as part of the redevelopment process and use the park dedication process to acquire the appropriate land.

Policy 3.3: Make continued effective use of the Park Dedication Ordinance. Park land dedication will be required when land is developed or redeveloped for residential, commercial, and industrial purposes. The City will annually review its park dedication requirements in order to assure that dedication regulations meet statutory requirements and the needs of Roseville.

Goal 4: Create a well-connected and easily accessible system of parks, open spaces, trails, and recreation facilities that links neighborhoods and provides opportunities for citizens to gather and interact.

Policy 4.1: Connect the park system to the neighborhoods and community destinations via paths and trails.

Policy 4.2: Make the park system accessible to people with physical disabilities.

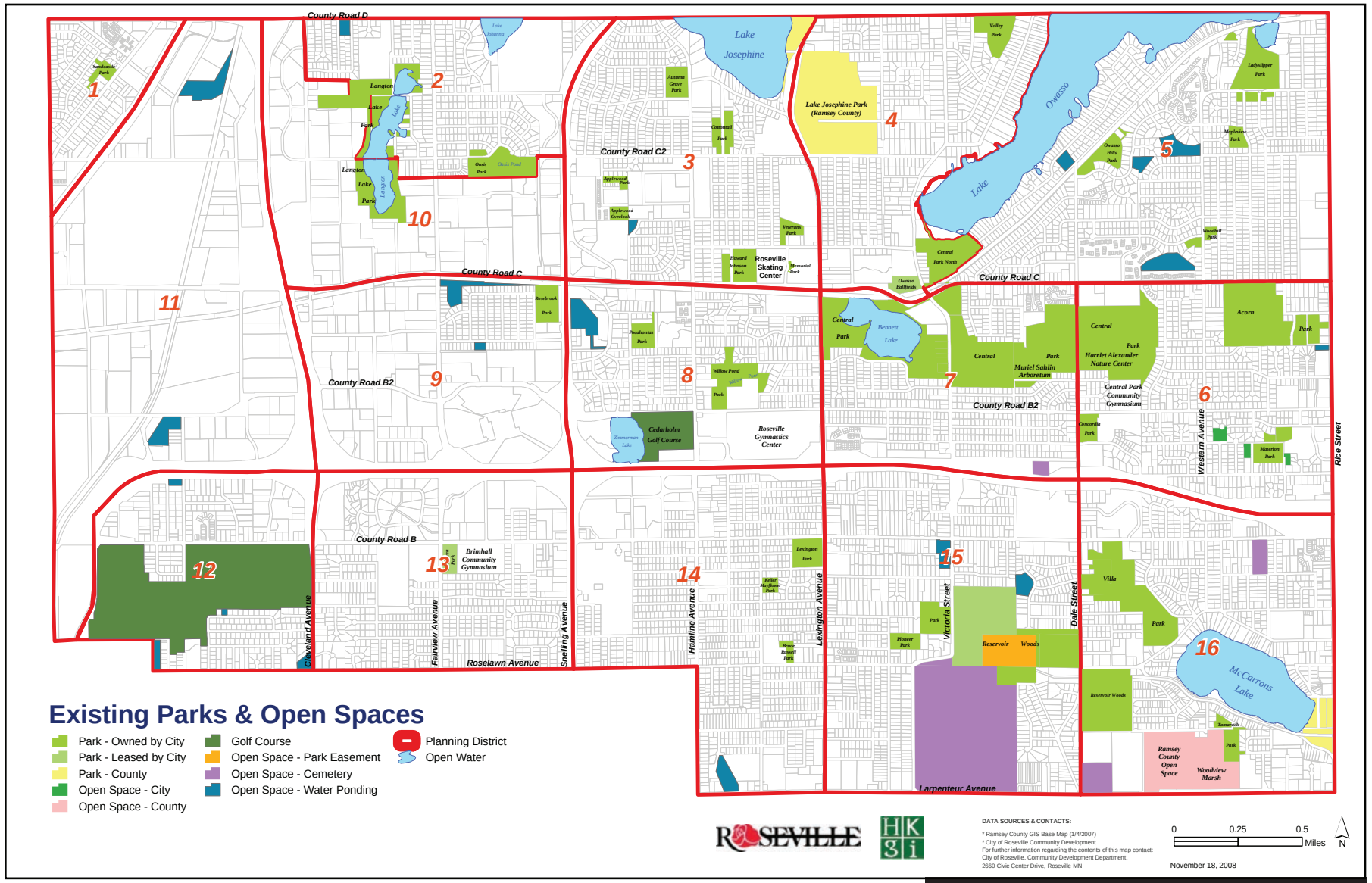
Policy 4.3: Align development and expansion of the non-motorized pathways system with the need to provide connections to and within the parks, open spaces and recreation system.

Goal 5: Preserve significant natural resources, lakes, ponds, wetlands, open spaces, wooded areas, and wildlife habitats as integral aspects of the parks system.

Policy 5.1: Encourage dedication of parks, open spaces, and trails in new development and redevelopment areas that also preserve significant natural resources on and/or adjacent to the subject site.

Policy 5.2: Utilize adopted Natural Resources Management Plans to manage and restore the significant natural resources in the park system.

Policy 5.3: Seek ways to effectively preserve wooded areas and to appropriately add trees to parks, open spaces, boulevards, and other City property.



Existing Parks & Open Spaces

- Park - Owned by City
- Park - Leased by City
- Park - County
- Open Space - City
- Open Space - County
- Golf Course
- Open Space - Park Easement
- Open Space - Cemetery
- Open Space - Water Ponding
- Planning District
- Open Water

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DATA SOURCES & CONTACTS:

* Ramsey County GIS Base Map (1/4/2007)
* City of Roseville Community Development

For further information regarding the contents of this map contact:
City of Roseville, Community Development Department,
2660 Civic Center Drive, Roseville MN

0 0.25 0.5 Miles

N

November 18, 2008

Existing Parks and Open Spaces

Figure 9.1

Park Classification System

The City's parks, open spaces and recreation facilities are organized into seven classifications, defined as follows:

Play Lot (PL)

Play lots are small parks intended for informal recreation, play and relaxation. There are two play lots in the existing park system.

Neighborhood Park (NP)

Neighborhood parks offer opportunities for a variety of recreational activities, both organized and informal. There are 16 neighborhood parks in the existing park system.

Community Park (CP)

Community parks are larger and offer diverse environmental features, including unique natural open space. They offer many opportunities for recreation. There are three community parks in the existing park system.

Urban Park (UP)

Urban parks offer varied natural features and include a wide range of recreational opportunities. There are two urban parks in the existing park system.

Trail Park (TP)

Trail parks offer opportunities for recreational travel, such as hiking or biking through areas of natural beauty. There are four trail parks in the existing park system.

Athletic Field (ATHP)

Athletic fields are park areas that are entirely designed for organized athletic play. There are three athletic fields in the existing park system.

Conservancy Park (CONP)

Conservancy parks are intended for the protection and preservation of the natural environment, and offer recreational opportunities. There are three conservancy parks in the existing park system.

Regional Facility (RF)

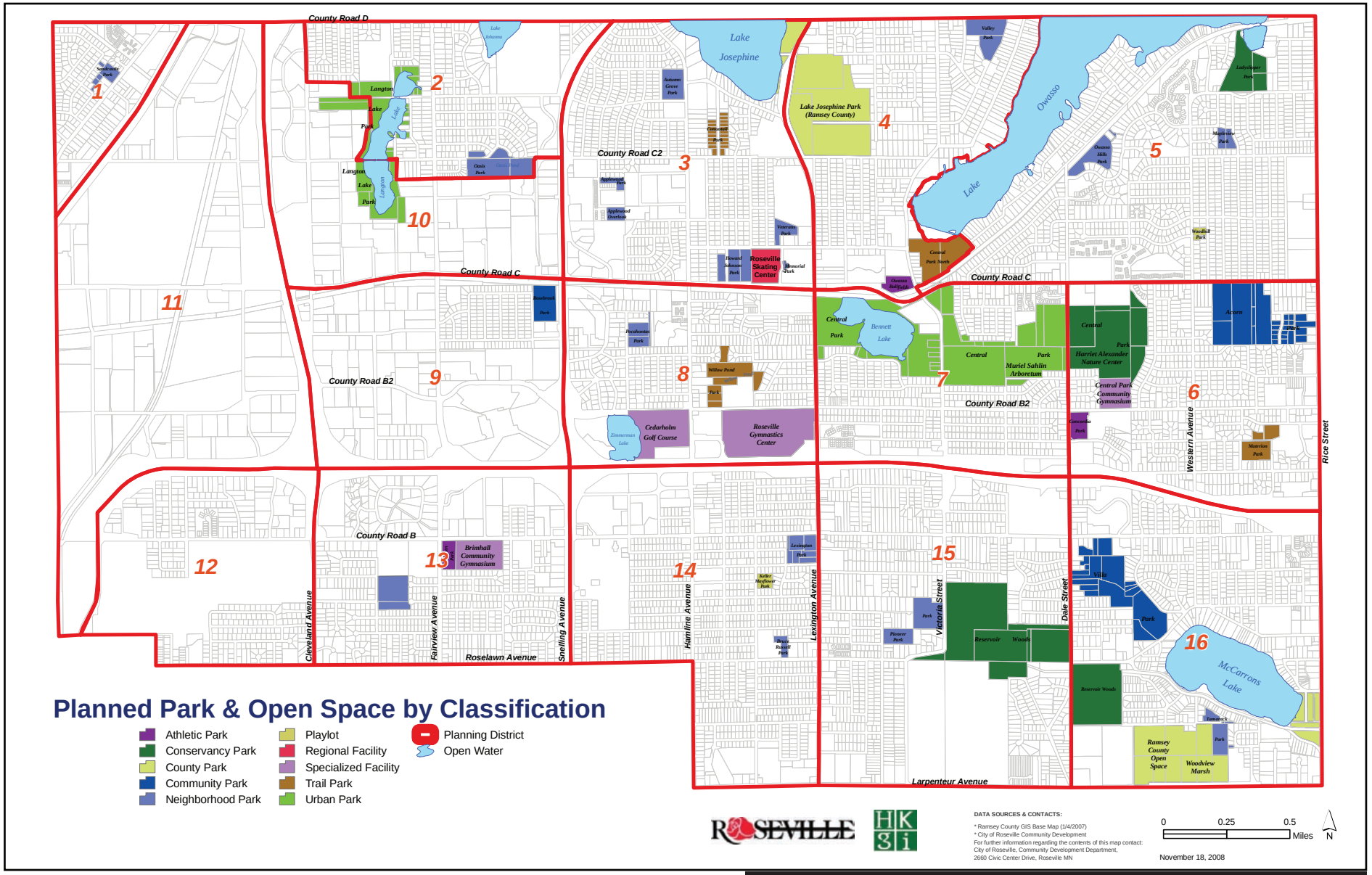
Regional facilities provide unique recreational facilities that are used by people throughout the region. The Roseville Skating Center is the only regional facility in the existing system.

