



# **Edina Comprehensive Plan Update 2008**

**Submittal approved by the City  
Council on December 2, 2008**

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# **Edina Comprehensive Plan Update 2008**

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## Chapter 1: Introduction

- 1.1 Plan Purpose: Making the Right Choices
- 1.2 The Need to Update the 1998 Comprehensive Plan
- 1.3 How was the Comprehensive Plan Update 2008 Prepared?
- 1.4 Plan Organization
- 1.5 How to Use this Comprehensive Plan

### 1.1 PLAN PURPOSE: MAKING THE RIGHT CHOICES

Edina is the preeminent place for living, learning, raising families, and doing business. A strong and healthy community grows and evolves in response to its citizens' needs and wants. These are the premises upon which this Comprehensive Plan is based.

A Comprehensive Plan is about the future. Edina's Comprehensive Plan is a vision of what its citizens want Edina to become. It is also a framework for shaping future growth and change and for protecting what Edina values. It is a guide for enhancing what the community wants to improve, and for creating what the community feels is lacking. It also helps clarify the relationships between the community, its neighboring municipalities, and the Twin Cities metropolitan region.

The Comprehensive Plan articulates a city-wide vision, with goals and objectives that reflect **Edina's Vision 20/20**, the strategic planning report that was completed in 2000 and updated in 2003. It contains information about current conditions, trends and challenges, and goals and policies for land use, community design, housing, transportation, parks, water resources, heritage preservation, and community services and facilities.

The Comprehensive Plan is a general plan that brings together its various chapters into a unified "big picture." It is a broad statement of the community's goals and policies that direct the orderly and coordinated physical development of Edina into the future. The Comprehensive Plan serves as a guide for designating desired land use and infrastructure development as well as developing community services.



## **1.2 THE NEED TO UPDATE THE 1998 COMPREHENSIVE PLAN**

Minnesota State law requires that cities' Comprehensive Plans must be reviewed and updated at least once every 10 years. The updated Edina Comprehensive Plan must be submitted to the Metropolitan Council by December 31, 2008. This Comprehensive Plan will fulfill the City's responsibilities in growth management as required by the Metropolitan Land Planning Act (Section 462.355, Subd. 4, 473.175, and 473.851 to 473.871), in concert with the Metropolitan Council's 2030 Regional Development Framework and its regional infrastructure systems plans, i.e. Transportation, Water Resources Management, and Regional Parks.

The City of Edina currently uses its 1998 Comprehensive Plan to guide its policy-making and decisions. However, as Edina moves towards the future, the needs of the City and its citizens will change. The changes need to be reflected and addressed in an updated Comprehensive Plan to better serve the community, i.e. its current citizens and those new residents and businesses that will come here in the future.

## **1.3 HOW WAS THE COMPREHENSIVE PLAN UPDATE 2008 PREPARED?**

According to Edina City Code (Sec, 805.02, Subd, 1), the Planning Commission is responsible for preparing, reviewing, and making recommendations on the Comprehensive Plan, including its required updates. A Planning Commission Task Force, comprised of residents who are currently on the Planning Commission, oversaw the preparation of the updated Comprehensive Plan. Several consultant firms assisted with the public outreach program and with the technical review and analysis. Ultimately, planning decisions are made by City Council, which considers recommendations from the Planning Commission-in adopting the Comprehensive Plan. To implement the Comprehensive Plan, the City Council is also responsible for adopting the City's budget, regulations, programs, and for levying taxes and making appropriations.

The Comprehensive Plan Task Force, with City staff and consultant assistance, conducted a series of internal work sessions and an outreach program (including Listening Sessions held with groups of residents at their request) to seek input on the issues and to obtain feedback on work progress and draft reports:

- Planning Commission Task Force meetings/workshops (23)
- Kick-off Community Meeting – December 4, 2006



- Other Community Meetings and Open Houses – March 21, August 23-27-28-30, November 1-7-8-13-15, all 2007
- Listening Sessions (8)
  - Morningside Woman's Club (January 8, 2007)
  - Edina Housing Initiative (January 25, 2007)
  - Morningside Rotary (March 6, 2007)
  - Chris Rofidal and Neighbors (April 26, 2007)
  - 70<sup>th</sup> Street Homeowners (May 23, 2007)
  - Morningside Neighborhood Association (June 4, 2007)
  - Edina Chamber of Commerce (September 4, 2007)
  - Housing Coalition (October 10, 2007)
- Developers Focus Group – April 30, 2007
- Intergenerational Dialogue – April 18, 2007
- City Council and Planning Commission workshops (4): September 5, 2006, April 24, August 7, and October 23, all 2007
- Workshops with other City Commissions (3): Bike Task Force on June 6, Park Board on June 12, and Transportation Commission on August 1, all 2007
- City website updates and draft chapters
- Comment Cards and e-mails
- Public Hearings: December 19, 2007 and January 30, 2008
- Planning Commission meeting on February 27 (Adoption and referral to City Council with recommendation for their approval and adoption).

This outreach program captured community sentiment about Edina's evolution into a special place that people care about deeply. It also noted some anxiety about the future, as Edina faces a complex and challenging future. From this input emerged the following messages and themes:

- We are planning for generations: Be Bold. Establish a clear vision that integrates environmental, social, and economic perspectives.
- Provide opportunities for people to live here throughout their lives: families, seniors. We need housing choices, lifecycle housing.
- Consider mixing housing and retail together compatible with nearby residential.
- Protect our residential neighborhoods. Edina has strong neighborhood areas that are generally protected from commercial uses. Changes to areas that are already higher density should be managed to permit mixed uses and better transit.
- Edina is a unique community with a strong sense of identity. Its character is derived from its physical, economic, and cultural strengths. Allow growth, but work with developers to create not just buildings, but



developments that complement a community of enduring quality and character.

- Make our streets safer for everyone, especially for pedestrians and bicyclists. Encourage increased transit use.
- Maintain our existing parks. Build and connect more trails, especially to the regional trail system.
- Enhance our strong and competitive retail and employment position.
- Promote sustainability and energy conservation, as a community and in individual redevelopment projects.

## 1.4 PLAN ORGANIZATION

The Edina Comprehensive Plan is designed to be a readable, functional document that will guide Edina's future development.

Edina's Comprehensive Plan is organized as follows:

### 1. Introduction

Plan Purpose; Need to Update the 1998 Comprehensive Plan; How this Comprehensive Plan was developed; Plan Organization; How to Use this Comprehensive Plan.

### 2. Vision, Goals, and Objectives

The City of Edina Vision 20/20 Update (Fall 2003) has been used as the basis of this Comprehensive Plan. This document will be reviewed again and updated in the future.

### 3. Community Profile: Population, Housing, and Employment – This chapter establishes the context for the Comprehensive Plan; it describes demographic changes and trends, as well as population, household, and employment forecasts.

### 4. Land Use Plan and Community Design Framework – This chapter identifies where Edina residents will live, work, play, and shop. There is an inventory and map of existing land use and a map depicting desired future land use and how Edina plans to accommodate growth. This chapter discusses the connection between land use changes and transportation infrastructure and traffic management. This chapter also includes a city-wide community design framework for both public and private properties, and a consideration of the special issues facing corridors. Finally, this chapter considers and builds on the recommendations emanating from the *Massing Task Force Report* and



the ***Greater Southdale Area Final Land Use and Transportation Study Report.***

5. **Housing** – This chapter includes an inventory (see page 5-1) of existing housing stock, and an identification and evaluation of future housing needs, considering anticipated demographic changes and the recommendations emanating from the ***Housing Succession Plan for Edina's Future*** report by the Edina Housing Task Force.
6. **Heritage Preservation** – This chapter comprises the draft Heritage Preservation Plan recently completed by the Heritage Preservation Board.
7. **Transportation** - The transportation chapter includes an analysis of existing roads, provision for bicycles and pedestrians, freight movement, transit, and aviation. This chapter includes policies for improving Edina's multi-modal transportation system. The Transportation Plan discusses how growth and change within Edina depends on land use decisions, how the intensity and extent of existing and planned development affects the distribution of households and jobs in Edina, and how that distribution determines traffic flow. This chapter references the Land Use and Community Design chapter to illustrate the interaction between land use generators, access, corridor design and character, and connectivity issues. This chapter also incorporates the Edina Bike Plan.
8. **Water Resource Management** – The Water Resource Management chapter includes plans for wastewater/sewers, surface water management, and water supply, with consideration given to the phasing and growth management directions in the Land Use and Community Design chapter.
9. **Parks, Open Space, and Natural Resources** – Identification of opportunities and existing system deficiencies, as well as goals and policies, are based on information drawn from the recently-completed ***Parks and Open Space Needs Assessment***. This chapter includes an inventory of existing parks, trails, and recreation facilities, an acquisition plan for potential expansion and upgrading, plans for operations, maintenance, and replacement, as well as a recreation programs and services plan. There are no regional parks or trails within Edina. However, this chapter references the proposed Cedar Lake LRT Regional Trail and the proposed Nine Mile Creek Regional Trail. This chapter also discusses the need for a natural resources conservation and management plan.



## 10. Environmental Quality

This chapter was completed by the Energy and Environment Commission. It identifies the City's goals, policies, and objectives in the following areas: (1) Climate Change and Global Warming, (2) Clean Energy and Energy Efficiency, (3) Recycling and Solid Waste Management, and (4) Outdoor and Indoor Air Quality.

**11. Community Services and Facilities** – This chapter includes a description of current conditions and future plans for continued improvements in Public Safety (Police and Fire), Environmental Health / Public Health, Educational Facilities (Schools and Libraries), Information Technology, and Communications and Marketing.

**12. Implementation** – This chapter includes a description of the standards and programs for implementing the Comprehensive Plan that are required by the Metropolitan Council, including consistency with the Metropolitan Council **2030 Regional Development Framework** and conformance with the metropolitan system **Policy Plans**. This chapter will describe the official controls (such as zoning), public programs, funding partners, and fiscal devices (such as the Capital Improvement Program) that will ensure implementation of the Comprehensive Plan and efficient management of public infrastructure.

## 1.5 HOW TO USE THIS COMPREHENSIVE PLAN

The Planning Commission should use the Comprehensive Plan as the basis for its deliberations and decisions regarding review of development applications, and for its recommendations to City Council. Most importantly, this Comprehensive Plan should provide guidance to those preparing zoning and other ordinance changes, whether as part of implementation of this Comprehensive Plan or as additional requests for ordinance changes arise in the future.

Edina's other advisory commissions should use the Comprehensive Plan to guide their goal-setting and programs.

The City Council and City departments should use the Comprehensive Plan to make land use and development decisions, to initiate studies and develop programs built around the policies outlined in the Comprehensive Plan, and to establish annual goals, work programs and priorities, including Capital Improvement Plans. It will be the primary responsibility of the Planning Department to ensure that the Comprehensive Plan is consulted and its policies followed.



The Comprehensive Plan should be shared with neighboring municipalities, regional and state agencies, educational and health care institutions, and other public or private entities, as a means of educating and informing them about Edina's vision and plan for shaping growth and change.

Property owners, residents, businesses, and developers should use the Comprehensive Plan to consider potential future uses and development of property.



## Chapter 2: Vision, Goals, and Objectives

- 2.1 Introduction
- 2.2 Vision and Goals
- 2.3 Objectives

### 2.1 INTRODUCTION

Edina has always been a community that has recognized the importance of its past while preparing itself for the future. From its incorporation in 1888 as a milling area on the banks of Minnehaha Creek, Edina has evolved to be a model among municipalities in the Twin Cities metropolitan area. It has been an innovator and leader in many ways as evidenced by:

- Adoption of a comprehensive zoning ordinance in 1929, the first Minnesota village to do so.
- Approval and construction of the Country Club neighborhood in 1924 featuring contoured streets, parks, trees, an eighteen-hole golf course and housing with private covenants governing unit placement, architectural style and property maintenance.
- Establishment and upgrade of the 50<sup>th</sup> and France commercial neighborhood starting in the 1930s.
- The opening of Southdale Center in 1956 as the nation's first fully enclosed, climate-controlled regional shopping mall – a model that has been subsequently used throughout the country.
- Development of Centennial Lakes and Edinborough, which have become contemporary models for the integration of commercial and residential land uses.

Edina has achieved these and other successes as a community in a number of ways. One of the key attributes of the community's success has been the interest in proactively preparing itself for the future. The Centennial Lakes/Edinborough project referenced above is evidence of this fact. Further evidence includes The Second Century, a report prepared by the Edina Futures Commission in 1990 that analyzed potential community changes.



**Edina's Vision 20/20**, a long-range strategic plan that articulates Edina's purpose and values, continues the pattern of anticipating the future and shaping it to better serve the Edina community. Edina Vision 20/20 was updated in 2003.

Edina's mission statement is:

*"Our mission is to provide effective and valued public services, maintain a sound public infrastructure, offer premier public facilities, and guide the development and redevelopment of lands, all in a manner that sustains and improves the uncommonly high quality of life enjoyed by our residents and businesses."*

The following narrative summarizes the 2003 update of **Edina's Vision 20/20**.

## **2.2 VISION AND GOALS**

The Vision Statement, articulated in the following goals, is:

Edina will be the preeminent place for living, learning, raising families and doing business, distinguished by:

### **A Livable Environment**

Our residents regard their quality of life in Edina as very high. Many factors contribute to this opinion, including premier schools, exceptional neighborhoods, an advantageous location in the metropolitan area, excellent public facilities and services, safe streets, a clean and adequate water supply, access to new technology and communications systems and a strong sense of community identity.

### **Effective and Valued City Services**

Our customers (we view our residents and businesses as customers as well as taxpayers) have an extraordinarily high regard for city services. They associate an outstanding value with these services. They also distinguish Edina from other places by the quality of our services. These services change as the needs of our customers change, but their effectiveness and value will be the benchmarks of our success.

### **A Sound Public Infrastructure**

Edina streets, utilities, parks, and public buildings are the essential components of the foundation of our city. A sound public infrastructure



encourages the development of a stable private infrastructure, leading to an enhancement of the sense of quality that Edina has and will enjoy.

### **A Balance of Land Uses**

Edina is a model of urban development: a diversity of land uses, housing choices for all stages of a person's life, outstanding neighborhoods and an extensive network of parks and open spaces all arranged in a manner of development that is pedestrian- and transit-friendly. It also includes the employment of reinvestment and redevelopment strategies to address changing housing and business needs and prudent policies that sustain Edina's enormous investment in its housing stock and neighborhoods.

### **Innovation**

"Innovation" means matching our technological resources with the needs and desires of our residents. "Innovation" means creating value in what we do to serve our citizens. "Innovation" means operating local government in a business-like manner even though we are not a business. "Innovation" means forging partnerships with our schools, community organizations and volunteers to serve our customers. "Innovation" can also mean risk-taking. Although our residents are highly satisfied with their community, we always seek innovative ways to improve their lives.

## **2.3 OBJECTIVES**

Nine objectives were developed as part of the original 20/20 Vision plan, representing a broad range of observations and findings that became evident during the planning process. In 2003, finding that many of the City's goals had been accomplished, the City Council updated Vision 20/20 by revising, updating, and combining objectives. They adopted the following eight objectives:

1. Maintain strong residential neighborhoods.
2. Provide a level of City services that sets Edina apart from other communities.
3. Provide capital investments that balance need and affordability.
4. Accommodate the efficient movement of people and goods in and around Edina.



5. Take an active role in future redevelopment strategies.
6. Support Edina Public Schools in maintaining an exemplary public education system for the community.
7. Evaluate and efficiently employ technological advancements to provide City services.
8. Continually update and refine Vision 20/20.

### **Conclusion**

The conclusion of that 2003 20/20 update was:

*Edina has achieved successes as a community by preparing itself for the future. From a visioning perspective, Edina's Vision 20/20 examines where our community has been, where it wants to go and how it will get there. From a strategic planning perspective, it examines the challenges and opportunities that have been identified as having the highest priority in the community. As in recent years, once the strategies, or goals, of highest priority are addressed, other items will move into positions of greater prominence. As an ongoing dynamic process, Vision 20/20 will be amended in the future to address these issues.*



## Chapter 3: Community Profile: Population, Housing and Employment

- 3.1 Introduction
- 3.2 Population
- 3.3 Housing
- 3.4 Employment
- 3.5 Trends and Challenges

### 3.1 INTRODUCTION

Following the platting of the first residential subdivision and the incorporation of the Village of Edina in 1888, city leaders and residents began to shape the city into its modern urban form. The City was on the forefront of planning; it was the first village in the State to appoint a Planning Commission (1928) and the first municipality to hire a full-time planning director (1957). The City demonstrated its commitment to planning with the design and construction of the first enclosed auto-centered regional mall in 1956.