Specialized Facility (SF)

Specialized facilities represent elements of the park system that should be identified for their special use and purpose. Specialized facilities in the existing system include Cedarholm Golf Course, Harriet Alexander Nature Center and Muriel Sahlin Arboretum, Roseville Gymnastics Center, Central Park Community Gymnasium, and Brimhall Community Gymnasium.

Table 9.1 Park Classifications lists the City's existing parks, open spaces, and recreational facilities by park classification.

Figure 9.2 Planned Parks and Open Space by Classification shows the location and classification of each of the City's parks, open spaces, and recreational facilities.



Planned Parks and Open Space by Classification

Figure 9.2

Park Classification	Park	Acres
Playlot (PL)	Keller Mayflower	2.26
	Woodhill	2.60
Neighborhood Park (NP)	Applewood Overlook	2.42
	Applewood Park	2.09
	Autumn Grove	6.54
	Bruce Russell	1.95
	Howard Johnson	9.56
	Lexington	8.18
	Mapleview	3.28
	Memorial (Civic Center Campus)	
	Oasis	15.37
	Owasso Hills	8.53
	Pioneer	13.52
	Pocahontas	5.67
	Sandcastle	3.43
	Tamarack	6.93
	Valley	10.58
	Veterans	3.59
Community Park (CP)	Acorn	44.60
	Rosebrook	8.28
	Villa	33.10
Urban Park (UP)	Central	139.25
	Langton Lake	62.72
Trail Park (TP)	Central Park North	17.47
	Cottontail	6.48
	Materion	8.51
	Willow Pond	14.88
Conservancy Park (CONP)	Central Park - Nature Center	52.28
	Ladyslipper	17.48
	Reservoir Woods	109.42
Athletic Field (ATHP)	Concordia	4.77
	Evergreen	3.94
	Owasso Fields	4.40
Regional Facility (RF)	Roseville Skating Center	
Specialized Facility (SF)	Cedarholm Golf Course	
	Harriet Alexander Nature Center	
	Muriel Sahlin Arboretum	
	Central Park Community Gymnasium	
	Brimhall Community Gymnasium	
	Roseville Gymnastics Center	

Park Classifications

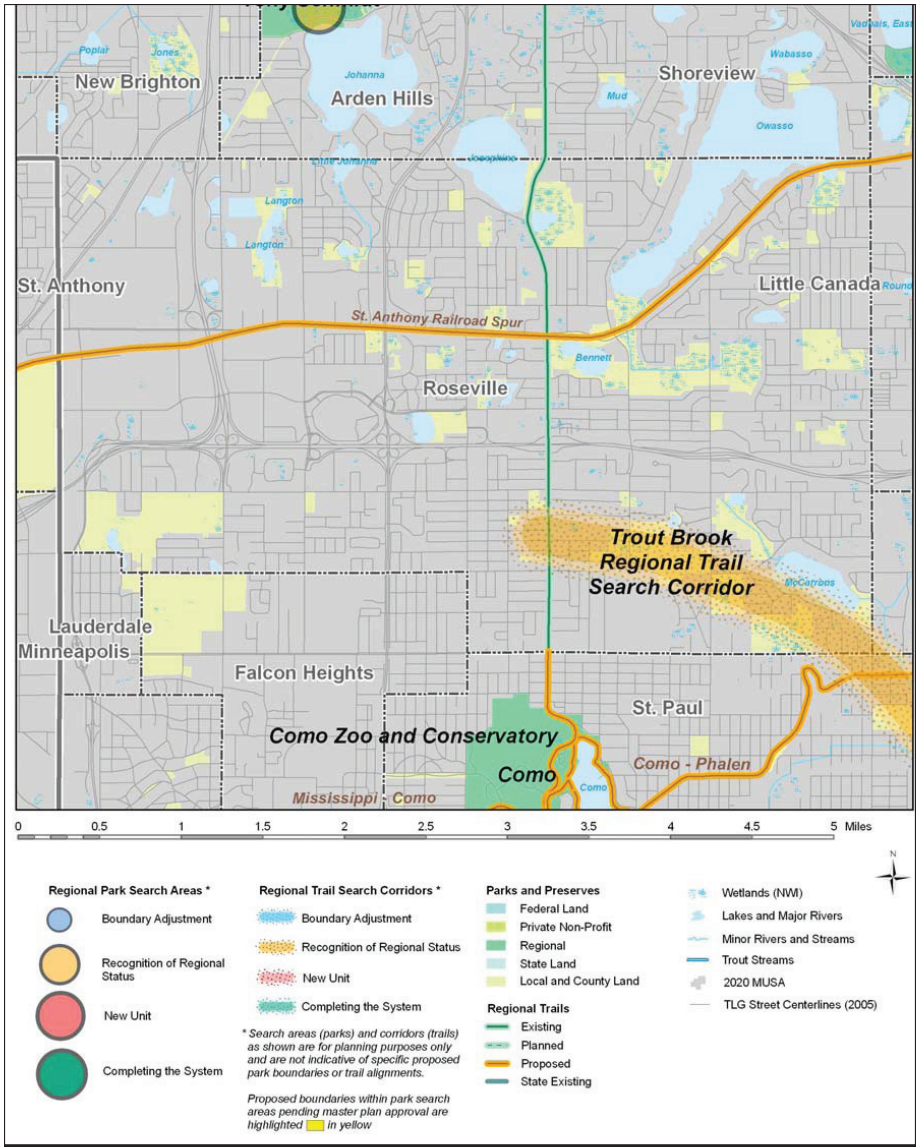
Table 9.1

Pathways

Pathways, which include footpaths, trails, sidewalks, and bike lanes, are an important part of Roseville's park system. Pathways allow people to move within a park. Pathways provide access to parks, creating connections from neighborhoods to parks, recreation facilities, and schools. Pathways provide recreation and fitness opportunities, promoting an active and healthy lifestyle for Roseville residents.

Roseville is committed to working with the Metropolitan Council, Ramsey County, adjacent cities, and other agencies to promote regional trail projects and to coordinate local trail systems. Figure 9.3, which is the 2030 Regional Parks Plan Map for Roseville, shows the three regional trails identified in Roseville's System Statement from the Metropolitan Council, including the existing Lexington Avenue Regional Trail, proposed St. Anthony Railroad Spur Regional Trail, and the Trout Brook Regional Trail Search Corridor. The existing County trail along Lexington Avenue is a newly designated regional trail. Since the St. Anthony railroad corridor currently has an active railroad operating on the tracks, trail planning for this potential regional trail corridor would not take place until there is a change in the status of the use of the tracks. At such time that the tracks become inactive for railroad use, Ramsey County would work with the City and others to create a trail master plan. Ramsey County is planning to work with the city and others to explore the potential for an extension of the existing Trout Brook Trail in St. Paul northwest to provide a connection to the newly designated Lexington Avenue Regional Trail in Roseville.

In 2008, the City established a Pathway Advisory Committee to update the City's Pathway Master Plan. This



2030 Regional Parks Plan Map in Relationship to Roseville

Figure 9.3

Roseville Pathway Master Plan

LEGEND:

- Footpath (4.28 miles)
- Sidewalk (36.49 miles)
- Striped Shoulder (29.70 miles)
- Trail (32.51 miles)
- Proposed Segments (32.55 miles)
- Proposed Striped Shoulder (1.56 miles)

ROSEVILLE

Prepared by:
Engineering Department
August 12, 2008

Pathway Master Plan

Figure 9.4

plan was first adopted by the City Council in 1997, with updates in 2001 and 2002. The purpose of the Pathway Master Plan is to provide a set of guidelines for the development of the community's pathway network. These guidelines provide policies and standards for the planning, design, construction, maintenance, promotion, and regulation of Roseville's pathway facilities.

The recommendations provided in the Pathway Master Plan focus not only on the physical facilities, but also on promoting safe pathway use through education and enforcement. The City will use the Pathway Master Plan to assist the City Council on decisions regarding pathway issues. For reference, Figure 9.4 is the Pathway Master Plan Map. This depicts the City's existing pathway system, the proposed pathway connections from the 2002 plan update, and the proposed pathway connections in the 2008 update.