This section of the Comprehensive Plan provides baseline data and future projections of basic demographic elements including population, housing and employment. The information contained in this section is intended to inform residents and city officials of current demographic conditions and their potential impact on future land use. Historical data is provided to offer a glimpse of past trends and the possible implications of those trends as Edina continues to evolve and change to meet new challenges based on changing circumstances. This section attempts to outline the parameters of some of these changes.

This report updates the 1998 Comprehensive Plan. Since the last Comprehensive Plan the City has completed or adopted other studies that focus on particular issues or areas of concern. These documents also inform the comprehensive plan update process.

- *Housing Succession Plan for Edina's Future* (Edina Housing Task Force, 2006-draft)
- *Edina's Vision 20/20 Strategic Plan (2000) and Vision 20/20 Strategic Plan Update (2003)*
- *Edina Transportation Commission Policy (2005)*
- *Community Attitude and Interest Survey (Parks and Recreation – 2006)*
- *Northeast Edina Transportation Study (2006)*
- *Contemporary Residential Construction Issues in Regards to Teardown Development in Edina (2006)*





- *Greater Southdale Area Land Use and Transportation Study (2005-draft)*
- *Edina Heritage Preservation Plan (2006)*

### Planning Area Designation

The Metropolitan Council classifies Edina as a “developed community,” geographic planning area in the *2030 Regional Development Framework*. The System Statement for the City of Edina issued by the Metropolitan Council advises that “As Edina 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.”

### Growth Forecasts

Changes in population, households, and employment affect all parts of the Comprehensive Plan. For example, the number of households and workers in Edina drives the need for services and infrastructure. The number of anticipated new households drives the need for new housing and additional parks, open space, and other City services. The Metropolitan Council forecasts growth at appropriate densities for all metro communities in order to protect the efficiency of wastewater, transportation, and other regional system investments, and to help ensure the metropolitan area can accommodate its projected growth by the year 2030. Figure 3.0 summarizes the Metropolitan Council’s forecasts for 2010, 2020, and 2030, amended from the original forecasts contained in the System Statement, based on discussions between City of Edina staff and Metropolitan Council staff in November, 2007.

Figure 3.0

Forecast of population, households, and employment

			Revised Development Framework		
	1990	2000	2010	2020	2030
Population	46,070	47,425	48,500	49,100	50,000
Households	19,860	20,996	21,600	22,000	22,500
Employment	44,534	52,753	52,100	55,000	57,400



## 3.2 POPULATION

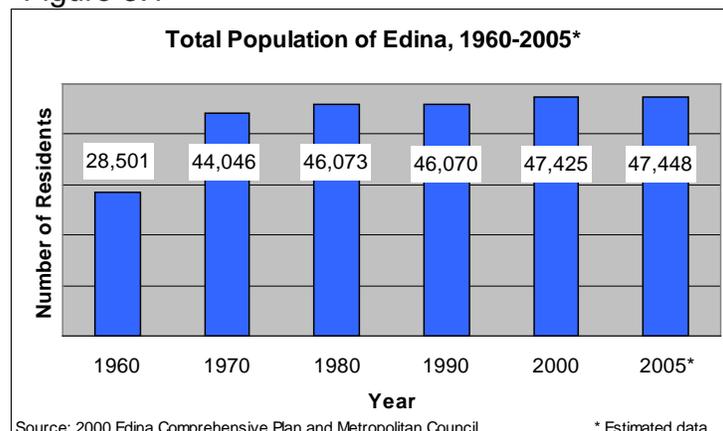
### Summary

The total population of Edina has increased modestly since 1990 and the city's population is expected to increase about 3 percent between 2010 and 2030. This population increase is slightly less than the average population increase projected for adjacent communities (Bloomington, Eden Prairie, St. Louis Park, etc.). Overall, the city's populace is aging, living in smaller households and remaining in the same dwelling unit for a longer period of time. In 2000 over 36 percent of the city's households contained a resident over the age of 65 years. Altogether, about 46 percent of the residents are either under 18 or over 65 years of age. The Metropolitan Council projects that in Hennepin County the number of residents aged 65 years and older will increase by over 100 percent from 2005 to 2030. Over the last ten years, the increase in the number of households was greater than the increase in number of residents. According to the 2000 Census, 62 percent of residents lived in the same house that they had lived in for the last five years, up from 42 percent in 1990. The overall number of minority residents is proportionally small (about 6 percent in 2000) compared to the white population of the city. However, the small increase in the total city population from 1980 to 2000 appears to be entirely from the in-migration of residents of an ethnic or racial minority

### Total Population

The 2000 Decennial Census found the City of Edina with a population of 47,425 people, a slight increase of 2.9 percent from 1990<sup>1</sup>, as seen in Figure 3.1. This population growth trend is a shift from the period from 1980 to 1990 when Census data showed virtually no net population change. Metropolitan Council population estimates for 2005 reveal a

Figure 3.1



<sup>1</sup> 2000 and 1990 Census information throughout the report was obtained from the 2000 Census Gateway website, [www.census.gov/main](http://www.census.gov/main)



further increase in the number of Edina residents, albeit at a slower pace than during the 1990s. Although Edina’s population has only increased seven percent since 1970, it is ranked as the 11th most populous among municipalities entirely within the six-county Metro area.

### Age in Total Population

Figure 3.2 portrays the breakdown in age of Edina residents in the 1990 and 2000 censuses. The data show that the city’s population is aging. The percentage of residents over the age of 65 and the percentage of residents in the 45-65 age bracket both increased by almost 15 percent from 1990 to 2000. In 2000 residents over the age of 45 years represented almost half of the city’s population. At the other end of the age spectrum, a “baby boomlet” appeared in the last decade, as children of the baby boom generation increased the number of city residents under 18 years of age by almost 18 percent. Altogether, about 46 percent of the residents are either under 18 or over 65 years of age.

Figure 3.2

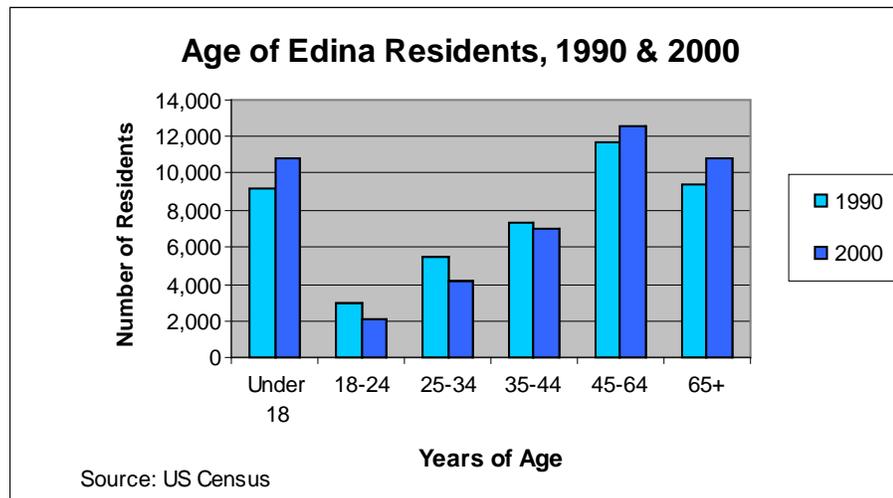
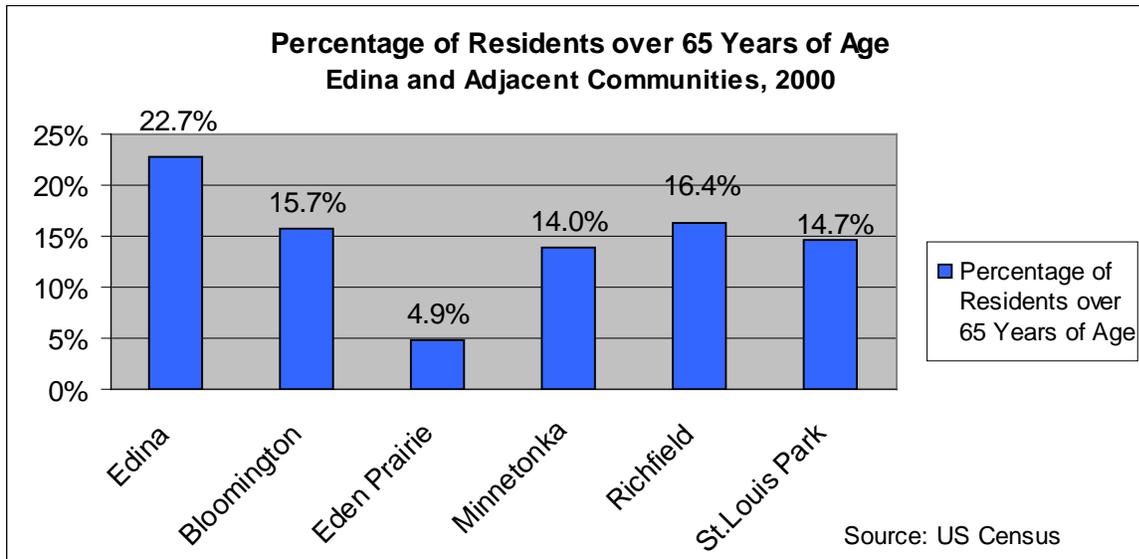




Figure 3.3



In comparison with adjacent communities, Edina had the highest percentage of residents over the age of 65 years, as shown in Figure 3.3. This characteristic – a significant portion of its population over the age of 65 – is shared by Bloomington, Minnetonka, Richfield and St. Louis Park. By contrast, the percentage of seniors in Eden Prairie is significantly lower.

Many factors indicate that the percentage of Edina residents over the age of 65 will increase in the next 10 to 20 years. The largest segment of the Edina’s population, the 45-64 age bracket, will reach retirement age. This population cohort, in addition to the considerable number of residents currently over 65 years of age, will likely live longer, desire to age in their existing homes or neighborhoods, and expect to live active lives. This will have a significant impact on city resources and policy decisions.

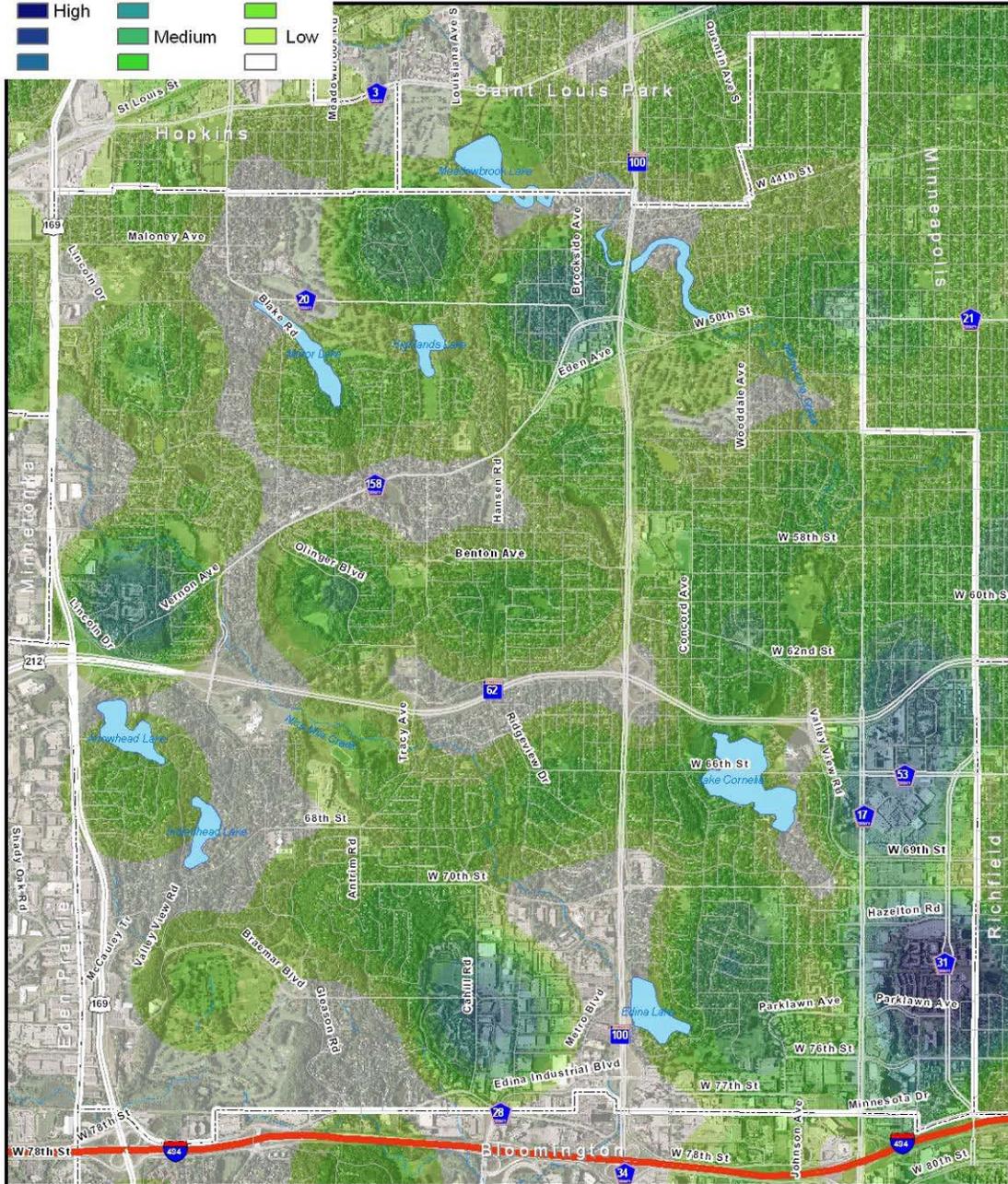
Figure 3.4 shows that the concentration of residents over the age of 65 is greatest in the York and France Avenue corridors, consistent with the large number of multi-family apartment and condominium complexes in those areas.



**Legend**



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**Figure 3.4**



**City of Edina**  
2008 Comprehensive Plan Update

**Population Over 65 Density**

Data Source: 2000 US Census

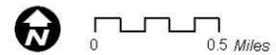
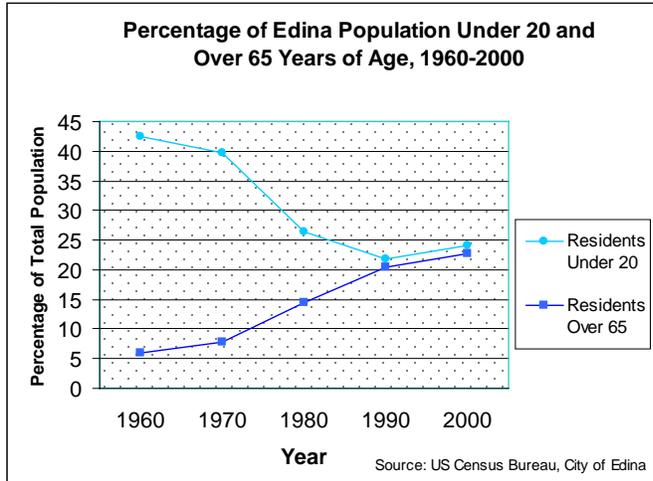




Figure 3.5



A related trend pertains to the percentage of children in Edina's population. The 2000 Census showed the city with the lowest percentage of residents under 20 years of age compared to adjacent communities. Figure 3.5 shows 40-year trendlines representing the percentage of Edina residents under the age of 20 and over the age of 65. Historically, the percentage of children has decreased while the percentage of seniors has increased from 1960 to 2000. The 2000 Census revealed that the

percentages of the total population of the two groups were nearly even at almost 23 percent.

### Age of Household Members

The most significant change in households has been in the overall increase in age of household members. The 1980 Census reported that 26 percent of the households had residents over the age of 65 years, as shown in Figure 3.6. Currently, almost 37 percent of Edina households contain a resident over 65 years of age. On the other hand, the percentage of households with children declined until 1990, and then the city witnessed a slight upswing. In 1980 the Census recorded about 32 percent of the households with children. This percentage fell to about 25 percent in 1990, but increased to 27 percent in 2000. Combined, almost 64 percent of city households have at least one member under 20 or over 65 years of age.