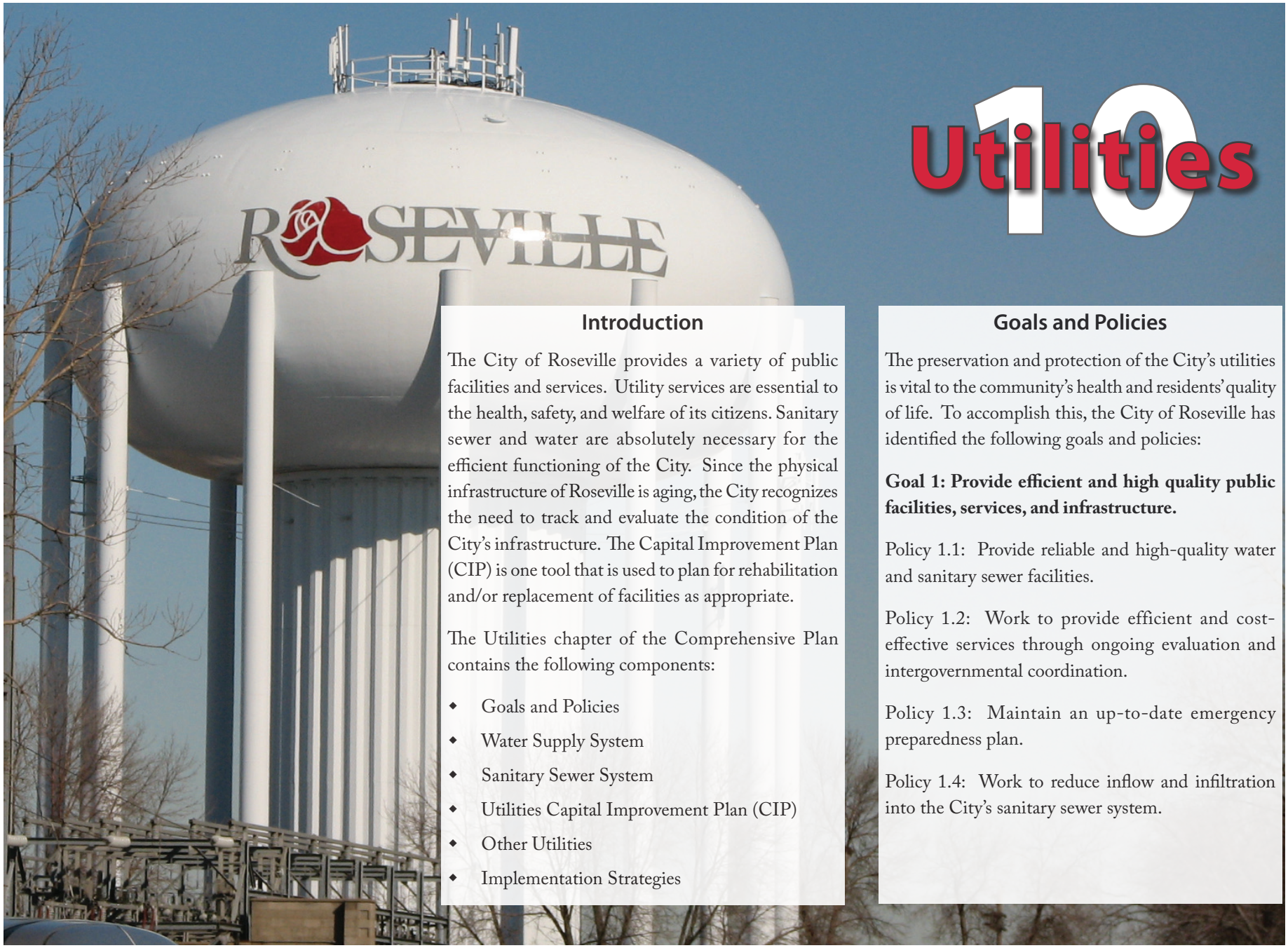
Building connections and enabling people to travel without a vehicle is an objective that cannot be limited to the Parks, Open Space, and Recreation chapter. Sidewalks and trail corridors are created as land is developed. Redevelopment provides the opportunity to build pieces that are missing from the current system. The Transportation chapter (Chapter 5) is a critical tool for influencing non-vehicular movement in Roseville. Street improvements create the opportunity for related improvements to sidewalks, trails, and pedestrian crossings. Street design determines the ability to provide safe travel areas for bicycles. Coordination of all aspects of the Comprehensive Plan is essential to making Roseville a safe and convenient place to travel by foot, bicycle, and other non-vehicular means.

Issues and Potential Improvements

Due to the anticipated update of the City's Parks and Recreation System Plan, a general assessment of future issues related to parks, open spaces, and recreation facilities was conducted to provide general guidance for future initiatives. This assessment highlighted several issues and potential issues.

1. Some neighborhoods are currently lacking adequate parks and recreation facilities. Using the Planning Districts (in the Land Use Chapter) to also function as park service districts, Districts 1, 10, 11, 12, and 13 have been identified, through public comment, as lacking adequate park and recreation facilities.
2. Roseville has a history of exploring the community's needs, interests, and ideas for a future community center facility, including the City Center Master Plan. The IR2025 report established a specific strategy focused on the exploration of a future community center. Additional investigations are required to evaluate location options, facility components, and development feasibility.
3. A number of undeveloped open space properties still exist within the community that are owned by a single property owner. These properties could provide valuable opportunities to preserve natural open spaces and create connections within the parks and recreation system in the future.
4. The Northeast Diagonal transit corridor may provide future opportunities for enhancing the community's parks and recreation system. These enhancements could include construction of a recreational trail in the corridor to provide improved connections within the community as well as more direct access to the nearby recreational facilities in Minneapolis, particularly the Grand Round system.

It is anticipated that these issues will be explored as part of the process of updating the Park and Recreation System Plan.



10 Utilities

Introduction

The City of Roseville provides a variety of public facilities and services. Utility services are essential to the health, safety, and welfare of its citizens. Sanitary sewer and water are absolutely necessary for the efficient functioning of the City. Since the physical infrastructure of Roseville is aging, the City recognizes the need to track and evaluate the condition of the City's infrastructure. The Capital Improvement Plan (CIP) is one tool that is used to plan for rehabilitation and/or replacement of facilities as appropriate.

The Utilities chapter of the Comprehensive Plan contains the following components:

- Goals and Policies
- Water Supply System
- Sanitary Sewer System
- Utilities Capital Improvement Plan (CIP)
- Other Utilities
- Implementation Strategies

Goals and Policies

The preservation and protection of the City's utilities is vital to the community's health and residents' quality of life. To accomplish this, the City of Roseville has identified the following goals and policies:

Goal 1: Provide efficient and high quality public facilities, services, and infrastructure.

Policy 1.1: Provide reliable and high-quality water and sanitary sewer facilities.

Policy 1.2: Work to provide efficient and cost-effective services through ongoing evaluation and intergovernmental coordination.

Policy 1.3: Maintain an up-to-date emergency preparedness plan.

Policy 1.4: Work to reduce inflow and infiltration into the City's sanitary sewer system.

Policy 1.5: Prepare long-term plans to identify, prioritize, and determine the costs to maintain and/or replace City water and sewer facilities.

Policy 1.6: Utilize the CIP and annual budgeting process for prioritizing major public expenditures.

Goal 2: Work with private utilities and other governmental entities to ensure that Roseville residents and businesses have high-quality and reliable electric, natural gas, telecommunications, and other services.

Policy 2.1: Encourage private utilities to replace outdated infrastructure and to provide new infrastructure that allows residents, businesses, and institutions to make effective use of current technologies.

Policy 2.2: Coordinate public improvement projects with private utilities to facilitate replacement or updating of existing utilities.

Policy 2.3: To improve aesthetics within the city, work with private utility providers to convert overhead utility lines to underground utility lines.

Policy 2.4: Communicate City land-use and development plans to private utilities to ensure that adequate services are available.

Policy 2.5: Monitor private utility maintenance and reliability statistics and consult with adjoining municipalities and other governmental entities regarding adequacy of services.

Goal 3: Coordinate the installation of communication technology infrastructure to be responsive to rapidly evolving systems.

Policy 3.1: Require installation of communication infrastructure in all development and redevelopment projects.

Policy 3.2: Require communication infrastructure installation on all street reconstruction projects.

Water Supply System

Roseville's Water Supply Plan provides the City and its residents with assurance of adequate safe water to meet their needs and procedures for water system emergencies. It also discusses measures the City is implementing to conserve this precious resource.

The Water Supply Plan consists of four parts:

- Part I: Water supply system description and evaluation
- Part II: Emergency response procedures
- Part III: Water Conservation Plan
- Part IV: Metropolitan Land Planning Act Requirements

The City of Roseville purchases treated, potable water from Saint Paul Regional Water Services. The current wholesale water contract is for a 20-year period and is in place until 2025. Saint Paul Regional Water Services provides the required treatment processes before the water is introduced into the water distribution system in Roseville; no further treatment is required by the City. The City distributes the water to its retail customers. Roseville also provides wholesale water via its system to the City of Arden Hills. To accomplish this, there are three interconnection points with the City of Arden Hills:

City	Size	Location
Little Canada	8"	County Road C and Rice Street
Little Canada	12"	South of Woodlynn on Rice Street
Shoreview	8"	County Road D and Lexington
New Brighton	6"	Old Highway 8 and County Road D
St. Anthony	12"	West of Patton Road on County Road C
Lauderdale	6"	Roselawn and Lake Street
St. Paul	8"	Galtier Street and Larpenteur Avenue

Community Cross Connections

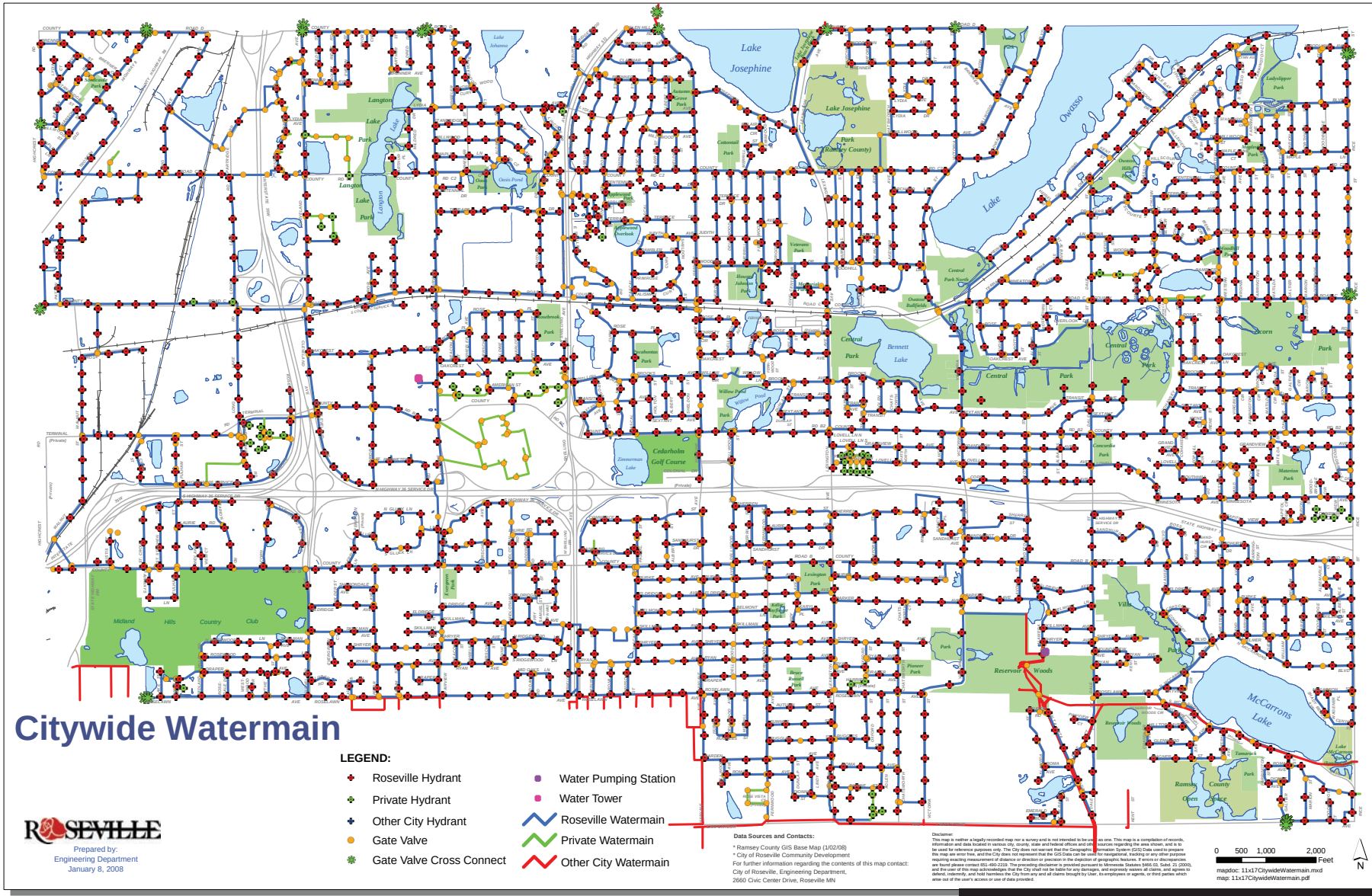
Table 10.1

1. Cleveland Avenue and County Road D
2. Fairview Avenue and County Road D
3. Glenhill Road and Hamline Avenue

Historically, the water utility has been managed to be self-supporting, with future replacement needs financed from revenue generated from the fees paid by customers. The City periodically reviews the contract with Saint Paul Regional Water Services to ensure that the City is obtaining the most cost-effective services.

The water system consists of 160 miles of mainline, one water tower, and one booster station (water pumping facility) and has seven emergency connections with adjacent communities (see Figure 10.1).

These interconnections are normally closed but can be opened to meet Roseville's emergency needs. Appropriate personnel are to be contacted before these



City Watermain

Figure 10.1

connections are opened so operational changes can be implemented in the source city, if necessary.

The interconnections with the cities of Little Canada, Lauderdale, and St. Paul are only of use in emergency situations related to the Roseville distribution system. The source water for these connections is from the City of St. Paul system and would be of little value during an emergency within the St. Paul Regional Water Services production and treatment systems.

The interconnections with Shoreview, St. Anthony, and New Brighton could be opened in a wider variety of emergencies as they produce their own water from wells within their system.

Sanitary Sewer System

The entire city of Roseville is within the Metropolitan Urban Service Area (MUSA). Therefore, sanitary sewer interceptor and treatment is provided to the City via the Metropolitan Council Environmental Services (MCES) system. Within the city, the system is under the jurisdiction of the City's sanitary sewer utility. Historically, the sanitary sewer utility has been managed to be self-supporting, with future infrastructure replacement needs financed with revenues generated from the fees paid by users.

The Roseville sanitary sewer system consists of approximately 180 miles of sanitary sewer, 3,112 manholes, and 13 lift stations. The public sanitary sewer provides service to 17,258 households and businesses. The Citywide Sanitary Sewer map (Figure 10.2) shows the locations of these facilities and direction of flow.

Residential			Non-Residential		
	Number	Percent		Number	Percent
Single Family	9,114	55.7%	Commercial	484	31.4%
*Multi-Family	205	10.0%	Institutions	69	2.9%
*includes one mobile home park					

Sewage Connections

Table 10.2

City	Sewer flow TO Roseville	Sewer flow FROM Roseville	Drinking Water flow TO Roseville	Drinking Water flow FROM Roseville
Arden Hills	None	48 residences (County Road D)	107 residences (County Road D)	None
Falcon Heights	None	None	None	16 residences
Maplewood	None	None	6 units	Schroeder Milk- (Rice Street)
St. Anthony	2 residences	None	None	2 residences
St. Paul	9 residences 17 unit apt bldg	None	2 Shopping Ctrs, Taco Bell (Larpenteur Ave)	None
Shoreview	None	11 units (County Road D/ Lake Owasso)	None	None
Totals	28 units	59 units	113 units	18 units 1 commercial

Source: City of Roseville Research 6/2008

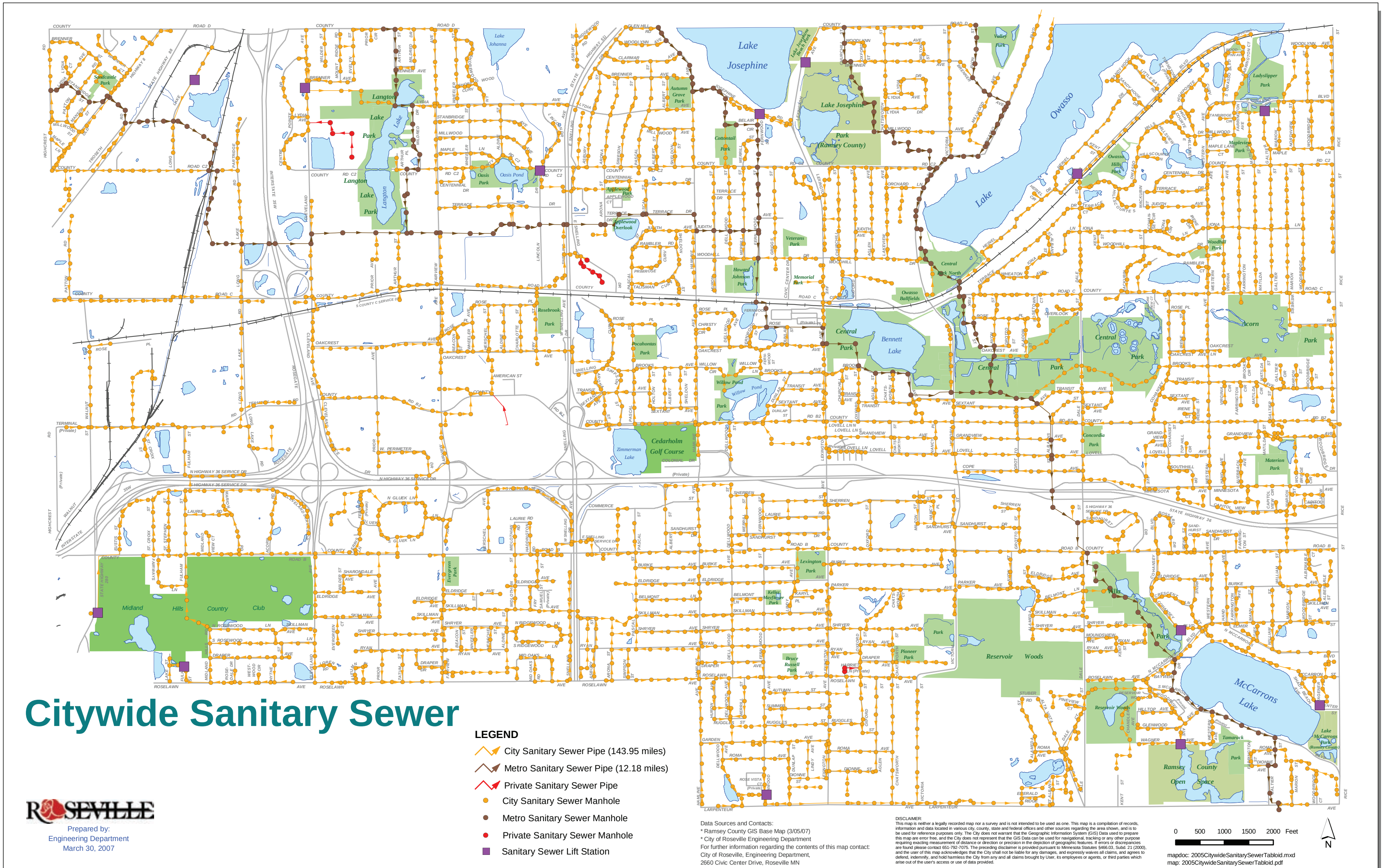
Intercommunity Utility Service Connections

Table 10.3

Trunk sewers and the 13 lift stations collect wastewater and deliver it to the MCES interceptor sewers. The MCES interceptors serving the city of Roseville include RV-430, RV-431, RV-432, and RV-433. For interceptor locations and service areas see Figure 10.2 - Citywide Sanitary Sewer Map. All of the interceptors flow south and eastward where they connect to RV-430, which delivers the waste to the Pigs Eye Wastewater Treatment plant in St. Paul. Operated by the MCES, this plant accepted an estimated 1.95 billion gallons of wastewater from Roseville in 2007. See Figure 10.3 for the Sanitary Sewer Service Areas map.

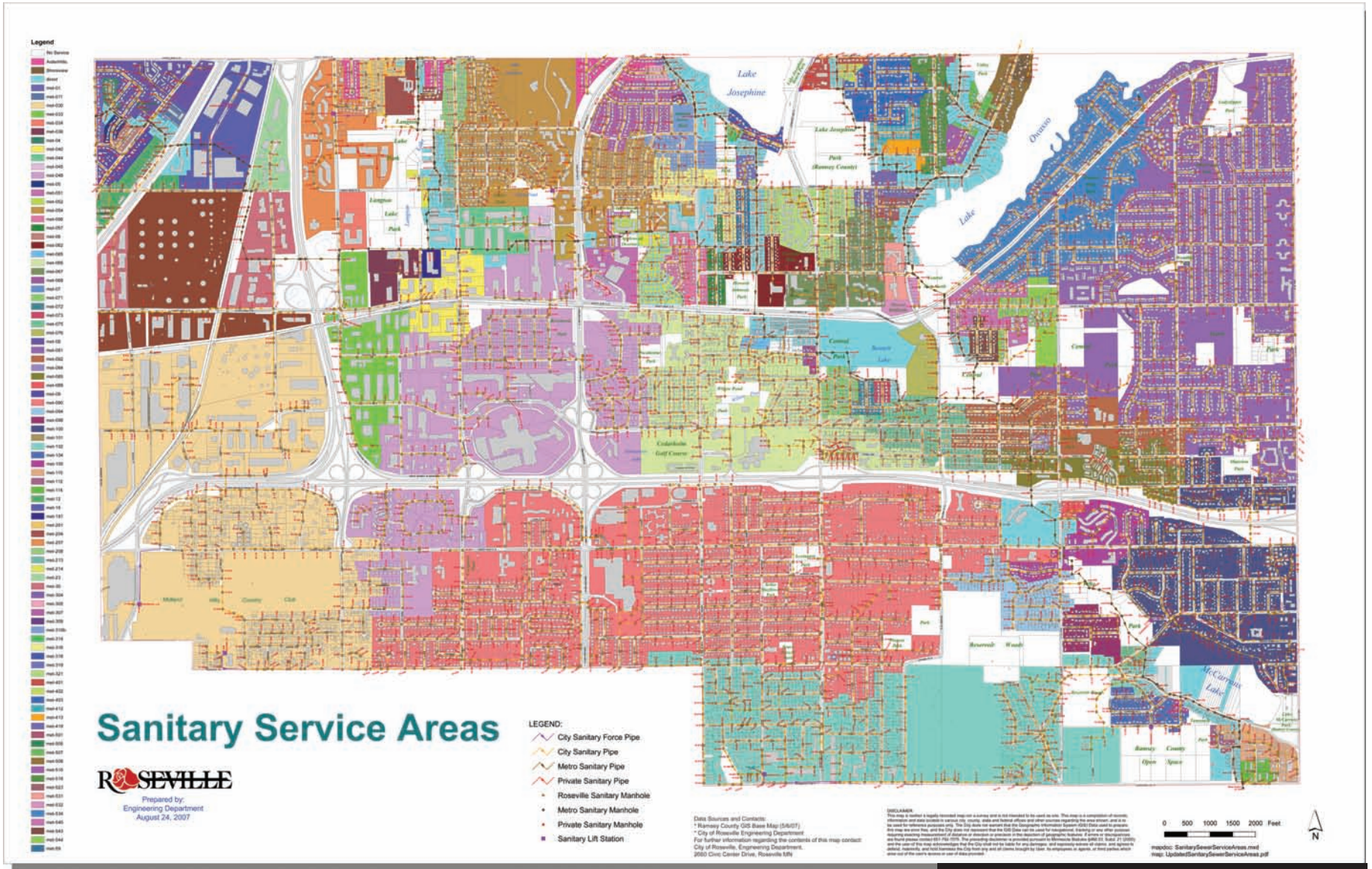
MCES owns and maintains the interceptor sewers. Public sanitary sewer trunk lines are in place and serve all 10,674 parcels in Roseville.