Figure 3.6

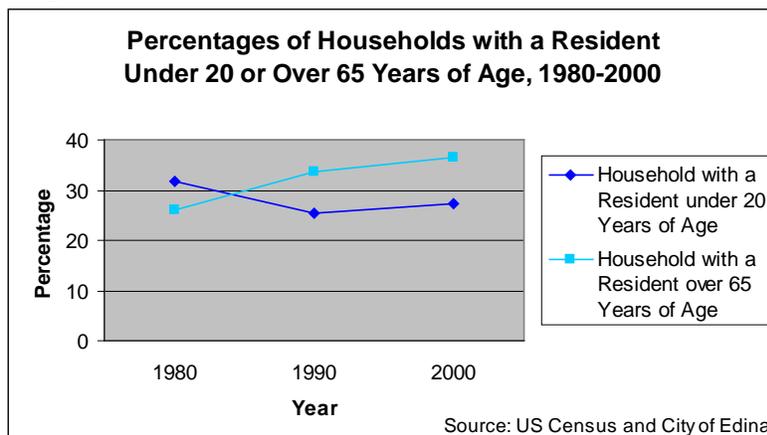
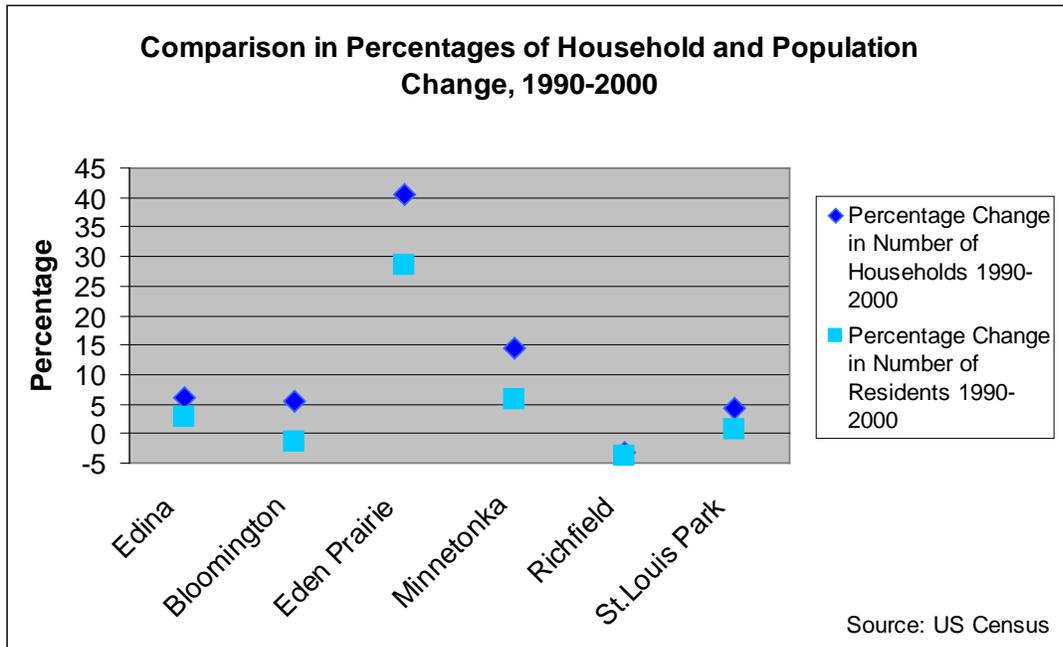




Figure 3.7



### Recent Population Change and Household Growth

While Edina’s population has increased in the last ten years, it is growing slower than some adjacent communities, as shown in Figure 3.7. The city’s population base increased by almost 3 percent (1,355 people) between 1990 and 2000, but Hennepin County increased by 7.5 percent and the average percentage increase of adjacent communities was almost 6 percent.

Symptomatic of a nationwide trend, the number of households increased at a faster rate than the number of residents during the 1990s. Figure 3.7 illustrates this trend in comparison with comparable Metro communities. In each of the communities listed, the rate of increase in households outpaced the percentage increase in population, even in Bloomington and St. Louis Park where the 2000 population totals dipped below the 1990 levels. An interesting aspect of the chart is that in rapidly-growing Eden Prairie, the gap between the percentage increases of households and residents is much greater than that of the mature built-out communities of Edina, Bloomington and St. Louis Park. This suggests that as the newer communities are fully developed in the next few



decades, the rate of change in the number of households and residents will more closely resemble that of the older communities.

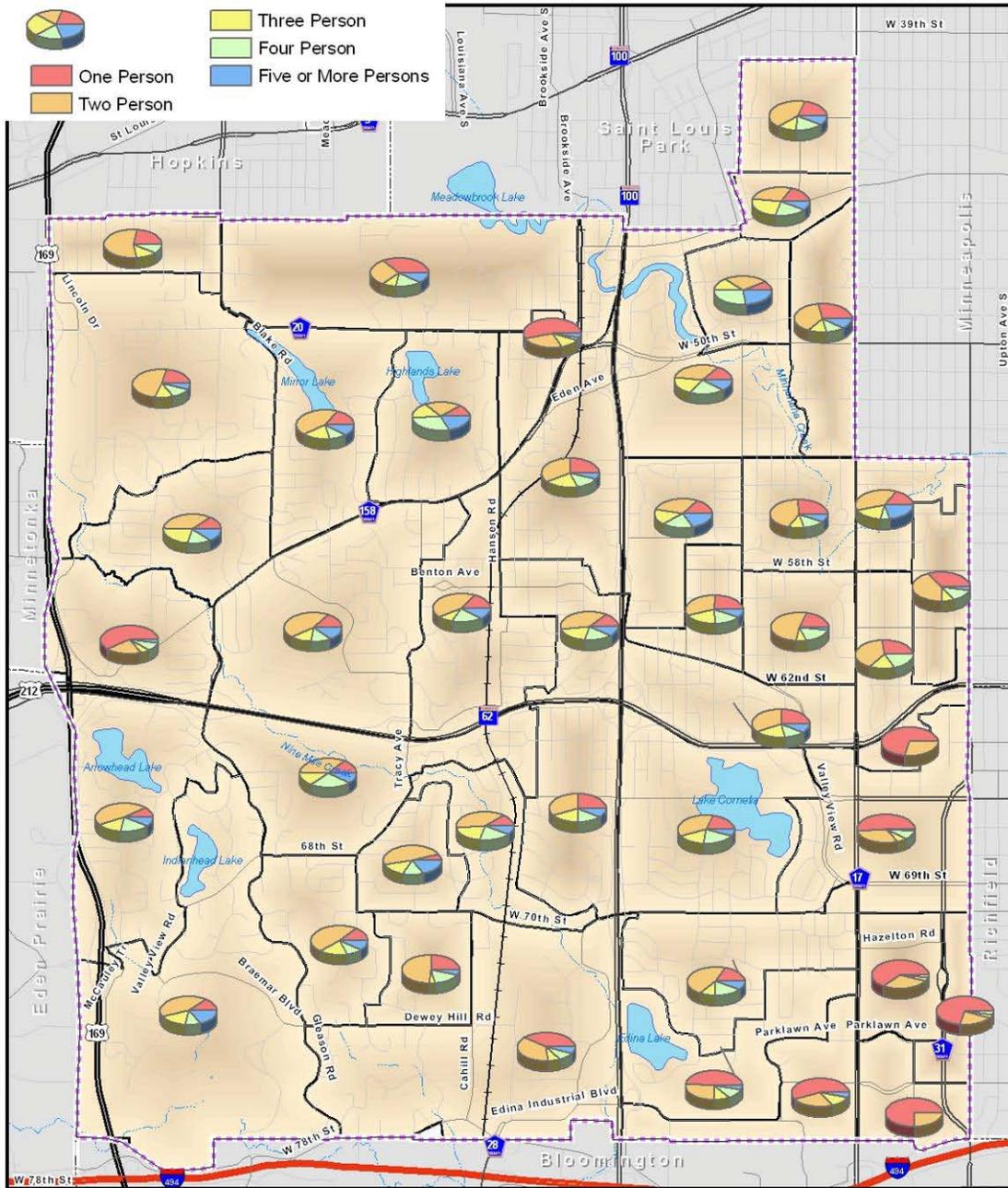
### **Household Size**

Directly related to the greater increase in households compared to the number of residents, from 1990 to 2000 household size decreased from an average of 2.3 persons per household to 2.2 persons. Within Edina, the size of the households varies throughout the city. Household size may correspond to many factors: the dominant housing type, certain neighborhood characteristics, proximity of amenities such as recreational or health facilities, household income, convenience to services, or other factors.

Figure 3.8 shows household size by census block group. The map shows that the majority of one-person households are located in the Greater Southdale area, with small additional concentrations adjacent to TH 169 and in Grandview. Two-person, three-person and larger households are most common in the west-southwestern parts of the city where single-family homes on larger lots are predominant.



Legend



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Figure 3.8

**Persons per Household  
2000 US Census Data**



**City of Edina**  
2008 Comprehensive Plan Update

Data Source: 2000 US Census

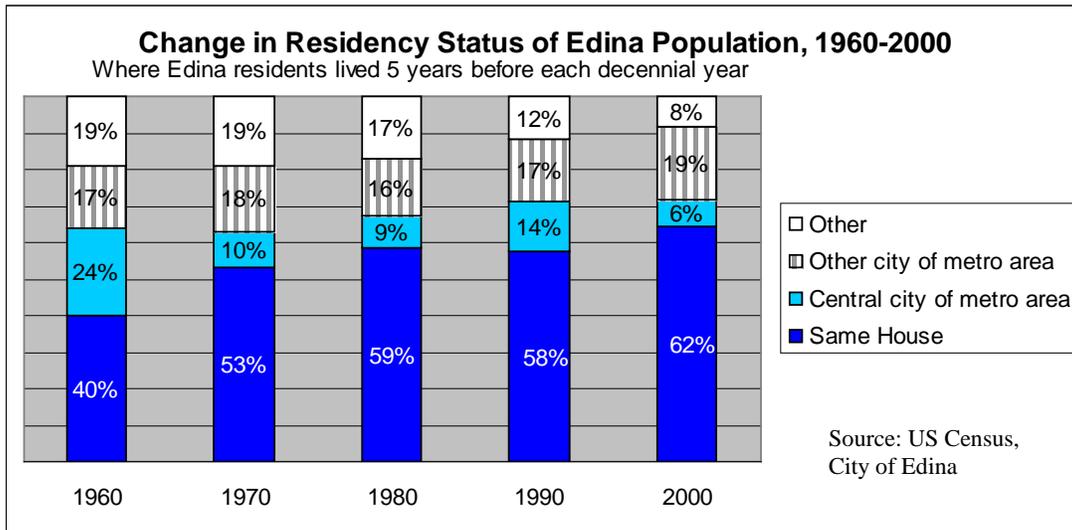






## Resident Migration

Figure 3.9



Census data shows that the average Edina resident has maintained a long residency within the city. As Figure 3.9 shows, the average term of residency has increased over the years. According to the 2000 Census, 62 percent of residents lived in the same house that they had lived in five years before, up from 42 percent in 1990. The 2000 Census data also show that the smallest percentage of residents in the last forty years moved from Minneapolis or St. Paul, and the largest percentage moved from another city in the metro area. Only a small percentage of residents moved from outside the metro area.

## Racial and Ethnic Composition

During the 1990's the ethnic and minority population of Edina increased significantly. Although the percentage change is quite large, the overall number of minority residents is proportionally small compared to the white population of the city. However, the change in total city population appears to be entirely from residents of an ethnic or racial minority, as was also the situation in the years 1980-1990. Table 3.1 shows the change in number and percentage of the primary ethnic and minority populations of Edina. In 2000, the Census Bureau allowed respondents to self-identify themselves as more than one race. Thus much of the large percentage increase in the "other race" category can be attributed to a statistical shift, the result of a change in a Census category.



**Table 3.1**  
**Racial and Hispanic/Latino Composition of Edina Residents, 1980-2000**

	Percentage of Total			Change 1980-1990		Change 1990-2000	
	1980	1990	2000	By Numbers	By Percentage	By Numbers	By Percentage
Total Population	46,073	46,070	47,425	-3	-0.01%	1355	2.9%
White alone	98.4%	97.2%	94.3%	-574	-1.3%	-62	-0.1%
Black or African American alone	0.5%	0.7%	1.2%	123	58.6%	213	64.0%
American Indian and Alaska Native alone	0.1%	0.1%	0.1%	35	116.7%	-3	-4.6%
Asian alone	0.8%	1.7%	3.0%	417	110.0%	622	78.1%
Other race	0.2%	0.2%	1.4%	-6	-5.6%	585	573.5%
Hispanic or Latino	0.5%	0.7%	1.1%	93	39.7%	212	64.8%

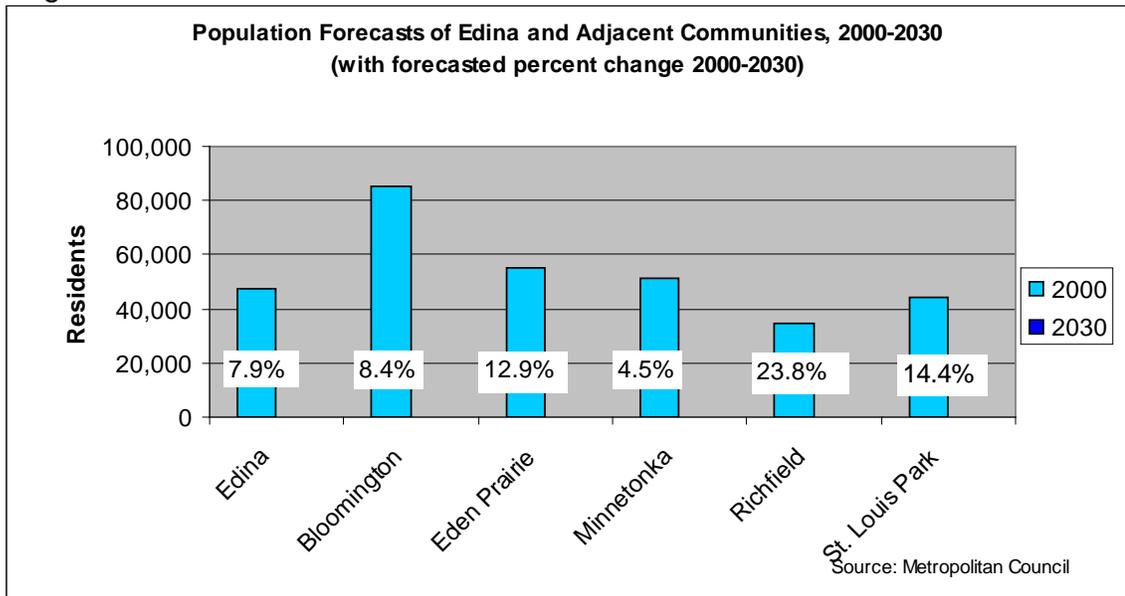
\* In the 2000 Census the "other race" category included American Indian and Alaskan Native alone, Native Hawaiian and Other Pacific Islander alone, some other race alone, and two or more races.

Source: US Census

### Population Projections

While Edina’s population has increased in the last ten years, it is growing more slowly than that of adjacent communities, as was shown in Figure 3.7. This trend is expected to continue under the population projection assumptions used by the Metropolitan Council. Edina’s population is expected to grow slightly while adjacent metropolitan municipalities grow more rapidly in the 2000-2030 time period according to Metropolitan Council forecasts. As shown in Figure 3.10, Edina is expected to increase its population at a percentage rate greater than that of Minnetonka, yet slower than adjacent communities. However, a revised 2030 population projection, based on City expectations of development and demographic conditions, sets this future population figure slightly lower.

Figure 3.10





More significant than the number of future new residents will be the projected change in the age of residents in 2030. The State Demographic Center has issued population projections of age groups for Hennepin County. Table 3.2 shows the percentage change of age groups for the County from 2005 to 2030. Although these projected county-wide percentage changes cannot be directly applied to Edina because they were calculated for the county as a whole, the projected changes contained in the table do indicate quite a different composition of city residents and do appear to reflect demographic changes the city is already experiencing.