The City's sanitary sewer lines and lift stations collect sewage from individual parcels or properties and route



Citywide Sanitary Sewer

Figure 10.2



Sanitary Sewer Areas

Figure 10.3

the sewage to the MCES sewer interceptors. The City's system design and condition is reviewed and updated continuously to ensure adequacy. The 13 sanitary sewer lift stations are electronically monitored 24 hours a day.

On-Site Sewage Treatment

On-site septic systems are regulated by City code. The code requires that existing structures with on-site septic systems shall connect to the municipal sanitary sewer system within one year of sewer service being made available. Current records indicate all existing structures in the city of Roseville are connected to the sanitary sewer system.

Intercommunity Services

The City of Roseville provides utility service to properties in adjacent communities. In summary, sewage from 59 dwelling units flows from Roseville to an adjoining community, and 26 units send sewage into the Roseville system. Neighboring communities have not requested additional sanitary sewer extensions, and the City is not aware of any potential new requests.

Future Demand Forecast

Municipal sewer service is available to all properties within the City. Redevelopment and/or reuse of existing sites is the largest challenge for the City in the future. Developers are responsible for extending trunk or lateral mains to provide for sewer connections in development or redevelopment projects.

Presently over 98% of the property within the city has been developed. The City of Roseville's 2030 household and employment forecasts are shown in Table 10.4 and Table 10.5 projects annual sewer flow and hourly demand in 2010, 2020, and 2030. Table 10.6 projects annual sewer flow by land use by year in five-year increments until 2030.

Year	2010	2020	2030
Sewered Population	36,000	37,000	38,300
Sewered Households	15,500	16,000	16,500
Sewered Employment	42,450	44,700	46,100
Average Annual Wastewater Flow (MGD)	4.47	4.5	4.54
Allowable Peak Hourly Flow (MGD)	10.73	10.8	10.9

Projected Sewer Flow

Table 10.4

	2010		2020		2030	
Interceptor	Ave. Annual Wastewater Flow (MGD)	Peak Hourly Flow (MGD) (1)	Ave. Annual Wastewater Flow (MGD)	Peak Hourly Flow (MGD) (1)	Ave. Annual Wastewater Flow (MGD)	Peak Hourly Flow (MGD) (1)
1-RV-430 (2)	5.02	12.04	5.61	12.9	6.15	14.15
1-RV-431	0.20	0.77	0.33	1.17	0.33	1.20
1-RV-432	0.22	0.83	0.22	0.84	0.22	0.84
1-RV-433A	0.10	0.41	0.10	0.41	0.10	0.41
1-RV-433	0.19	0.72	0.19	0.72	0.19	0.72

Notes:
(1) Calculated using MCES peak flow factors

(2) Projections for 1-RV-430 include flows from 1-RV-431, 432, 433A, and 433.

Projected Sewer Flow by Interceptor by Year

Table 10.5

Land Use and Sewer Flow Analysis

Sewer Flow Analysis

Within Urban Service Area	Allowed Density Range Housing Units/Acre Minimum	Maximum	Existing (2000) acres	2010 acres	2015 acres	2020 acres	2025 acres	2030 acres	Change 2000-2030 acres	Sewer Flow Assumptions (gallons/acre)	Existing (2000) mgd	2010 mgd	2015 mgd	2020 mgd	2025 mgd	2030 mgd	Flow increase 2000-2030 mgd
Residential Land Uses			3403	3403	3465	3487	3547	3619	216								
Low Density Residential	1.5	4	2973	2965	2987	2978	3002	3037	64	550	1.635	1.631	1.643	1.638	1.651	1.670	0.035
Medium Density Residential	4	12	146	146	156	157	169	160	14	800	0.117	0.117	0.125	0.126	0.135	0.128	0.008
High Density Residential	12	30	284	292	322	352	376	422	138	6000	1.704	1.752	1.932	2.112	2.256	2.532	0.076
									0								
C/I Land Uses	Est. Employees/Acre		1539	1540	1552	1534	1524	1566	27								
Neighborhood Business	32		40	40	37	42	35	45	5	800	0.032	0.032	0.030	0.034	0.028	0.036	0.004
Community Business	32		216	217	214	220	230	206	-10	800	0.173	0.174	0.171	0.176	0.184	0.165	-0.008
Regional Business	32		220	220	254	254	254	279	59	800	0.176	0.176	0.203	0.203	0.203	0.223	0.047
Business Park	32		43	43	43	43	110	282	239	800	0.034	0.034	0.034	0.034	0.088	0.226	0.191
Office	32		163	163	150	140	125	79	-84	800	0.130	0.130	0.120	0.112	0.100	0.063	-0.067
Industrial	8.5		857	857	754	682	617	496	-361	500	0.429	0.429	0.377	0.341	0.309	0.248	-0.181
Community Mixed Use	Residential is 25 - 50% of total mix; 4.00 dwelling units - no max density		0	0	100	153	153	179	179	1900	0.000	0.000	0.190	0.291	0.291	0.340	0.340
Public/Semi Public Land Uses			3420	3420	3420	3417	3413	3334	-86								
Institutional			513	513	513	513	510	476	-37	600	0.308	0.308	0.308	0.308	0.306	0.286	-0.022
Parks and Recreation			834	834	834	831	830	845	11	250	0.209	0.209	0.209	0.208	0.208	0.211	0.003
Golf Course			181	181	181	181	181	157	-24	150	0.027	0.027	0.027	0.027	0.027	0.024	-0.004
Roadway Rights of Way			1796	1796	1796	1796	1796	1770	-26	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Railroad			96	96	96	96	96	86	-10	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Subtotal Sewered			**8362**	**8363**	**8437**	**8438**	**8484**	**8519**	**157**	**Total**	**4.974**	**5.018**	**5.369**	**5.609**	**5.785**	**6.152**	
Undeveloped																	
Vacant			171	170	95	95	48	48	-123								
Wetlands	--	--	271	271	271	271	271	271	0								
Open Water, Rivers and Streams	--	--	57	57	57	57	57	71	14								
Total			**8690**	**8691**	**8765**	**8766**	**8812**	**8861**	**171**								

* For Mixed Use categories include information regarding the estimated minimum and maximum housing density ranges and acres/percentage of residential use.

mgd=million gallons per day

Projected Sewer Flow by Land Use by Year

Table 10.6

Infiltration and Inflow (I/I)

The MCES Water Resources Management Plan includes policies for reducing inflow and infiltration (I/I). The MCES has projected significant growth in the metropolitan area by 2030. This increase, along with current levels of I/I in the system, would require significant, costly increases to expand the existing MCES treatment facilities to meet the future wastewater flows. As a result, the MCES has implemented an I/I surcharge program. Communities with excessive I/I will need to develop plans to reduce I/I. The City of Roseville has been identified as a community with I/I challenges. The MCES has imposed a surcharge on the City as a part of its I/I reduction program. Based on current readings that the MCES has taken from several monitoring points, Roseville's surcharge is estimated at $82,538 a year for five years, beginning in 2007. The City is working to identify areas of the sanitary sewer system that are contributing to the City's I/I problem and to take the necessary measures to reduce and/or eliminate the surcharge. The following outlines the City's objectives, policies, strategies, and implementation plan to achieve reduction in I/I.

Problem: The City of Roseville is faced with an annual surcharge from the MCES due to I/I levels that exceed the MCES allowable peak flow rate for the community

Objective: The objective of the program is to identify and remove sufficient I/I to eliminate the current I/I surcharge and reduce the annual treatment cost paid to the MCES.

Approach: The approach will include an initial "big picture" review of the current situation, followed by more detailed investigations, data evaluation, rehabilitation and then long-term follow-up. The Implementation Plan provides a basic guideline for I/I reduction efforts. It must be flexible to allow for a change in direction in response to the actual situations or defects that are identified during the course of the work. Rehabilitation is the step that actually removes sources of I/I and is considered an ongoing task.

Existing I/I Problems

In 2007, the City began to study its I/I problem in response to the MCES imposed surcharge. In 2008, the City will complete the initial study and develop and implement an I/I reduction plan, along with an analysis of costs for remediation. The following steps explain how the City identified the extent, source, and significance of I/I throughout the City's sanitary sewer system.

1. Initial review: This was completed through the compilation of MCES flow data, city maps, city investigation records, lift station data, connection data, and building type information.
2. Analysis: The data was reviewed with respect to other system information to develop a plan for additional investigation efforts. The data allowed staff to eliminate areas where monitoring demonstrated there was not an I/I issue, and focus efforts on areas with I/I peaks.
3. Collection of additional flow data: The areas with I/I peaks were outfitted with temporary flow meters to allow us to review "flow response" and the correlation to rainfall events. Lift station pumping records analysis.
4. Identification of potential source(s): Once the analysis was complete, various types of I/I within the system could be identified. The source of I/I affects which actions the City will implement to reduce the excessive I/I.

I/I Implementation Plan

Once the potential sources of I/I are identified, the City will take the following actions to eliminate and prevent excessive I/I.