**Table 3.2  
Projected Percentage Change in  
Hennepin County Population by Age  
Groups, 2005-2030**

Years of Age	Percent Change
Under 20	1.3
21-44	-2.0
45-64	5.4
65+	102.5

Source: MN State Demographic Center

**Table 3.3**

**Percentage Change in Number of Households  
Edina and Adjacent Communities, 2000-2030**

Community	Households		Percent Change 2000-2030
	2000	2030	
Edina	20,996	22,500	7.2%
Bloomington	36,400	40,000	9.9%
Eden Prairie	20,457	26,500	29.5%
Minnetonka	21,267	24,000	12.9%
Richfield	15,073	19,500	29.4%
St. Louis Park	20,773	24,000	15.5%

Source: Metropolitan Council

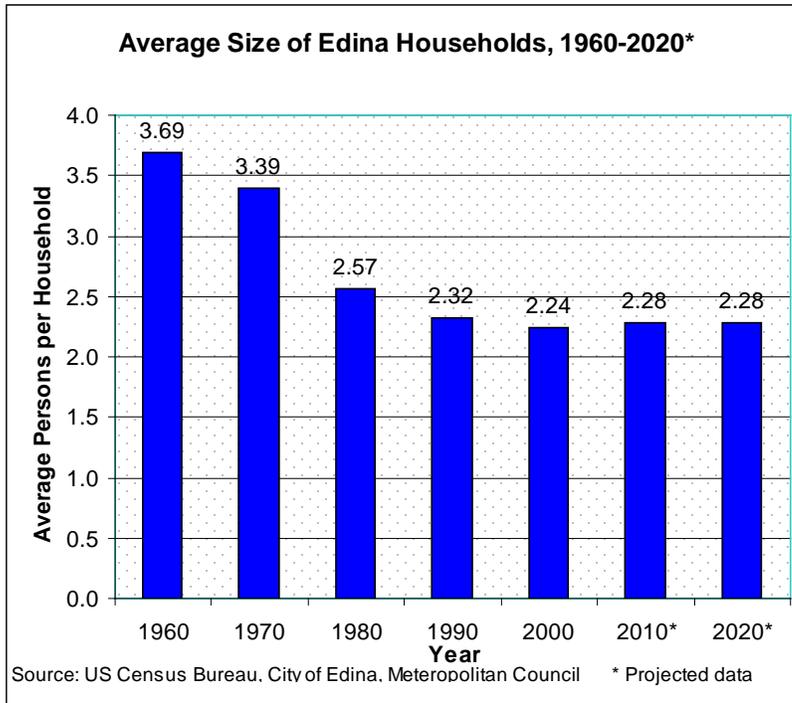
As seen in Table 3.3, the Metropolitan Council expects the number of households to increase rather modestly for Edina, Bloomington, Minnetonka and St. Louis Park in the next 25 years. However, in the case of Eden Prairie and Richfield, the projected increase is more significant as those communities fully develop or intensify current development patterns.

The Metropolitan Council also provides projections on the average size of future households. Figure 3.11 shows those projections up to the year 2020 and the average size of city households, as recorded by the U.S. Census Bureau, dating back to 1960.



Although average household size decreased from 1960 to 2000, it is expected to show a slight increase in this decade and level off in the next decade.

Figure 3.11



### Population Growth in General

Population growth is a function of three basic elements; births, deaths, and migration. The methodology employed by the Metropolitan Council in preparing its forecasts provides a description of the dynamics of population change. The forecast assumed that the average female in the region would bear 1.9 children over her lifetime and there would be a net migration of 12,000 individuals per year, eventually rising to 13,700 individuals per year by the year 2030. The birth and net migration elements are of course counteracted by the death rate to produce the forecasted change.

The trends described in this Conditions and Trends section continue to shape both the size and the character of Edina's population. Fewer children are being born, the death rate is declining due to improved health of older residents, and Edina is once again seeing a net in-migration due to its role as both a regional economic engine and a



desirable place to live with a strong school system and convenient cultural and lifestyle amenities. Over the life of the Comprehensive Plan these three elements of population growth are likely to change again, most notably as the ‘baby boom’ generation moves farther into senior citizen age cohorts, and death rates increase.

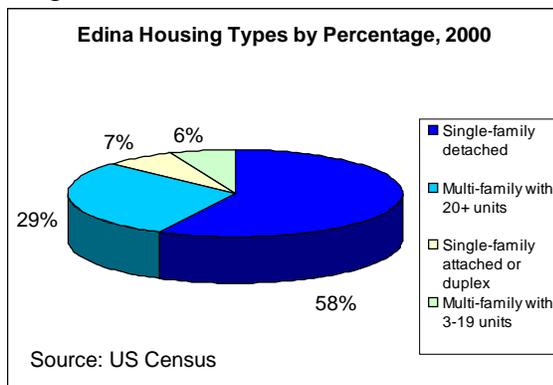
### 3.3 HOUSING

#### Summary

The number of housing units increased about 3 percent from 1990 to 2000, totaling 21,669 units. Approximately 451 new units were constructed between 2000 and 2006 to make the current total about 22,120 units. Housing type is predominantly single-family detached, although multi-family units now compose about 37 percent of all housing types. The percentage of multi-family units has been increasing since 1970. The city’s housing stock, with a median age of 42 years, reflects a time period when the average household size was larger. In 2000 there were about 70 percent 1-2 member households and only about 42 percent 1-2 bedroom dwelling units. This type of mismatch is sometimes called “overhousing,” an imbalance in the relationship between persons in a household and the number of rooms or bedrooms in a dwelling. While this definition can be simplistic, nevertheless, when it is linked to issues of household income/ability to pay for housing, these two factors contribute to overall housing affordability problems. A sharp increase in demolition permits issued by the city in the last three years reveals that residents are adapting the housing stock to suit contemporary needs and desires. In 2000 the median-price for a single-family dwelling was \$311,900. Using a standard affordability measure, to purchase a median-priced Edina home a household income of at least \$94,000 is required. A majority of Edina households do not achieve this income. Data from the Hennepin County Assessor’s Office reveals that the median sale price of a single-family home in Edina was \$435,000 in 2005, an 87 percent (inflation-adjusted) increase from 1995.

#### Total Number, Housing Types, Tenure

Figure 3.12



The 2000 Census recorded 21,669 housing units in Edina, an increase of 686 units (or 3.3 percent) from 1990. About 451 new housing units were constructed between 2000 and 2006 to increase the current housing unit total to about 22,120 units. The predominant housing type in the city is the single-family

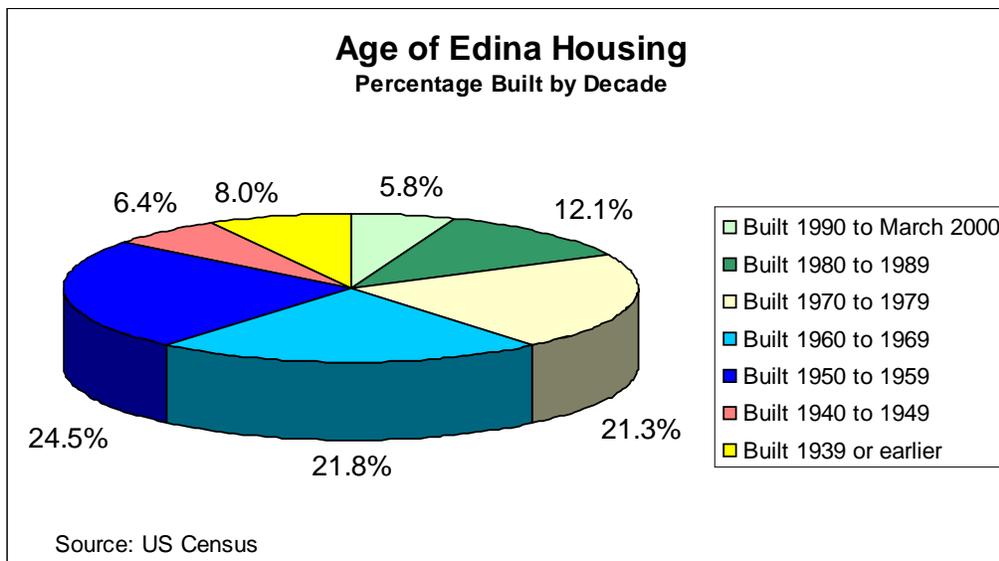


detached home, comprising about 58 percent of all units in 2000, as shown in Figure 3.12. However, since 1970 the majority of new units constructed have been multi-family, increasing from 18 percent to about 37 percent of all housing types, as of 2006. About 76 percent of all housing units are owner-occupied and about 24 percent are renter-occupied.

### Age of Housing

The median year of construction of a housing unit in Edina is 1965, which makes the median age of a dwelling unit about 42 years in 2007. As seen in Figure 3.13, the majority of the city's housing was built between 1950 and 1980.

Figure 3.13



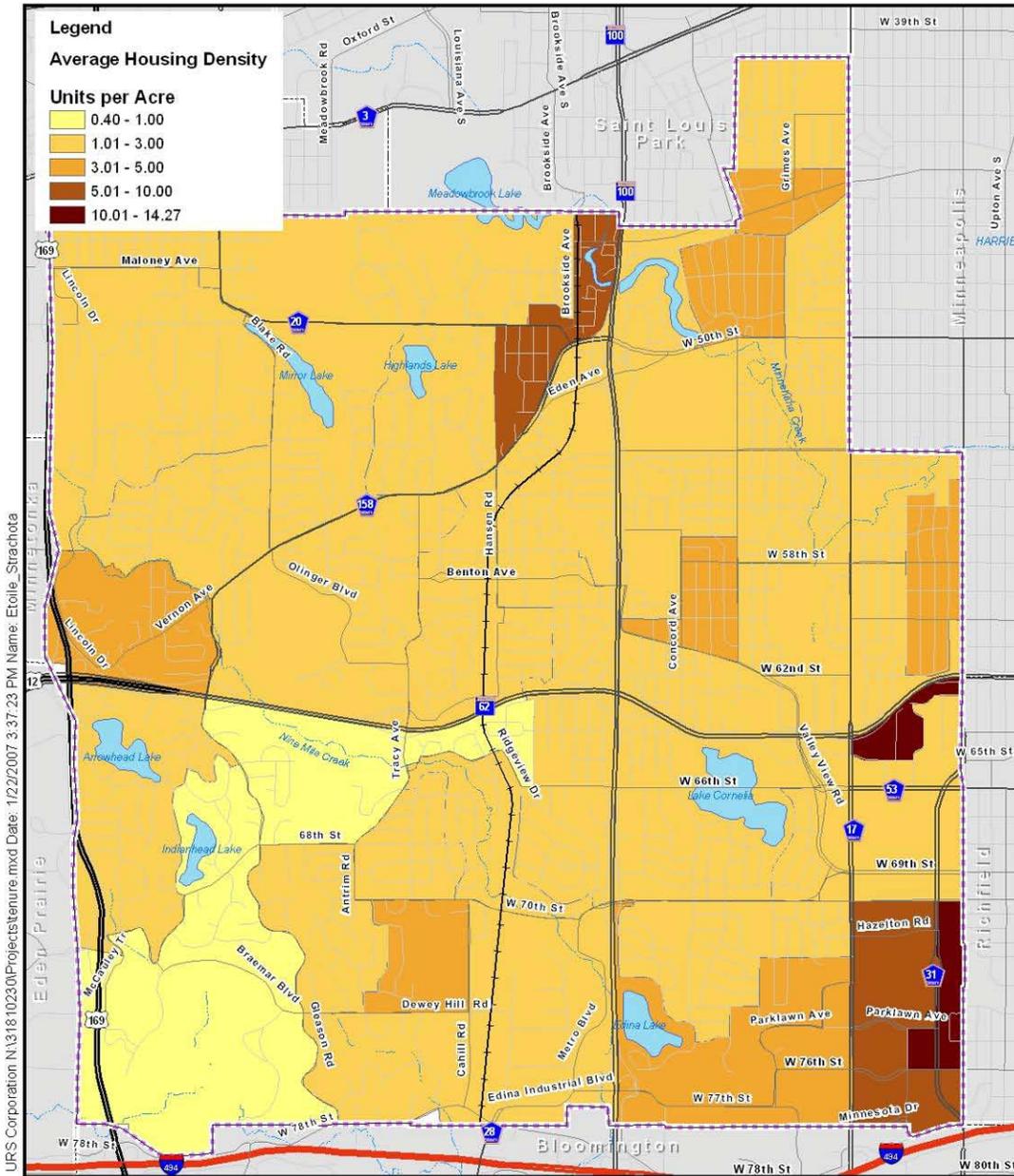
### Condition of Housing

As part of its 1998 Comprehensive Plan update, City staff conducted a windshield survey of all single-family homes in the city. Homes were evaluated based on exterior features of the structure and yard such as the condition of the roof, paint, yard, fence and outdoor storage. Of the 13,647 homes that were included in the survey, only 1.7 percent had identified deficiencies. The most prevalent deficiency was a roof in fair or poor condition (found in 80 percent of units judged deficient), followed by paint in fair or poor condition (48 percent). The City will update the 1998 Housing Condition Survey.



## **Housing Density**

Similar to the persons per household map (Figure 3.8), housing density is greatest in the multi-family corridors found on York Avenue and France Avenue, the Grandview area, and the concentration along Highway 169. Current housing density for the city is shown in Figure 3.14.



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**City of Edina**  
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Data Source: 2000 US Census

**Figure 3.14**  
**Housing Density**  
**2000 US Census Data**

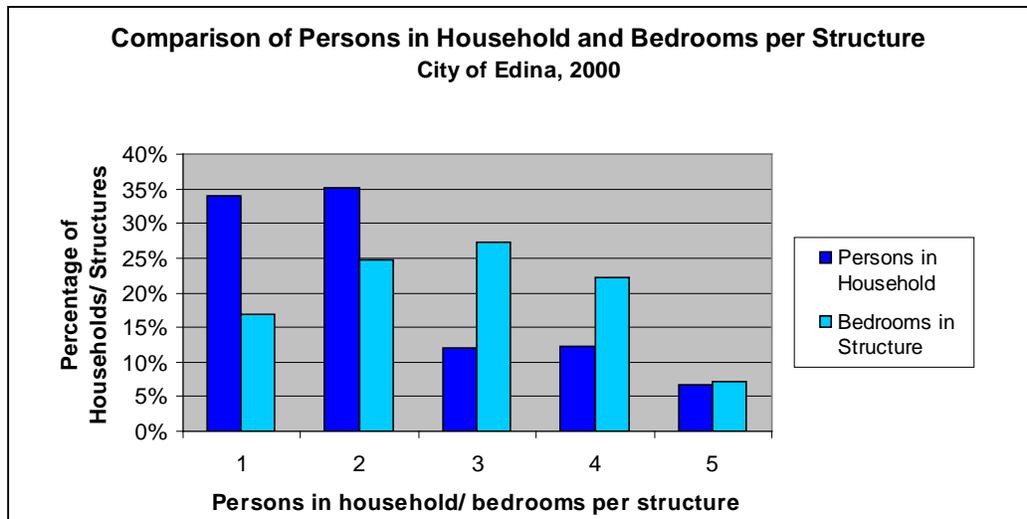




### Persons in Household and Bedrooms per Structure

One method of assessing the current housing stock is to compare the size of households and the size of housing units. Figure 3.15, derived from 2000 Census data, shows that households with 1- 2 members greatly outnumber structures with a similar number of bedrooms. However, the number of 3-4 member households is significantly fewer than the quantity of 3-4 bedroom dwelling units. Although it is common for a household to reside in a dwelling where the number of members does not match the number of bedrooms, the mismatch between the large number of 1-2 person households and the relative scarcity of 1-2 bedroom dwelling units indicates that availability or affordability of these housing units may be a concern for some households who desire such a unit. In 2000 there were about 70 percent 1-2 member households and only about 42 percent 1-2 bedroom dwelling units.

Figure 3.15



### Residential Construction Activity

Between 2000 and 2006, the City issued 578 building permits for the construction of new housing units. The type of housing permit was predominantly for multi-family housing units. The City issued new-construction permits for 508 multi-family units and 70 single-family units.



In addition, the City issued building permits for housing units that replaced existing dwellings, rather than for additional units. In the 2004 to 2006 time period, as shown in Table 3.4, there was a sharp increase in this type of development activity.

**Table 3.4**  
**Edina Residential Redevelopment Activity**  
**Demolition Permits Issued, 2000-2006**

Year	Number
2000	9
2001	8
2002	8
2003	8
2004	20
2005	35
2006	57
<b>Total</b>	<b>145</b>

Source: City of Edina

### Housing Price and Affordability

The appreciation of housing values in Edina, without a corresponding equal increase in median household income, has resulted in decreased housing affordability for some residents. As shown in Table 3.5, the change in median sale price of single-family homes indicates that the home price appreciation between 1990 and 2000 for Edina was exceeded only by Eden Prairie. Between 1990 and 2000 the median sale price for single-family homes in Edina increased by 18.3 percent. During this same period, the City's inflation-adjusted median household income increased by only a half of a percent.

**Table 3.5**  
**Change in Value of Median-Priced Single-Family Homes, 1990-2000**  
**For Edina and Adjacent Communities**

Census Year	Edina	Bloomington	Eden Prairie	Minnetonka	Richfield	St. Louis Park
1990	\$210,100	\$131,000	\$164,000	\$161,200	\$113,900	\$116,500
2000	\$248,500	\$147,000	\$198,300	\$190,100	\$127,300	\$131,900
Percent Increase	18.3%	12.2%	20.9%	17.9%	11.8%	13.2%

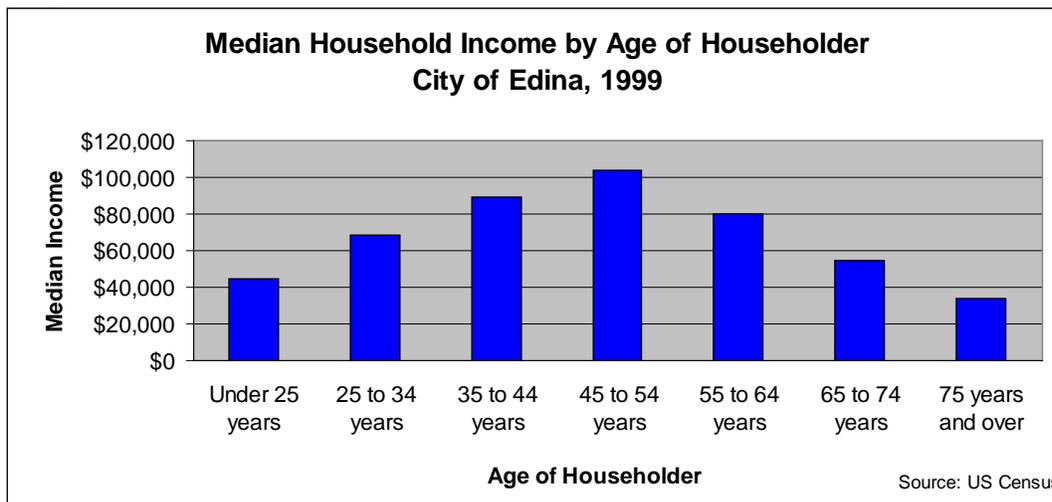
Note: 1990 figures adjusted for inflation. Median price of homes based on Hennepin County sale price data.

Source: US Census Bureau



As shown in Table 3.5, In 2000 the median sale price of a single-family home in Edina was \$311,900. According to the standard benchmark of affordability, by which a household does not spend more than 30 percent of its income on housing costs, the median household income needed to afford Edina’s median priced-home in 2000 was about \$94,000 per year.<sup>2</sup> As Figure 3.16 illustrates, only householders in the 45-54 year age range could comfortably afford a median-priced home in Edina. According to Census data, only about one-third of Edina households earned over \$94,000 per year.

Figure 3.16



An implication of these higher housing costs is that Edina’s housing market is unable to offer affordable housing to individuals from a broad range of ages and incomes. Young families, service workers, and seniors are most vulnerable to being priced out of the market. In its 2006 report, the Edina Housing Task Force noted the benefits of a community that provided a wide spectrum of housing options. These benefits include strong support for quality public schools and local businesses, ethnic diversity, unique community character, and community renewal.

More recent data shown in Table 3.5 suggests that the affordability issue has not improved. The median sale price of a single-family home in Edina increased by 39 percent between 2000 and 2005. Using the same standard benchmark of affordability that was used in the Housing Task Force report a household in 2005 would have needed an annual income of about \$131,000 to have afforded a median-priced single-family home in Edina, ie. \$435,000.

<sup>2</sup> Edina Housing Task Force, “Housing Succession Plan for Edina’s Future.”



### 3.4 EMPLOYMENT

#### Summary

Edina continues to be a sub-regional employment center. The number of jobs is about twice the number of city residents in the 16-64 year age range, the segment of the population most likely to be in the workforce. However, similar to other comparable Metro communities, the city experienced a net loss of jobs between 2000 and 2005. Employment in Edina is primarily concentrated in three industries:

- Finance and insurance, real estate, rental and leasing services;
- Professional, scientific, management, administrative, and waste services; and
- Educational, health care and social assistance.

The total number of jobs from these three industries constitutes over 58 percent of employment in Edina. Edina has a lower labor force participation rate than several comparable communities. About 25 percent of Edina residents work in Edina and slightly more than half of the working residents commute to jobs within Hennepin County. This proximity between jobs and residences allows about one-half of workers in the city to enjoy commutes of less than 20 minutes. The Metropolitan Council projects that Edina’s employment total will increase by about 9 percent over the next 25 years.

#### Current Employment Population

As an inner ring suburb, Edina functions as a retail and employment center for the southwest quadrant of the Metro Area. In fact, the City excels in the area of job production. In 2000 the Metropolitan Council reported that City businesses offered 52,753 employment positions. This number of jobs is considerably greater than the 23,314 residents recorded by the 2000 U.S. Census in the 16-64 year old age range, the segment of the population most likely to participate in the workforce.

**Table 3.6**  
**Change in Edina Employment and Population, 1980-2005**

Year	Total City Employment	Change from Previous Reported Year			
		Employment		Population	
		Number	Percent	Number	Percent
1980	39,914	----	----	----	----
1990	51,121	11,207	28.1	-3	-0.01
2000	53,252	2,131	4.2	1,355	2.90
2005	48,235	-5,017	-9.4	23	0.05

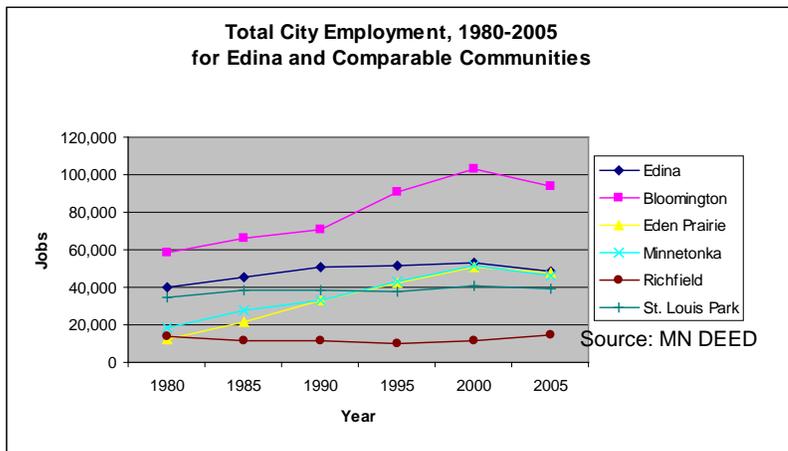
Source: MN DEED, US Census Bureau, Metropolitan Council



Employment figures for 1980-2005 reveal a similar relationship between the city employment rolls and the residential population. From 1980 to 2000 the number of jobs increased faster than the number of new city residents, as shown in Table 3.6. This trend was most apparent during the 1980's when the population remained virtually the same and the number of workers employed in the city increased by 28 percent. However, the decrease in the number of jobs between 2000 and 2005 did not correspond to a similar decrease in population. In fact, the number of residents increased slightly between 2000 and 2005.

To offer some comparison of total employment figures for similar communities, Figure 3.17 shows total workers for several Metro cities. With the exception of Richfield, adjacent communities all experienced a drop in the number of workers employed in the cities between 2000 and 2005. (In the case of Richfield, city employment rose to its 1980 level.) By percentage, Edina had the steepest drop in employment, but Hennepin County and the Metro region also suffered decreases in the number of jobs for this time period.

Figure 3.17



### Character of Employment

Employment in Edina is primarily concentrated in three industries: Finance and insurance, real estate, rental and leasing services; Professional, scientific, management, administrative, and waste services; and Educational, health care and social assistance. The total number of jobs from these three industries constitutes over 58 percent of employment in Edina. Employment in retail trade and the arts and hospitality industries contribute significantly to the overall employment figure as well. By comparison with Hennepin County, Edina has a higher percentage of workers in its top



three industries, while Hennepin County has a higher percentage of its workers in construction and manufacturing and utilities, wholesale trade, transportation and warehousing – industries that traditionally require large parcels of relatively inexpensive land in which to operate. Table 3.7 shows the comparative percentage employment by industry for Edina and Hennepin County.

**Table 3.7**  
**Percentage of Employment by Industry, 2005**  
**Edina and Hennepin County**

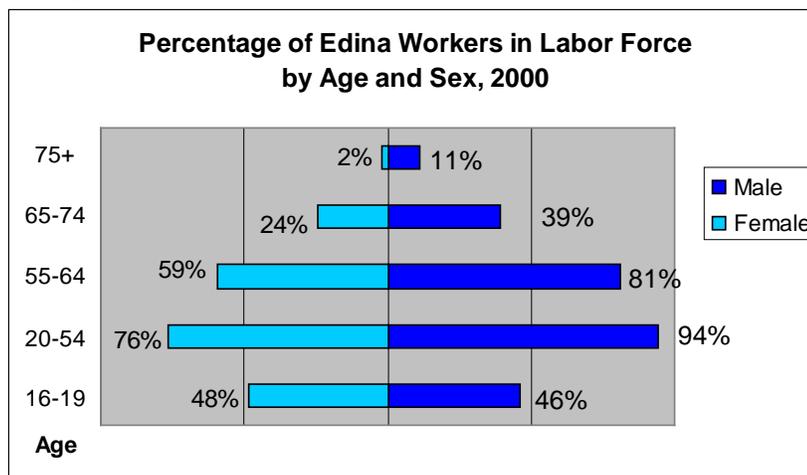
Industry	Edina	Hennepin County
Construction and manufacturing	5.6	14.3
Wholesale trade	4.0	5.6
Retail trade	13.5	9.7
Utilities, transportation, warehousing	0.8	4.4
Information	2.2	2.9
Finance and insurance, real estate, rental and leasing services	15.1	10.7
Professional and technical services, management, administrative, and waste services	23.5	18.3
Educational, health care and social assistance	19.7	18.2
Arts, entertainment, and recreation, accommodation and other services	12.8	11.9
Public administration	0.9	2.8
Unclassified	1.9	1.1

Source: Minnesota Department of Employment and Economic Development

### Labor Force Participation

The 2000 Census reported that 22,547 residents were active in the workforce, or about 84 percent of the total residents between the ages of 16-64 years. As shown in Figure 3.18, an examination of the percentages of residents in the workforce broken down by age and sex reveals that, with the exception of the teenage years, male residents are more likely to be employed throughout their lives. The highest percentage of women who work are in the 20-54 year age range, but that percentage steadily decreases in the higher age ranges.

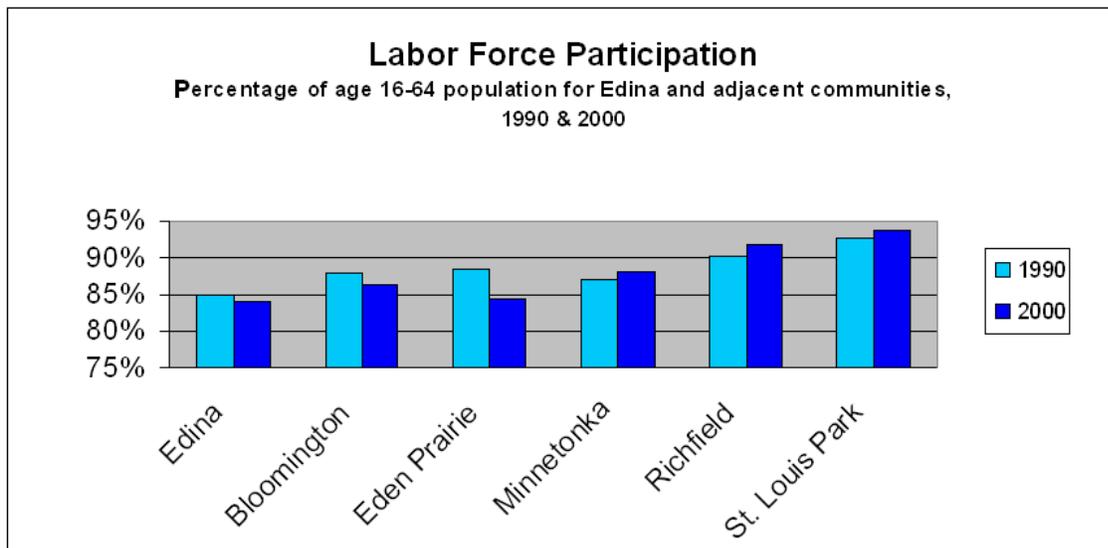
Figure 3.18





In comparison with other communities, Edina and Eden Prairie had similar percentages of the working age population in the work force in the year 2000. St. Louis Park had the highest labor force participation rate, as seen in the Figure 3.19. Three communities, Edina, Bloomington, and Eden Prairie, each saw a decrease in the percentage of working age adults between 1990 and 2000.

Figure 3.19



### Place of Work and Worker Residency

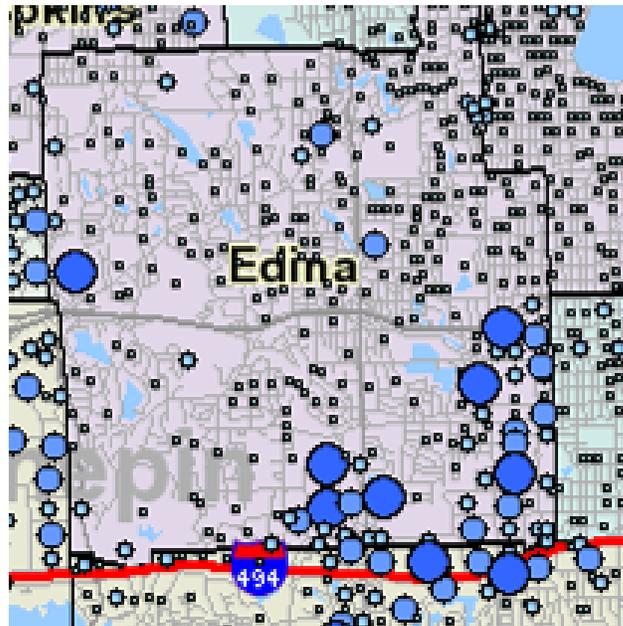
City residents are impacted by work travel trips whether or not they commute to employment since work-related trips increase the burden placed on the transportation infrastructure. The Metropolitan Council's 2000 travel behavior inventory found that home-based work trips (trips to work that began and ended at home) are the longest, at 25.6 minutes of travel duration for an average distance of 11.4 miles. This type of trip represents 12.8 percent of all trips made by metro area residents. Since only 1 to 1.5 percent of city residents or workers resided outside of the Metropolitan Area, this employment information focuses on Metropolitan Area commuting patterns.

Central to the examination of place of work is the location of Edina's employment centers. As shown in Figure 3.20 below, the primary location of jobs is along the main traffic thoroughfares, represented by the larger blue circles. (The larger the circle, the greater the number of jobs.) The main concentrations of jobs appear to be in the Greater Southdale area, along TH 100 in the Cahill area, and near the intersection of TH 62 with TH 169 in the western part of the city. In addition, there is employment located in the Grandview area and the East Campus area (the site of Normandale, Southview and



Concord schools). As the map demonstrates, employment in Edina is focused in the southeast quadrant of the city.

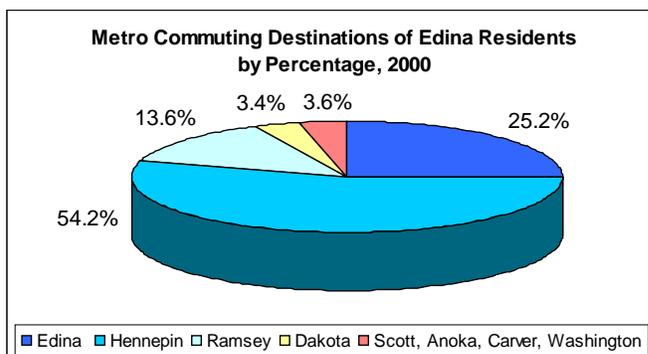
Figure 3.20



Source: US Census

As shown in Figure 3.21, almost 80 percent of Edina residents in the labor force work in Edina itself or within Hennepin County. The remaining 20 percent of city residents work in other metro area counties, primarily Ramsey County. To reveal commuter destinations in more detail, the accompanying Table 3.8 indicates that Edina residents commute primarily to workplaces within the city and Minneapolis.