1. Additional investigation: Conduct additional investigation to pinpoint I/I sources. Methods used:
   a. Smoke testing to reveal direct inflow sources such as low-lying manhole covers, roof drains, catch basins, and area drains
   b. Physical survey of manholes to identify deficient adjusting rings, manhole barrel joints, or wall leakage, and pipe penetration joint leakage
   c. Internal televising of sewer mains to view and videotape the condition of the existing underground pipe; this will identify structural pipe problems including open and leaking joints, collapsed pipes, poor-quality service connections, and broken pipes, in addition to I/I defects such as leaking joints and leaking or running service connections
   d. Sump pump inspections to inspect individual properties for sump pumps that may be connected to the sanitary sewer; if the pump is illegally connected, the property owner must correct the situation and have the property re-inspected periodically to ensure that it remains disconnected
   e. Foundation drain (or leaking service line) inspection of individual properties to identify directly connected foundation drains and

leaking service lines. Since this method is on private property and connections are typically underground, it is a difficult and potentially expensive task that is left as last choice in the investigation list

2. Rehabilitation of defects: Serious defects that are identified during the course of the investigation will be rehabilitated to eliminate I/I sources. Since the majority of the defects that are identified will be smaller, they will be compiled and evaluated before developing a rehabilitation project. This list of defects will be regularly reviewed and prioritized to provide the most benefit. A database of defects and projected rehabilitation methods will be maintained to prepare a priority listing of rehabilitation required to correct the problems.

   Rehabilitation methods include:

   a. Catch basin disconnection: Disconnect catch basin leads from sanitary sewer and extend connection to storm sewers for clean water flows.

   b. Roof drain disconnection: Disconnect/reroute roof drains to ground, street surface, or storm sewer.

   c. Seal manholes: Raise cover to grade and seal cover or replace with non-vented cover, grout manhole barrel joints, install cast-in-place manhole liner, or replace deteriorated manhole as needed.

   d. Fix pipe defects: Test and seal joints, install cured-in-place pipe liner (CIPP), slip lining with new carrier pipe, or perform pipe bursting to replace pipe "in place."

   e. Eliminate private property sources: Re-route sump pumps to discharge onto ground or street surfaces, provide alternative outlets for sump pump discharge water.

   f. Follow-up inspections: Conduct regular, every two to three years, random re-inspections to assure that the outside surface discharge remains intact.

   g. Foundation drain disconnection: Disconnect direct connections to the sanitary sewer and reroute the flow from the drain tile to a new sump pump installed to lift water from the foundation level and discharge it onto the ground surface away from the foundation.

   h. Repair of leaking service lines: Either replace or install slip lining to correct the leakage.

3. Annual Report: An annual report will be prepared to summarize efforts and costs during the course of the preceding year. It will include a review of flow data, comparison of changes from previous years, and MCES allowable flow rates, and recommend work for the following year.

Utility Capital Improvement Plan

The Capital Improvement Plan (CIP) has been developed to identify needs to ensure proper, continuous operation of the water and sanitary sewer utilities. The CIP was developed to support the intent of the Imagine Roseville 2025 goals to replace infrastructure when appropriate to minimize potential for failure of these systems.

Water Utility

The City's Water Utility provides for the operation, maintenance, and replacement of water utility infrastructure. The division also ensures compliance with a host of regulatory requirements in the operation and maintenance of this system.

The Water Utility's long-range goals include:

- Provide for uninterrupted operation of the water system to ensure the health and welfare of Roseville residents and businesses.
- Meet the regulatory goals of Minnesota Department of Health and other regulatory agencies related to the provision of safe drinking water.
- Provide excellent customer service in the utility area.
- Plan and implement a long-term infrastructure replacement plan.

To support these goals, the existing complement of vehicles and equipment will need to be replaced when they reach the end of their useful life. Infrastructure will be evaluated for appropriate rehabilitation or replacement schedules.

The city has over 100 miles of cast iron water mains that were installed in the 1960s and early '70s. Cast iron is prone to breakage due to minor shifts in the ground. It is recommended the City plan for the replacement or rehabilitation of all cast iron main over the next 20 to 30 years. Total cost in today's dollars could exceed $30 million for these mains to be replaced or lined. Technological improvements in pipe lining will help to minimize disruption to street infrastructure and keep restoration costs reasonable on these projects.

Other regulatory agencies have an impact on operational needs due to required compliance at the local level. A long-term funding plan is necessary to meet infrastructure replacement needs. The city will see minimal growth that would affect this system. Capital needs are to support replacement of existing infrastructure and support existing operational equipment.

Sanitary Sewer

The City's Sanitary Sewer Utility provides for the operation, maintenance, and replacement of sanitary sewer infrastructure. The division also ensures compliance with many regulatory requirements in the operation and maintenance of this system.

The Sanitary Sewer Utility's long-range goals include:

- Provide for uninterrupted operation of the sanitary sewer system to ensure the health and welfare of Roseville residents and businesses.
- Meet the regulatory goals of MCES and other regulatory agencies related to I/I reduction and other regulation.
- Provide excellent customer service in the utility area.
- Plan and implement a long-term infrastructure replacement plan.

To support these goals, the existing complement of vehicles and equipment must be replaced when they reach the end of their useful life. Infrastructure will be evaluated for appropriate rehabilitation or replacement schedules.

Other regulatory agencies have an impact on operational needs due to required compliance at the local level. A long-term funding plan is necessary to meet the infrastructure replacement needs. The city will see minimal growth that would affect this system. Capital needs are to support replacement of existing infrastructure and support existing operational equipment.

Other Utilities

In addition to water, sanitary sewer, and storm sewer service, development relies upon the availability of private utilities, notably electricity, natural gas, and communications. While local governments do not control the provision of these services, they do have limited regulatory authority over the location and design of the conveyance infrastructure. The City will continue to facilitate development of these private utilities, while minimizing associated adverse impacts.

In Roseville, electricity and natural gas are provided by Xcel Energy. Comcast provides a variety of services including cable television, telecommunication, and data services. Other companies provide communication services as well.

These private utilities use the public right-of-way for distribution of their services. The City has a right-of way ordinance that requires any private company to get a permit for work within the public right-of-way. This ensures that the City is aware of work that may inconvenience the public and that these private utilities restore the public infrastructure, minimizing the long-term costs to the City.

Although water supply and sanitary sewer are the primary focus of this chapter, private utilities (electric, natural gas and telecommunications) are essential elements of Roseville's well-being and future vitality. Reliable and high-quality service is required to attract and keep people and businesses in Roseville. As with municipal utilities, the ongoing replacement and upgrading of aging infrastructure is essential. In the coming years, technology infrastructure will be increasingly important. This technology connects Roseville to the global economy.

Implementation Strategies

In order to achieve the goals and policies discussed in this section, the City of Roseville should use the following strategies:

Ordinances

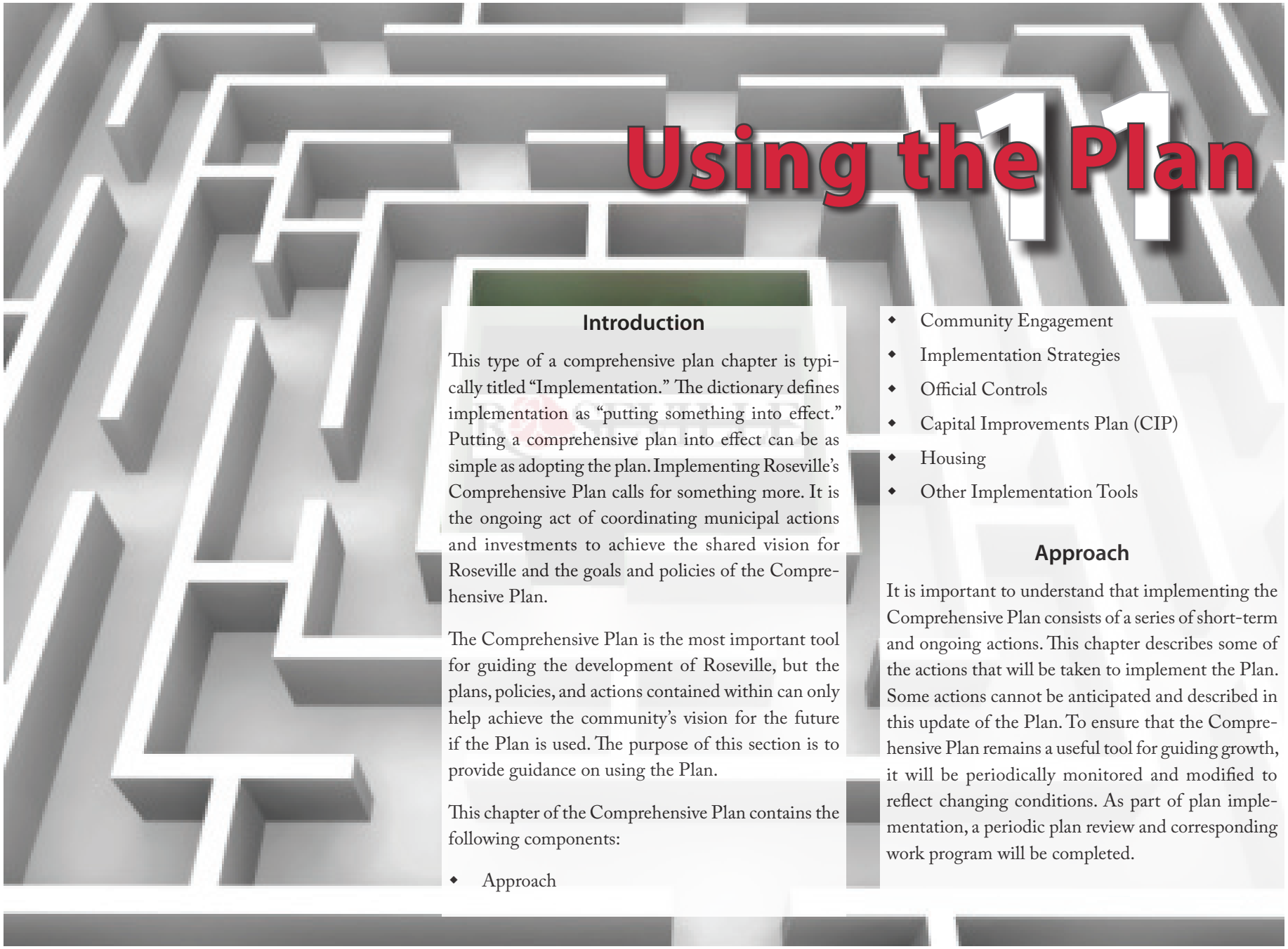
As a regulatory tool, ordinances can provide standards that define areas or features that need protection or preservation. They can also introduce regulations to assist in achieving a desired end.

Conservation and Education

One of the most cost-effective and efficient ways to promote water and energy conservation is through education. The City sponsors many programs and events on a local and regional level that focus on preserving and enhancing the environment. The City should focus on working with residents, businesses, and schools to identify ways that environmental awareness can promote conservation.

Power Outages

Document power outages and work with other governmental bodies and surrounding municipalities in developing appropriate responses.