Figure 3.21



**Table 3.8  
Top Edina Resident Commuter Destinations**

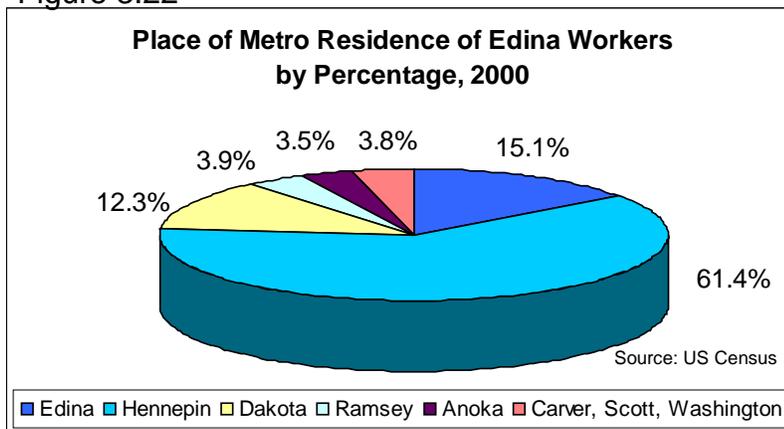
Destination	Number of Commuters
Edina	6,055
Minneapolis	5,467
Bloomington	1,752
Eden Prairie	1,069
St. Paul	1,048
Minnetonka	1,029
St. Louis Park	1,013

Source: US Census



Since Edina is an employment center for the southwest metro area, the vast majority of individuals who work in Edina commute from outside the city; only 15 percent commute from inside Edina. Over 60 percent of workers commute from within Hennepin County. The remaining 25 percent of workers travel from other Metropolitan Area counties, primarily Dakota County. Figure 3.22 shows the counties from which Edina workers are commuting. Apart from the Edina and Hennepin County commuting pattern, it appears that generally residents are traveling east to work in Ramsey County and workers are commuting to jobs in Edina from the southeast (Dakota County).

Figure 3.22



Commuting travel times for Edina residents compare favorably with other inner ring Metropolitan Area communities because of the City's proximity to central destinations in the region. Table 3.9 shows the comparative commuting times.

**Table 3.9**  
**Comparable Travel Time to Work by Percentage, 2000**  
**For Edina and Adjacent Communities**

Travel Time	Percentage of Workers Commuting Travel Time					
	Edina	Bloomington	Eden Prairie	Minnetonka	Richfield	St. Louis Park
Less than 20 minutes	51.4	50.3	48.4	47.6	51.9	52.3
20 to 29 minutes	27.6	27.1	26.8	27.7	26.3	30.2
30 + minutes	21.1	22.6	24.8	24.8	21.8	17.6

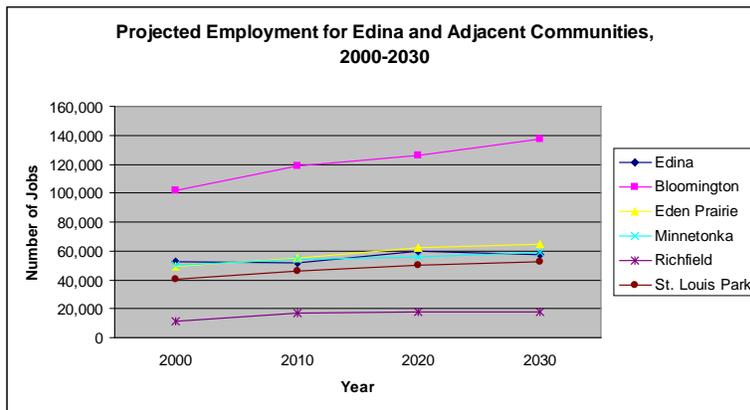
Source: US Census Bureau



## Employment Projections

As part of its Regional Development Framework, the Metropolitan Council projects future employment figures for the Metropolitan Region. Between the years 2000 and 2030, the Council projects that Edina’s employment total will increase by about 23 percent. This percentage is less than the projected increases for comparable communities, with the exception of Minnetonka. However, the projected employment increase is proportional to the projected population increase. Figure 3.23 below shows the Metropolitan Council’s employment projections.

Figure 3.23



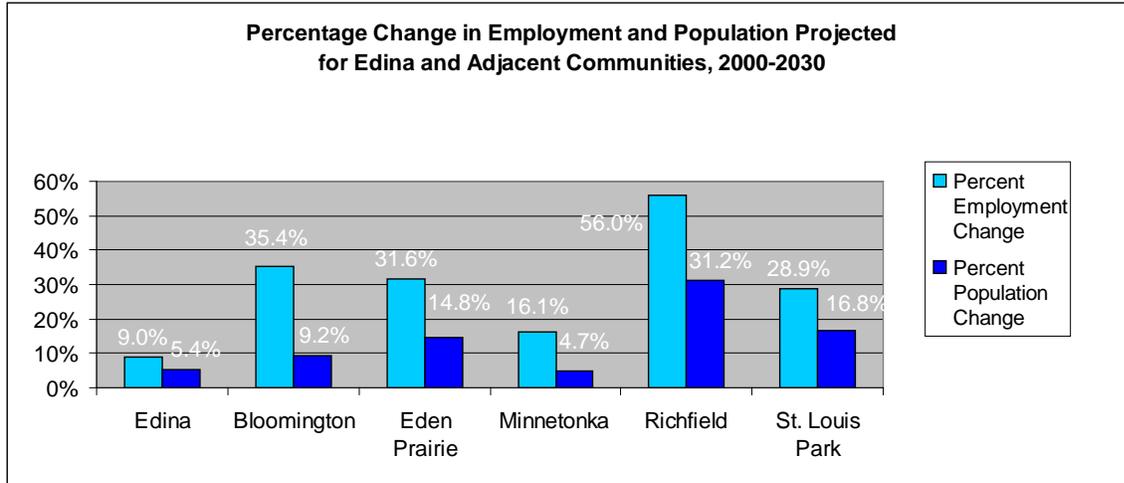
Source: Metro Council, US Census Bureau, 2000 data

A comparison of the projected employment change from 2000 to 2030 and the projected population change, expressed in percentages, shows that employment figures are expected to increase at a far faster rate than the total population for Edina and adjacent communities, as seen in Figure 3.24. Although it appears that Richfield’s expected 56 percent increase is significantly greater than comparable communities, the number of jobs in that city is less than in comparable communities.

An implication of these employment and population projections – new jobs and new residents– is that the transportation infrastructure will have to accommodate more peak time travelers. The City will gain the tax revenue from the increased worker payrolls and the accompanying retail expenditures, but the higher tax revenue will be balanced by the need to provide services for the increased daytime population.



Figure 3.24



## 3.5 TRENDS AND CHALLENGES

### Possible Implications of Demographic Conditions and Trends

It appears that the total number of Edina residents will not change much in the next 20 years, but the change in the demographic character of its residents will be substantial. The challenge for the city is to adapt itself as a lifecycle community to conform to the needs of a changing population. The aging populace will likely demand a different range of services, particularly in the fields of transportation and recreation. There will be a greater emphasis on mobility by non-vehicular transportation or paratransit. Convenience to daily needs for some residents will be categorized as a necessary, rather than a desirable, feature. Residents will more recreational/healthy living amenities such as walking and biking paths.

The change in physical character of a few districts and neighborhoods will be significant as well. The style of housing may change as well as residents desire smaller residences for less maintenance and expense. The predominant housing type of new construction will be multi-family as the real estate market responds to the demand for smaller dwelling units. The issue of housing affordability will increase in importance.

Similar to other comparable communities, Edina will most likely experience a decrease in labor force participation as the average resident age increases. However, the three primary industries which offer employment in the city appear to be in advantageous



positions with regards to future demographic and development trends. Current City infrastructure, with programmed future capital improvements, appears adequate to support robust economic development.



## Chapter 4: Land Use and Community Design

- 4.1 Introduction
- 4.2 Current Conditions: Existing Land Use and Community Character
- 4.3 Trends and Challenges:
- 4.4 Goals and Policies: Future Land Use Plan and Community Design Guidelines
- 4.5 Implementation
- 4.6 Current Zoning and District Descriptions

### 4.1 INTRODUCTION

This chapter combines the topics of land use and community design. Land use is one of the central elements of this Comprehensive Plan. The land use categories and policies in the Plan are intended to guide public and private decisions regarding the development, redevelopment and protection of land within the City.

To be a useful day-to-day decision-making guide, the Land Use Plan must be adaptable to unanticipated changes, and also be specific to current conditions and issues in the City. In order to balance these goals, it will be necessary to closely monitor and update the Land Use Plan on a regular basis.

It is widely recognized that the appearance and compatibility of a particular land use with its surroundings are as important as the use itself. Community design is defined by this Plan as a way of guiding the built and natural physical form of the city in order to foster and sustain its livability and sense of place. Where the land use plan addresses specific areas and combinations of land use, community design addresses the manner in which these land uses are sited and designed.

The Community Design component of this chapter looks at existing and planned land uses from the perspective of their current natural, designed, or built character. It suggests design strategies for protecting or enhancing this character or allowing for appropriate transitions.

### 4.2 CURRENT CONDITIONS: LAND USE AND COMMUNITY CHARACTER

#### Land Use Context: Natural Features and Landforms

Land uses in Edina are a result of dynamic natural forces that shaped the present landscape and human activities that continue to the present day.

Much of Edina, or about two-thirds of its land area, lies within the Nine Mile Creek watershed, while the remaining one-third of the City drains to Minnehaha Creek. Five lakes are interspersed throughout the city as well. Much of the city



consists of gently sloped terrain, though steep slopes are located in the Indian Hills neighborhood, along the creeks and in the northwest corner of the city. Main native species of trees include oak, elm, basswood, maple, and ash.

Soil formations in Edina and most of Hennepin County formed as a result of glacial activity that ended as recently as 10,000 years ago. The glacial lobes deposited sediment from the Lake Superior region and remnants of limestone and shale from Iowa. In most places the soil and rock, known as “drift,” is between 100 and 200 feet deep. The thickness of the drift means the underlying bedrock had no effect on the landscape pattern that developed. The topography of the city was formed when the glaciers melted, creating valleys from the runoff and hills and depressions from the accumulated soil and rock. Minor subglacial streams in the Edina area supplied sand and gravel to a large outwash plain that covered much of central Hennepin County. Sand and gravel resources, known as aggregate resources, are valuable for road construction and other public works projects. Edina contained extensive sand and gravel operations, such as the Centennial Lakes area, but at present aggregate deposits within Edina are fully urbanized or have been mined and redeveloped.

### **Land Use Context: Social and Economic**

As noted in the Existing Conditions section, the history of land use in Edina has notable regional and national significance. In one landmark instance, the eyes of the nation were upon Edina in 1956 when Southdale Mall opened. Lauded as “The Splashtiest Center in the U. S.,” by *Life* and a “pleasure-dome-with-parking,” by *Time*, the development initiated the double store anchor concept, a radical departure from traditional merchandising, which saw only the competitive impact and not the synergistic potential of two large stores selling similar goods in close proximity. This concept, offering a retail mix in a single development to act as a strong magnetic force, was highly successful and was duplicated in thousands of malls world-wide.

Beyond being a triumph of “cooperative capitalism”, Southdale represented a breakthrough in technological innovation. Retailing had formerly been hampered by the inability to adjust the climate to enable shopping year-round. To address this issue, Southdale was constructed with a massive heat pump, the largest in the world at the time, to maintain a constant indoor temperature of 72 degrees. Donald Dayton, one of Southdale’s department store presidents, said “We plan to make our own weather at Southdale. Every day will be fair and mild.”

This shift was not simply a change in retail format. It was a fundamental alteration of the retail development model that sought to include different land uses within a single domain. Victor Gruen, the Austrian émigré architect of Southdale, pulled as much park, street, and community life as economically feasible into the large enclosed space where the pedestrian experience reigned.



The mall was constructed with two stories to shorten walking distances and an open garden court to facilitate a pleasant walking experience.

Southdale is now over fifty years old. Victor Gruen's vision of mixing uses on a single property has been refined to include the vertical mix of uses. The significance of mixed use development lies in its ability to create synergies between different land uses, similar to Southdale's inclusion of two large stores. The benefits are many: different land uses can reinforce one another, have the potential to reduce vehicle trips, and inject more community life into commercial areas. When residential is in close proximity to certain types of retail, there is a "built-in" market that provides a market for the retail. In this manner the Future Land Use Plan seeks to provide a greater flexibility to allow mixed use in areas where it is appropriate.

### Existing Land Use Categories

Figure 4.1 illustrates the pattern of existing land use as of 2005. The categories on the map are described as follows:

#### Single-Family Residential

**Single-Family Detached.** Residential neighborhoods are the dominant land use within the city, and single-family housing is the dominant housing type. Neighborhood character varies based on era of construction, scale of development, and landscape influences, as described in the Community Design section of this chapter. The most common residential type consists of post-war contemporary single-family homes on wooded lots along curvilinear streets. About 53 percent of the city's land area is occupied by single-family detached housing.

#### Multi-Family Residential

**Single-Family Attached.** This land use consists of residential units with common walls, where each unit has direct exterior access. In Edina the most common building types are townhouses and duplexes (two-family dwellings). Townhouses tend to be clustered close to highway or major road corridors, while duplexes are often found in narrow strips along major thoroughfares such as Vernon and France avenues as a kind of buffer for adjacent single-family detached housing.

**Multi-Family.** This land use is defined by the multiple-unit building type where each individual unit does not have direct ground floor access to the outside. Multiple family developments are concentrated primarily along the main traffic arteries and are generally located toward the edges of the city, often in proximity to retail business establishments. Concentrations of multi-family development are found along York and France avenues, Vernon Avenue, Lincoln Drive and Cahill Road.



## Commercial

**Retail and Other Commercial.** An important part of Edina's identity is its status as a regional commercial and employment center. The Edina marketplace is dominated by high-end retail, medical, real estate and banking services, making a unique combination within the metro area. The City's demographics, in terms of incomes, match this business market (The City's median household income in 1999 was about \$66,000 compared to Hennepin County's median household income of about \$47,000). Retail areas can be defined based on their market positions: regional, community and neighborhood. The regional retail district is the Greater Southdale area. Community-level districts include 50th and France and Grandview Heights. Neighborhood shopping districts, including the commercial nodes at Valley View and Wooddale and West 70th and Cahill, consist of a cluster of one- and two-story multi-tenant commercial buildings set back from the street and surrounded by or adjacent to off-street parking. Several other neighborhoods have small commercial nodes providing convenience goods and services. The larger concentrations of this land use are generally located toward the edges of the city, rather than in the center.

**Office.** Long known as a retail center for the southwest Metro area, the city does contain prime office space where several large corporations have located their national headquarters. This land use is concentrated along such major thoroughfares as the western sides of France Avenue and TH 100 and the northern side of West 66th Street.

## Mixed Use

**Mixed Use Residential.** This land use consists of areas with a mix of uses including residential units. In its 2005 data, the Metropolitan Council recognizes



one acre of this land use in the city, at the intersection of France and West 54th Street. There are some areas currently emerging as mixed use, such as Greater Southdale and 50th and France.

**Mixed Use Industrial.** This land use includes a mixture of industrial uses that may include office and retail but no residential units. The mixed use industrial land use is primarily found in the Cahill industrial area west of TH 100 and along the south side of West 77th Street in the Pentagon Park area.

**Mixed Use Commercial and Other.** This land use category contains multiple nonresidential uses but no residential uses. There is currently no acreage of this land use mapped in Edina.

**Industrial and Utility.** Industrial lands in the city are concentrated where historically lower land prices and access to transportation networks favored their location. Currently, the two areas in the city that meet these qualifications are the Cahill area west of TH 100 and south of West 70th Street, the greater Pentagon Park area, and a smaller concentration along TH 169 as it borders Eden Prairie in the extreme southwest corner of the city. The industrial land use is generally located toward the edges of the city, rather than in the center.