11 Using the Plan

Introduction

This type of a comprehensive plan chapter is typically titled "Implementation." The dictionary defines implementation as "putting something into effect." Putting a comprehensive plan into effect can be as simple as adopting the plan. Implementing Roseville's Comprehensive Plan calls for something more. It is the ongoing act of coordinating municipal actions and investments to achieve the shared vision for Roseville and the goals and policies of the Comprehensive Plan.

The Comprehensive Plan is the most important tool for guiding the development of Roseville, but the plans, policies, and actions contained within can only help achieve the community's vision for the future if the Plan is used. The purpose of this section is to provide guidance on using the Plan.

This chapter of the Comprehensive Plan contains the following components:

- Approach
- Community Engagement
- Implementation Strategies
- Official Controls
- Capital Improvements Plan (CIP)
- Housing
- Other Implementation Tools

Approach

It is important to understand that implementing the Comprehensive Plan consists of a series of short-term and ongoing actions. This chapter describes some of the actions that will be taken to implement the Plan. Some actions cannot be anticipated and described in this update of the Plan. To ensure that the Comprehensive Plan remains a useful tool for guiding growth, it will be periodically monitored and modified to reflect changing conditions. As part of plan implementation, a periodic plan review and corresponding work program will be completed.

Statutory Framework

Two sections of State Law establish the framework for the creation and use of the Comprehensive Plan. General municipal planning law appears in Minnesota Statutes, Sections 462.351 to 462.364. These statutes apply to all cities in Minnesota. Cities in the seven-county metropolitan area are also subject to the Metropolitan Land Planning Act (MLPA) in Minnesota Statutes, Sections 473.851 to 473.871.

The MLPA requires the Comprehensive Plan to include an implementation program. The purpose of the implementation program is to describe the programs and actions that will be taken to implement the Plan and to ensure conformity with metropolitan system plans. The minimum statutory requirements for the implementation program (M.S. Section 473.852, Subd. 4) include:

- Description of official controls, addressing at least the matters of zoning, subdivision, water supply, and private sewer systems, and a schedule for the preparation, adoption, and administration of such controls.
- Capital improvement program for transportation, sewers, parks, water supply, and open space facilities.
- Housing implementation program, including official controls which will provide sufficient existing and new housing to meet the local unit's share of the metropolitan area need for low- and moderate-income housing.

Key strategies for implementing the Plan that apply to all elements or chapters include:

- Seek ways to achieve the Plan's goals
- Use established policies and plans to evaluate project proposals, decisions, and investments
- Monitor changing physical and demographic characteristics for implications to the Plan
- Work closely with other governmental and private parties to address shared interests and make effective use of limited financial resources
- Engage and involve the community in the use of the Plan

Community Engagement

Civic participation is vital to democracy. It takes many forms: individual volunteerism, volunteering on city commissions and committees, involvement with neighborhood and other nonprofit organizations, and participation in elections and governmental processes.

When residents are actively involved, civic decisions themselves are more likely to reflect and serve the needs of the community. And the built environment that results from public decisions made to benefit the community as a whole will decrease isolation and increase the vitality of public life.

Without public acceptance and engagement in the Comprehensive Plan, it will not have much of an impact in guiding Roseville's future.

Public participation and engagement is a community standard that this plan values. As indicated in the Imagine Roseville 2025 Final Report, Roseville residents are invested in their community and Roseville has a strong inclusive sense of community. The City values community input and will utilize all input when making decisions. To this end, the City will encourage diverse representation on all city commissions and advisory bodies. The importance of community engagement is reflected throughout the Comprehensive Plan, primarily in the Land Use Chapter and the Housing and Neighborhoods Chapter, and public participation will continue to be a major underpinning of future public policy decisions.

Specifically, as it relates to the use of the Comprehensive Plan, the following steps will be taken to ensure community engagement:

1. Create a clear and concise "citizen's guide" to the Comprehensive Plan that explains its purpose and summarizes its contents
2. Maintain a Comprehensive Plan webpage on the City's website that includes the citizen's guide and all chapters of the Plan
3. Have complete printed copies of the Comprehensive Plan available for public use at City Hall and the Ramsey County Library
4. Include information about the Comprehensive Plan in *Roseville City News*
5. Prepare a program for CTV15 that explains the 2030 Comprehensive Plan and make copies of the program for use as an informational resource
6. Provide opportunities for public participation in studies undertaken to address issues raised in the Comprehensive Plan

7. Explore ways to communicate information about the Comprehensive Plan to segments of the population not reached by traditional communication strategies.

Implementation Strategies

The individual elements or chapters of the Comprehensive Plan contain implementation strategies. The following is a summary of the implementation strategies identified within 2030 Comprehensive Plan:

Land Use

- Undertake a rezoning study to ensure that the City's zoning districts are consistent with the updated Land Use Plan
- Undertake a redevelopment planning study to establish a long-term vision and land-use plan for the Rice Street corridor
- Explore opportunities for providing a future neighborhood park within Planning Districts 12, 13, and 14

Transportation

- Undertake corridor-planning studies to establish long-range visions and plans for major roadway corridors to guide the determination of the appropriate functional, jurisdictional, and design classifications for these roadway corridors
- Study and improve intersections and roadway segments identified as having high crash rates, particularly Larpenteur Avenue at Rice Street and County Road B at Rice Street
- Utilize the Pavement Management Program to maintain high-quality streets, including coordination with Ramsey County on county roadways.
- Work with MnDOT on reconstruction and improvement of TH 36, including enhancements to the intersecting bridges, arterial roadways, and the roadway's landscaping.
- Monitor existing and potential traffic congestion areas, particularly the County Road B segment between Snelling Avenue and Hamline Avenue, the Rosedale area, and future redevelopment areas, and explore potential traffic-capacity improvements
- Promote and collaborate with other jurisdictions on transit improvements and transit-oriented community design
- Update the Pathway Master Plan on a regular basis and construct the planned network

Housing and Neighborhoods

- Working with the HRA, develop an affordable housing implementation strategy to meet the City's affordable-housing goals
- Working with the HRA, conduct a multifamily housing study to examine market-rate rental and senior-housing markets
- Study potential ways for organizing neighborhood groups, forums, and communication networks that would provide effective community engagement from the bottom-up
- Explore what neighborhood planning means and ways to bring the Comprehensive Plan goals and policies down to the planning-district level

Economic Development and Redevelopment

- Undertake redevelopment studies that support and encourage redevelopment within the six opportunity areas

Environmental Protection

- Continue to expand the City's education program to increase citizens' awareness of environmental protection, sustainability, and waste-reduction issues
- Implement the Civic Campus Geothermal Master Plan
- Establish emissions-reduction goals based on the City's completed emissions inventory

Parks, Open Space, and Recreation

- Undertake updating of the Parks and Recreation System Plan

Utilities

- Establish a plan, including funding, for the reconstruction or rehabilitation of all cast iron water main pipes over the next 20 to 30 years
- Establish a plan, including funding, for the reconstruction or rehabilitation of all VCP sanitary sewer pipes over the next 20 to 30 years
- Develop a conservation rate structure for water utility billing
- Implement an inflow and infiltration (I/I) reduction plan to identify and remove sufficient I/I in order to eliminate the current I/I surcharge and reduce the annual treatment costs paid to the MCES

- Document power outages and work with other governmental bodies and surrounding municipalities in developing appropriate responses.
- Work with citizens, businesses and schools to identify ways promote water and energy conservation through education.

Using the Plan

- Establish a plan to address pre-2009 master plans.

Official Controls

All official controls are required to be consistent with the Comprehensive Plan. If an official control conflicts with the Comprehensive Plan as the result of an amendment to the Plan, State Law (M.S. Section 473.865, Subd. 3) requires the official control to be amended within nine months following the amendment to the Plan so as to not conflict with the amended Comprehensive Plan.

Zoning

The City has established zoning regulations to implement the Comprehensive Plan and guide the use of land in Roseville. The Zoning Ordinances can be found in Title 10 of the City Code including, but not limited to the following sections that regulate physical development of the City:

- Zoning Districts and Maps
- Parking
- Signs
- Design Standards
- Erosion and Sedimentation Control
- Shorelands, Wetlands, and Stormwater Management

Figure 11.1 shows the City's current Zoning Map. Table 11.1 identifies the City's current zoning districts and allowable densities and lot sizes.

In 2009, the City will review and modify (as needed) the zoning regulations and zoning district designations to ensure that they conform to the updated Comprehensive Plan. Among the anticipated changes are:

1. Establishment of zoning districts and regulations to support the new Community Mixed Use land-use designation.
2. Establishment of zoning districts and regulations to support the new Neighborhood Business land-use designation.
3. Establishment of zoning districts and regulations to support the new Community Business land-use designation.
4. Establishment of zoning districts and regulations to support the new Regional Business land-use designation.
5. Establishment of zoning districts and regulations to support the new Office land-use designation.
6. Establishment of zoning districts and regulations to support the new Business Park land-use designation.

Subdivision

Regulations governing the subdivision of land are contained in Title 11 of the City Code. In addition to platting regulations, this section includes park dedication and design standards regulations. The City will review and modify the subdivision regulations as needed in 2009 to ensure that they conform to the updated Comprehensive Plan.

Dedication of Park Land

Requirements for the dedication of park land are contained in this chapter of the City Code (Section 1103.07). In implementing the Comprehensive Plan, the City will review these requirements and make modifications as needed to ensure conformance with state law (M.S. Section 462.358, Subd. 2).

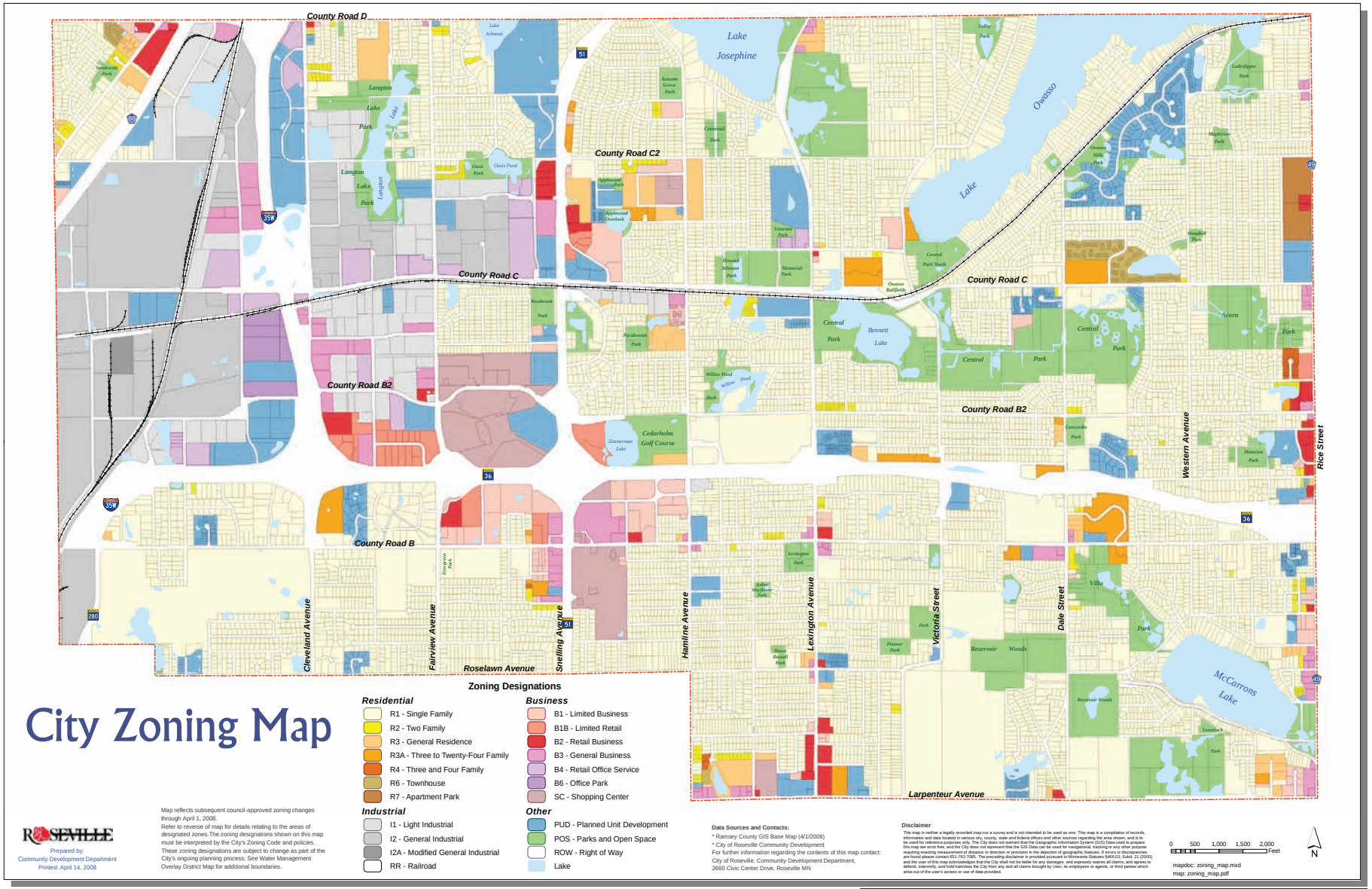
Public Ways and Public Property

Regulations governing the use, design and maintenance of public ways and public property are contained in Title 7 of the City Code, including the following sections that regulate physical development of the City:

- Parks and Recreation
- Public Waters
- Public Ways
- Construction of Streets and Sidewalks
- Excavation, Grading, and Surfacing
- Forestation Control
- Right-of-Way Management

Other Ordinances

The City will review other chapters of the City Code to identify other ordinances that control the physical development of the City and ensure consistency of any relevant ordinances with the Comprehensive Plan.



Current Zoning Map (2008)

Figure 11.1

Zoning District	Allowable Net Density	Minimum Lot Size
Single-Family Residence (R-1)	*1.0 to 4.0 dwelling units (du) per acre*	*11,000 sq. ft.*
Two-Family Residence (R-2)	*4.0 to 8.0 du per acre*	*11,000 sq. ft.; 5,500 sq. ft. per du*
General Residence (R-3)	*10.0 to 22.0 du per acre*	*11,000 sq. ft.; 2,800 sq. ft. per du with two or more bedrooms*
Multi-Family Residence: Three to Twenty-Four Units (R-3A)	*10.0 to 30.0 du per acre*	*11,000 sq. ft.; 2,800 sq. ft. per du with two or more bedrooms*
Three- to Four-Family Residence (R-4)	*8.0 to 12.0 du per acre*	*15,000 sq. ft.*
Three- to Eight-Family Residence (R-5)	*8.0 to 12.0 du per acre*	*15,000 sq. ft.*
Townhouse (R-6)	*11.0 du per acre*	*4,000 sq. ft.*
Apartment Park (R-7)	*Refer to minimum lot size*	*20,000 sq. ft.; minimum lot size per du varies depending upon the height and number of bedrooms per unit*
Mobile Home (R-8)	*Refer to minimum lot size*	*5,000 sq. ft.*
Public Park and Open Space (POS)	*N/A*	*N/A*
Limited Business (B-1)	*1.0 Floor Area Ratio (FAR) maximum*	*None.*
Limited Retail (B-1B)	*1.0 FAR maximum*	*None.*
Retail Business (B-2)	*1.0 FAR maximum*	*None.*
General Business (B-3)	*1.0 FAR maximum*	*None.*
Retail Office Service (B-4)	*1.0 FAR maximum*	*None.*
Mixed Use Business Park (B-6)	*0.75 FAR maximum*	*None.*
Shopping Center (SC)	*1.0 FAR maximum*	*None.*
Light Industrial (I-1)	*0.4 FAR one-story building; 0.6 FAR two-story building*	*43,560 sq. ft.*
General Industrial (I-2)	*0.4 FAR one-story building; 0.6 FAR two-story building*	*43,560 sq. ft.*
Modified General Industrial (I-2A)	*0.4 FAR one-story building; 0.6 FAR two-story building*	*43,560 sq. ft.*
Planned Unit Development (PUD)	*None.*	*None.*

Current Zoning Districts and Minimum Densities (2008)

Table 11.1

Master Plans

For the purpose of the policies described here, the term "master plan" refers to general land-use plans prepared and adopted by the City for specific geographic areas as the result of City-initiated study or analysis, and does not include project-specific redevelopment detail plans.

It is the policy of the City that all master plans, once adopted, shall also be addressed in the Comprehensive Plan. The master plans shall be addressed by one or more of the following means, as appropriate:

1. Including references to the master plan as a tool for use in implementing various aspects of the Comprehensive Plan;
2. Updating the content of the land-use plan and other elements of the Comprehensive Plan to correspond to the master plan; and/or
3. Adopting into the Comprehensive Plan as a specific element of the Land Use Chapter, and separate and distinct from the master plan document itself, those policies, design guidelines, and other elements of the master plan that are identified in the master plan for such inclusion to promote its implementation.

For master plans adopted before 2009, the City Council shall review each plan and determine whether each one should be addressed in the Comprehensive Plan, and if so, how it will be addressed in the Comprehensive Plan pursuant to this policy.

This policy does not limit the City Council's ability to amend the Comprehensive Plan to address and/or incorporate other plans, policies or guidelines.

The City will require that the all future master plans include a description of how they will be addressed in the Comprehensive Plan.

Master plans adopted prior to 2009 are not addressed in the Comprehensive Plan without further action of the City Council.

Capital Improvements Plan

State Law requires that the implementation program for the Comprehensive Plan contain a capital improvement program for transportation, sewers, parks, water supply, and open space facilities. Each relevant chapter of the Comprehensive Plan contains a section on future capital improvements. The Comprehensive Plan serves as the foundation for ongoing capital-improvements planning by the City.

The City has created a capital-improvements plan (CIP) that matches the estimated project costs over a ten-year period with funding sources. The CIP allows the City to prioritize projects and to make best use of available revenues. By looking at future needs, the City is better able to find funding sources to fill gaps and to coordinate projects with other jurisdictions. The CIP is updated and approved annually. See Appendix A for Roseville's 2009-2018 CIP.

The Comprehensive Plan guides capital improvements by all political subdivisions. According to State Law (M.S. Section 462.356, Subd. 2), no capital improvements shall be authorized by the City (and its subordinate units) or any other political subdivision having jurisdiction within Roseville until the Planning Commission has reviewed the CIP and reported in writing to the City Council as to its compliance of with the Comprehensive Plan. The City Council may, by resolution adopted by two-thirds vote, dispense with this requirement when it finds that the proposed capital improvement has no relationship to the Comprehensive Plan.

Housing

The Comprehensive Plan must include a housing implementation program, including official controls which will provide sufficient existing and new housing to meet the local unit's share of the metropolitan area need for low- and moderate-income housing. The City will continue to work with the Metropolitan Council to determine Roseville's fair share of the region's new affordable housing for the years 2011-2020. The City and its Housing and Redevelopment Authority (HRA) will continue to monitor Roseville's housing supply, identify needs for public action, and design programs to meet these needs.

Other Implementation Tools

Other Policy Plans

The Comprehensive Plan refers to other policy plans that Roseville uses to guide municipal systems, actions and investments. These plans cover municipal systems for transportation, sanitary sewer, water supply, surface-water management, and parks. These plans serve as ongoing tools for implementing the plans, goals, and policies in the Comprehensive Plan. These plans may be updated and modified without updating the Comprehensive Plan.

Coordination of Actions

In addition to capital improvements, there are statutory requirements for coordinating acquisition and disposition of public lands and the use of tax increment financing with the Comprehensive Plan.

Public Lands

According to state law (M.S. §462.356, Subd. 2), publicly owned land within the City cannot be acquired or disposed of until the Planning Commission has reviewed the proposal and reported in writing to the City Council as to the compliance of the proposed action with the Comprehensive Plan. As with capital improvements, the City Council may, by resolution adopted by two-thirds vote, dispense with this requirement when it finds that the proposed acquisition or disposal of real property has no relationship to the Comprehensive Plan.

Financial Assistance

Tax increment financing (TIF) is the only finance tool formally tied to the Comprehensive Plan. State Law requires that the City find that a TIF plan conforms to the Comprehensive Plan. As a matter of policy, similar evaluation should apply to other forms of public financial assistance. In agreeing to provide financial assistance to private development, it is reasonable that the City Council determines that the development furthers the objectives of the Comprehensive Plan.

Future Studies

The City uses environmental reviews and other technical studies as tools for implementing the Comprehensive Plan. Previous studies have examined future housing needs and future areas for commercial and industrial development. Certain development projects require formal studies to evaluate the environmental implications of planned development. The City will continue to use additional studies to provide the information needed to implement the Comprehensive Plan and to evaluate directions that may lead to Comprehensive Plan amendments.

Partnerships

The City anticipates implementation of the Comprehensive Plan will require cooperation and coordination with neighboring municipalities, Ramsey County, and other agencies and organizations. These ongoing partnerships will be essential to successful implementation of the plan.

Amendments and Updates

As needed, the City will amend the Plan to correct errors or reflect changing needs and conditions in accordance with the process outlined in the City Code and compliant with state statutes.