**Institutional.** Institutional land uses include city-owned properties and county libraries, as well as large public and private service providers such as hospitals and other medical care facilities; schools, social, cultural and educational establishments and cemeteries. This category also includes public safety and government service facilities such as police, fire, and public works.

**Parks, Recreational.** Edina has an extensive public park system that serves the community and area residents. Parklands include a golf course, biking and walking trails and various forms of recreational and athletic facilities, playgrounds and playing fields, and natural open space. Lands devoted to parks and recreation constitute the second highest percentage of all land use acreages. Some of the land included as park and recreational is within the Minnehaha and Nine Mile creek floodplains, as well as other floodplains and stormwater drainage areas.

**Golf Course.** Edina has four major golf courses located in these public parks and private country clubs: Braemar, Interlachen, Richards and Edina. They constitute 921 acres of the city's land area.

**Major Highway.** The city is bisected by two regional arteries, TH 62 and TH 100, which divide the city into geographic quadrants. In addition, two more highways, I-494 and TH 169, border the city or pass near its boundaries. The limited access roads allow for convenient exit to points outside the city or access to destinations within the city for residents, workers, and visitors. The acreage listed for this land use does not include local roads.

**Railway.** The Canadian Pacific Railway maintains a rail line that runs north-south through the city. The rail line, known locally as the "Soo Line," contains



about 4 miles of track in the city and runs roughly parallel to TH 100, west of that highway.

**Undeveloped.** Land categorized as “undeveloped” in the city contains protected and non-protected wetlands, steep slopes and land not clearly used for any other categorized land use or whose land use cannot be discerned by aerial photos or available data. The largest parcel of land that was identified as undeveloped on the 2005 Existing Land Use map, in the Knollwood subdivision in the city’s northwest corner, has since been platted for development

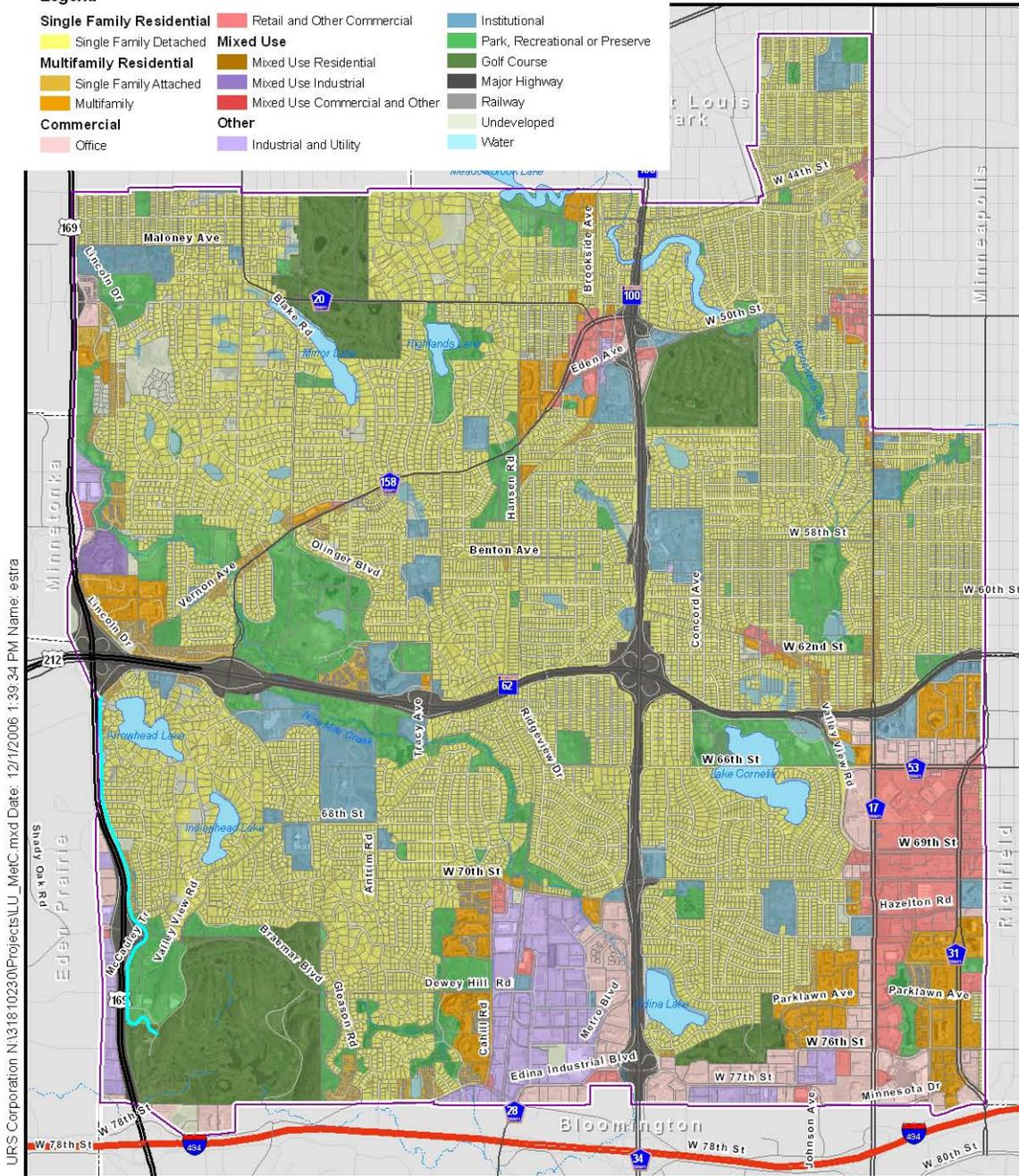
**Water.** Nine Mile and Minnehaha Creeks provide a natural drainage system for the city’s land. Numerous lakes are both independent and linked to the creeks.





**Legend**

Single Family Residential	Retail and Other Commercial	Institutional
Single Family Detached	Mixed Use	Park, Recreational or Preserve
Multifamily Residential	Mixed Use Residential	Golf Course
Single Family Attached	Mixed Use Industrial	Major Highway
Multifamily	Mixed Use Commercial and Other	Railway
Commercial	Other	Undeveloped
Office	Industrial and Utility	Water



URP Corporation N:\318\10230\Projects\LU\_MetC.mxd Date: 12/11/2006 1:39:34 PM Name: estra

**Figure 4.1**

**Existing Land Use, 2005**



**City of Edina**  
2008 Comprehensive Plan Update

Data Source: Met Council Generalized Land Use, 2005





### Changes in Land Use, 2000-2005

Land uses have changed since the previous Comprehensive Plan to accommodate changing community needs, demographics and economic conditions. The greatest change by percentage of land use occurred in what the Metropolitan Council classifies as “undeveloped land.” (This land may be undevelopable due to environmental constraints, may not be able to be classified in other land use categories, or its use cannot be determined from aerial photos.) As seen in Table 4.1, the undeveloped/undevelopable land use category decreased by 113 acres between 2000 and 2005. The largest increase in acres is in the office land use category, which increased by 55 acres during this time period. There was also a significant decrease in the industrial land use category during this period.

**Table 4.1**  
**City of Edina**  
**Change in Land Use, 2000-2005**

Land Use Category	2000	2005	Percent of Total Acres (2005)	Change 2000-2005	
	Acres	Acres		By Acres	By Percent
Single-Family Detached	5,453	5,434	53.2%	-19	-0.3%
Single-Family Attached	252	261	2.6%	9	3.5%
Multi-family	400	420	4.1%	20	5.0%
Retail and Other Commercial	401	384	3.8%	-17	-4.1%
Office	352	407	4.0%	55	15.5%
Mixed Use Industrial/Mixed Use Residential	23	26	0.3%	3	13.4%
Industrial and Utility	373	337	3.3%	-36	-9.7%
Institutional	478	468	4.6%	-10	-2.0%
Park, Recreational	823	922	9.0%	99	12.0%
Golf Course	695	693	6.8%	-2	-0.4%
Highway Right-of-Way	407	401	3.9%	-6	-1.4%
Undeveloped/Undevelopable	307	194	1.9%	-113	-36.9%
Water	260	261	2.6%	1	0.2%
Source: Metropolitan Council	10,225	10,209	100.0%		

Note: Land use totals are not consistent due to rounding and changes in how land use categories are calculated. The undeveloped/undevelopable land use category contains protected and non-protected wetlands, steep slopes and land not clearly used for any other categorized land use or whose land use cannot be discerned by aerial photos or available data. The increase in Park, Recreational acreage shown in this table was determined to be from inaccurate data.



## Character Districts

In order to establish principles for community design in the future, it is important to understand the City's historical development patterns and existing character. Historical development is discussed in Chapter 6. The manner in which the City evolved from rural village to streetcar suburb to postwar planned community allows us to define a series of character districts: neighborhoods, commercial nodes and districts or corridors that share a distinctive identity based on their built form, street design, landscape elements and other features, sometimes including prevalent architectural styles. Character districts are broadly delineated in Figure 4.2 and described below. It should be recognized that the 'boundaries' between these districts are often quite indistinct and that many districts share common features or elements. Principles and guidelines for character districts are described in the next section of this chapter. This section also includes specific guidance for a few geographically defined areas where redevelopment is most likely to occur.

### Residential Character Districts

#### Traditional Neighborhood

The oldest areas of suburban development, built in the early 20<sup>th</sup> century in what was then a largely agricultural village, served by streetcar lines to Hopkins and Lake Harriet - Minneapolis. Areas are centered in and around the formerly independent village of Morningside, the 50<sup>th</sup> and France commercial district, and the West Minneapolis Heights and Mendelssohn subdivisions bordering the streetcar line in northwest Edina.

**Characteristics:** straight streets, smaller blocks and relatively smaller lots than in later development. Most streets have sidewalks. Bungalow styles are common in the Morningside area. West Minneapolis Heights contains a variety of vernacular Midwest styles, combined with significant numbers of postwar homes. Garages, where present, are usually detached and served by side yard drives or (rarely) alleys.





### Garden Suburb

Planned communities designed to provide high standards of services, amenities and maintenance for upper-class residents. The Country Club District is a nationally recognized example of this type, developed by realtor Samuel Thorpe beginning in 1924 on 300 acres in the old Edina Mills community. The district was designed by landscape architects Morell and Nichols with contoured streets, shade trees, parks and landscaped open space, north of the Edina Country Club golf course. Building restrictions covered all aspects of architectural style, siting and property maintenance, as well as racial and ethnic restrictions.

While the Country Club District is a historic district with defined boundaries, two nearby areas share similar characteristics: the Sunnyslope area west of Minnehaha Creek and the Interlachen area (Rolling Green and Hilldale), built adjacent to that country club. Both areas have larger lots than the Country Club District but similar street layouts.





**Common characteristics:** mature trees, regular building setbacks and massing, similar historical revival architectural styles (i.e., American Colonial, English Tudor, French Colonial). Interconnected and gently curved street pattern is punctuated by landscaped triangles and islands at intersections. The Country Club District has sidewalks and generous boulevards; the other areas do not. The Interlachen area is characterized by larger lots, larger homes and proportionally more green space.



**Postwar Housing** makes up the largest component of the City's housing stock, with about 85% of all units built after 1950. Street patterns in postwar neighborhoods vary widely, from a loosely rectilinear or contoured grid (one that often predated the housing) to an almost circular grouping focused on an internal park (i.e., Brookview Heights).

**Postwar Traditional** housing is typified by the Cape Cod, Rambler, and split-level styles. Garages, where present, may be detached or attached but recessed behind the primary façade. These districts are located primarily in the northern half of the city. Street patterns are generally a loosely organized grid, but become more curvilinear in areas west of Hanson Road. Sidewalks are uncommon.



“By the 1950s, the influence of Frank Lloyd Wright’s prairie style horizontal roofs and functional “Usonian” houses had filtered down to the developers’ vernacular. ... Many Edina houses of this era are well-crafted with stone exterior elements, hardwood floors and plaster walls.” *Edina Massing Study*

**Postwar Contemporary** housing includes a more diverse and eclectic mix of architectural styles, collectively termed “Pastoral Modern” in the *Edina Massing Study*. Homes are oriented with the long axis parallel to the street (like the earlier rambler style), and lots tend to be wider than in older neighborhoods. Garages tend to be attached and front-loaded. Mature vegetation gives these neighborhoods a settled character.

Duplexes were located along more heavily-traveled streets (France Avenue, West 70<sup>th</sup> Street) as a transitional element, apparently in order to buffer adjacent single-family housing from traffic while perhaps providing more affordable housing options.





**Postwar Garden Revival** is a term used to describe one specific district: the Indian Hills neighborhood and vicinity north of the Braemar Park golf course in the city's hilly southwest quadrant. This area is similar to the earlier Interlachen area in that streets wind around the steep contours, lots are large, and a high proportion of trees have been retained.



**Multifamily Concentrations.** Multifamily housing, including townhouse condominium, and apartment complexes, tends to be clustered in specific districts or enclaves close to major thoroughfares and often in proximity to parks and shopping districts. Building size, scale, style and materials vary greatly among these developments. Landscaping is frequently used to define entries or as a buffer from adjoining roads or surrounding development.





### Nonresidential/Mixed Use Character Districts

Unlike the residential character districts discussed above, nonresidential and mixed-use districts have typically undergone many changes since their initial construction. Changing modes of transportation, consumer preferences and construction methods have caused these areas to become more diverse over time. Today certain districts have a distinct character defined by street patterns, building placement or architectural style, while others lack this coherence and can be viewed primarily as combinations of land uses. Many of these districts continue to evolve with changing market conditions. The land use plan in Section 4.4 provides a basic template of preferred land uses and built form, including building height, for specific mixed-use districts. The guidelines in this section focus on common elements that create successful mixed-use districts by integrating a variety of uses in a visually coherent and walkable setting.

#### Neighborhood Commercial Nodes

include both the original village centers (Morningside) and the newer neighborhood shopping districts that developed at crossroads or edges of neighborhoods (Valley View, West 70th and Cahill). Other small commercial nodes such as 50<sup>th</sup> and France have now grown into larger mixed-use districts, discussed below.

The **Morningside district** is characterized by small storefronts and other commercial buildings, one to two stories in height, directly abutting the sidewalk. It is a part of a larger district that spans the Minneapolis-Edina boundary; the Minneapolis side contains larger commercial buildings such as a nursery, and a newer strip mall. Parking in the Edina district is on-street or in a series of small lots behind buildings.



The **Valley View and Wooddale** commercial node consists of a cluster of one- and two-story multi-tenant commercial  
*Edina Comp Plan Update 2008*  
*Chapter 4: Land Use and Community Design*





buildings set back from the street and surrounded by surface parking. Multifamily buildings on the south side of Valley View are 3-4 stories and well-landscaped, with parking to the rear.

The **70<sup>th</sup> and Cahill** commercial node includes two commercial buildings – a two-story office/retail building and a one-story strip mall. Both are set back from the street behind a wide landscaped buffer and separated by surface parking. Surrounding uses are one-story office/industrial buildings and both older and newer multi-family complexes.

**Mixed Use Centers** began as smaller commercial nodes but have increased in size, scale and diversity to the point where they serve larger areas, from the community to the regional scale. They range in character from highly pedestrian-oriented to predominantly auto-oriented, although all benefited from open space enhancements.

The **50<sup>th</sup> and France** district originated as a small village center and streetcar terminus. With extensive public improvements, it has evolved to a highly pedestrian-oriented shopping district, part of a larger district that extends into Minneapolis. Structured parking has allowed existing multi-story commercial buildings to be fully utilized and new buildings to be added. The most recent phase of redevelopment is adding housing to the district in stacked flats and mixed-use residential/retail buildings.





The **Grandview Heights** district is in the process of evolving from a somewhat scattered auto-oriented commercial/industrial district to a more integrated mix of uses, with the addition of offices, multifamily housing and a combined library/senior center around a common green. Street patterns are disconnected, making wayfinding difficult.



The **Greater Southdale Area** is a regional retail and activity center that consists of several sub-areas. Originally centered upon the Southdale Shopping Center, it now encompasses substantial health care, office, entertainment and residential components. Its size, diversity and regional role make it unique within the City. It is characterized at present by a wide variety of low-rise to high-rise single-use buildings oriented toward surface parking, with some structured parking. Smaller scale retail includes the Galleria and Yorktown Shopping Centers. The **Centennial Lakes** sub-area within this district is an innovative early example of a multi-use redevelopment that includes several hundred townhouse and multi-family housing units. **Yorktown and Centennial Lakes Parks** are linked by open space corridors and a chain of ponds. Open space is largely internal and not visible from the street. **Edinborough Park** is a multi-use indoor recreational facility located within a large mixed-use complex.





**Mixed-Use Corridors** are located along or parallel to major thoroughfares (north France Avenue) or regional highways (I-494).



**North France Avenue** combines small-lot single-family housing, duplexes, newer townhouse development and several small commercial nodes north of 58<sup>th</sup> Street. High traffic volumes have eroded the historically residential character of the street, although landscaping and sidewalks add pedestrian amenities.



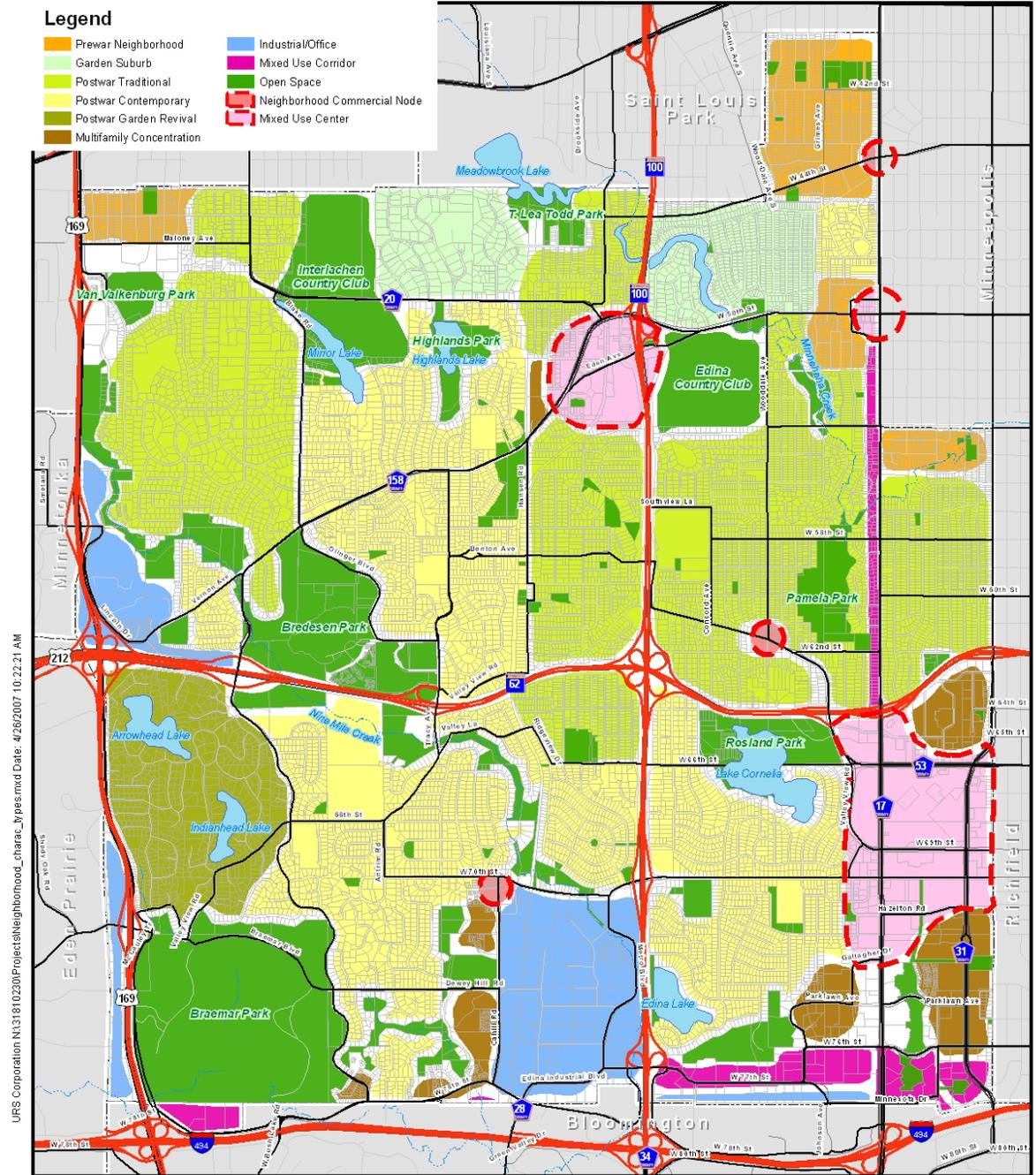
The **I-494 Corridor** includes a wide range of uses, often in isolation from one another or linked by somewhat confusing frontage road systems. The corridor is also an extension of Bloomington's office-dominated highway district, with concentrations of prominent buildings around interchanges.



**Industrial/Office Districts.** One large district (known as the Edina Interchange Center) is centered on the north-south railroad line that parallels TH 100, and includes a mix of office, service commercial and large scale industrial development. A second area parallels I-494 south of 76<sup>th</sup> Street. Parcels are large and many are underutilized; there are few internal streets.



Figure 4.2 is a generalized map of Edina's character districts.



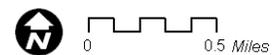
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Figure 4.2

**Character Districts**



**City of Edina**  
2008 Comprehensive Plan Update





### 4.3 TRENDS AND CHALLENGES

The city of Edina, as a “developed” municipality, has a host of land use issues that it shares with other similarly-designated municipalities, as well as some challenges that are unique to the community. As the City continues to mature, redevelopment of existing land uses becomes a priority in order to adapt to changing conditions and future challenges, and to retain Edina’s high degree of livability and commercial success as a regional retail and office center. Current land use issues include the following:

- **Redevelopment.** The city currently has very little undeveloped land that has the potential for development. Therefore, it is redevelopment that will meet the needs posed by changing demographics and private market conditions.. Redevelopment projects should dynamically respond to the rigors of the marketplace, provide excellence in design and offer clear community benefits. What guidance can the city provide developers regarding acceptable design elements and project intensity?
- **Development review and approval process.** The current zoning and land development review system provides limited scope and discretion to adequately address building, site, and community design issues.
- **Transportation choices.** How can the land use plan foster transportation options for residents and workers who desire an alternative to the private automobile? A transportation network that allows for additional transit and non-motorized travel options increases the movement capacity of the existing public right-of-way and capitalizes on resident needs for more active lifestyles.
- **Teardowns and infill development.** High land prices and scarcity of available land within the city have resulted in a sharp increase in single-family home redevelopment. New housing is often significantly larger than existing adjacent housing, particularly in small-lot neighborhoods, and can appear to visually overwhelm these homes, block views or cast shadows on them. There has been considerable public discussion about the appropriate massing, height and proportions of architectural elements in established neighborhoods. How can the City balance the desire of some residents for larger homes with state-of-the-art features and developers seeking to offer housing units that appeal to today’s market, with the interests of neighbors who object to the size and scale of some new construction?



*Indicators of teardown pressure – a lot where a smaller house was demolished; large-scale new construction and housing that appears out-of-scale with its neighbors.*

- **Aging population.** The City, along with the rest of the nation, faces a dramatic shift in the demographic makeup of its residents. The “baby boom” generation is becoming the senior generation. The land use implications of this change are many: today’s elders will live longer, lead more active lives and, by their sheer number, influence the type and character of land uses more than the previous generation. How can the City meet the typical needs of senior residents for more recreational opportunities, a flexible transportation network, and the ability to adapt their dwellings in order to age-in-place.
- **Development intensity and infrastructure capacity.** The scarcity of land for redevelopment increases the value of the parcels that are zoned for intensive use. This impacts the character of development proposals submitted to the City, particularly in the Greater Southdale/Centennial Lakes area. Recent development proposals for high density mixed use development may be restricted by a lack of infrastructure capacity, particularly in the areas of traffic and wastewater. How can the City encourage high-quality redevelopment in areas where the public infrastructure can support it?
- **Housing affordability.** One effect of high land prices is that affordable housing continues to be an issue for many Edina residents, as documented by the recent Housing Succession Study. As a participating municipality in the Livable Communities Act, the City has acknowledged the need for affordable housing in the community and has budgeted some resources toward easing the shortage. Given the scarcity and high prices of land, how can the City best direct its resources to achieve this goal?
- **Auto-oriented site design.** With the exception of the 50th and France and Morningside centers, Edina’s commercial centers and nodes do not offer the same quality of site planning as is evident in the City’s older residential neighborhoods. The focus is on attracting and catering to the interests of the customer arriving to the site in a private automobile. This site-design perspective has obvious consequences: surface parking is



visually prominent, signage is designed to be legible at driving speeds, landscaping remains limited, and connectivity to surrounding uses is inconvenient or even dangerous for non-driving customers.

Although in some cases, zoning requirements may have guided the placement of buildings within large expanses of parking, site plans are often lacking in landscaping and pedestrian amenities that could mitigate environmental and transportation-related impacts. When buildings are set within wide expanses of parking, customers and workers are discouraged from walking to nearby destinations, so travel for short trips is predominantly by car, further adding to traffic congestion.

- **Superblocks and Lack of Connectivity.** The development of large parcels as signature planned developments, such as Southdale Shopping Center, Edinborough and Centennial Lakes, has contributed significantly to Edina's identity and differentiation from comparable Metro area communities. However, one consequence of this type of development is an absence of street connectivity to surrounding neighborhoods and through the development itself. Instead, vehicular traffic is funneled onto a few local streets where capacity is often not adequate to meet the need. For instance, France and York avenues bear a local traffic burden that could be better accommodated through a more diffuse street network. The "superblocks" created in the southeast quadrant of the city reshape traffic patterns and travel modes to discourage non-motorized transportation within the district and fracture linkages to surrounding residential neighborhoods.

## 4.4 GOALS AND POLICIES: FUTURE LAND USE PLAN AND COMMUNITY DESIGN GUIDELINES

### Land Use Goals

1. Protect and preserve the essential character of existing residential neighborhoods.
2. Preserve and maintain housing that serves a range of age groups and economic situations.
3. Facilitate the development of new housing and recreation facilities that accommodate the special needs of aging City residents.
4. Encourage infill/redevelopment opportunities that optimize use of city infrastructure and that complement area, neighborhood, and/or corridor context and character.



5. Support and enhance commercial areas that serve the neighborhoods, the city, and the larger region.
6. Increase mixed use development where supported by adequate infrastructure to minimize traffic congestion, support transit, and diversify the tax base.
7. Increase pedestrian and bicycling opportunities and connections between neighborhoods, and with other communities, to improve transportation infrastructure and reduce dependence on the car.
8. Ensure that public realm corridor design is contextual, respectful of adjacent neighborhood character, supportive of adjacent commercial and/or mixed use development, promotes community identity and orientation, and creates the highest quality experience for pedestrians, cyclists, and transit users.
9. Incorporate principles of sustainability and energy conservation into all aspects of design, construction, renovation and long-term operation of new and existing development.
10. Improve the current development review and approval system to provide clearer direction as to community design goals and encourage high-quality development.

### **Land Use and Transportation Interface**

There is a fundamental link between land use planning and transportation planning. The transportation system must function as a network that links a diversity of uses in a manner that promotes efficient multi-modal travel (motor vehicles, bicycle, transit, and pedestrian). Successful land use planning cannot occur without taking transportation considerations into account. Conversely, transportation planning is driven by the need to support existing and planned future land uses which the community supports and/or anticipates.

Therefore, Edina will plan and design transportation facilities, and maintain existing facilities, in a manner that accommodates land uses to reinforce neighborhood cohesion, but does not burden other neighborhoods, takes advantage of and supports transit, connects effectively to sub-regional and regional systems, and uses techniques to limit single-occupancy vehicle travel while promoting bicycle and pedestrian modes of travel. Chapter 7 of this Comprehensive Plan deals with transportation, and responds to and supports the land use and community design policies presented in this chapter.

The land uses and densities presented in the 2030 Land Use Table are the bases for the planned/ anticipated future land use in the Transportation Analysis Zones (TAZs) which are the foundation for the traffic forecasting model (see Chapter 7)



### Future Land Use Plan

A basic theme of the land use plan is that Edina's low-density residential neighborhoods, which make up over 50 percent of the city's land area, are expected to remain largely unchanged. In general, the land use plan focuses on areas of the city where changes are likely to occur, either through redevelopment or infill development. Within those areas, the plan emphasizes the integration of compatible uses to meet the changing needs of Edina residents.

The Future Land Use Plan (Figure 4.3) depicts the pattern of planned land use at the parcel or block level. This plan takes into account the established pattern of land use, as shaped by current zoning and other regulations. However, land uses on individual parcels, blocks or tracts are likely to change during the time period of this plan, due to changes in ownership or market conditions. Therefore, the land use plan will undoubtedly require periodic updating in conjunction with rezoning requests or other changes.

The Community Design guidelines in this chapter look at existing and planned land uses from the perspective of their current natural, designed, or built character. The guidelines suggest design strategies for protecting or enhancing this character or allowing for appropriate transitions.



Examples of moderate-density residential development.



**Acres of Existing and Future Land Uses**

Table 4.2 shows a comparison between the total acreage of future land uses from Edina’s 2000 Comprehensive Plan and the 2008 Plan Update.

**Table 4.2  
Acreage of Existing and Future Land Use Categories, 2000-2030**

Land Use Category	Existing		Planned			2030	
	2000	2010	2015	2020	2025	2030	Net Acres*
<b>Residential Categories*</b>							
Low Density Residential- LDR	6,084	6,033	6,007	5,982	5,956	5,931	4,745
Low Density Residential- Attached- LDA	169	169	168	168	168	168	134
Medium Density Residential- MDR	226	233	236	240	243	247	185
High Density Residential- HDR	215	229	237	244	251	259	129
<b>Nonresidential and Mixed Use Categories</b>							
Neighborhood Commercial- NC	24	24	24	24	23	23	14
Office Residential-OR	0	118	176	235	293	352	176
Office- O	287	216	181	145	110	75	37
Mixed Use Center- MXC	90	131	151	171	192	212	106
Community Activity Center- CAC	217	201	193	185	177	170	85
Industrial-I	382	367	359	352	344	337	168
Regional Medical- RM	61	61	61	61	61	61	31
Open Space and Parks- OSP	1,015	1,136	1,196	1,257	1,317	1,377	--
Public/Semi-Public- PSP	1,034	887	814	741	667	593	--
Limited Access Highway- LAH	406	406	406	406	406	406	--
<b>Total</b>	<b>10,209</b>	<b>10,209</b>	<b>10,210</b>	<b>10,210</b>	<b>10,210</b>	<b>10,209</b>	<b>5,810</b>

Source: Metropolitan Council, City of Edina, URS

\* Net acres provided for regional planning purposes only and were derived by subtracting a percentage, based on type of land use, for public infrastructure and zoning ordinance requirements from each future land use category total acreage. Total acres may be inconsistent due to rounding. Allowable residential net acre density figures are included in Table 4.3 Future Land Use Categories.

Figure 4.3 shows the Future Land Use Plan map.





**Future Land Use Categories.** The categories in the table below apply to the Future Land Use Plan. It is important to note that land use categories are not zoning districts – they are broader and more long-term in scope. The land use plan and the zoning ordinance should be consistent with one another, but are not identical. Each land use category may be implemented through more than one zoning district, allowing for important differences in building height, bulk and coverage in different areas of the city. Some revisions to existing zoning districts or creation of new districts may ultimately be needed as part of the implementation of the land use plan.

Land uses are characterized primarily by range of densities or intensities. For residential uses, density is defined in terms of dwelling units per net acre (exclusive of road rights-of-way and public lands). For nonresidential and mixed uses, intensity is typically defined in terms of floor-to-area ratio, or FAR, which refers to the ratio of a building's floor area to the size of its lot. Thus, a maximum FAR of 1.0 could allow for a two-story building covering 50% of the lot; a 3-story building on one-third of the lot, and so on. Building heights are not specified in the table, because height will vary within and between categories, based on neighborhood context, infrastructure, and community design goals. (See the discussion later in this section.)

The “Development Guidelines” in the table below are intended to highlight important design considerations for each land use category, but are not regulatory in nature.



**Table 4.3. Future Land Use Categories**

Residential Categories	Description, Land Uses	Development Guidelines	Density Range
<b>LDR</b> Low Density Residential	Applies to largely single-family residential neighborhoods, encompassing a variety of lot sizes and street patterns (see “Character Districts” for more detail). Typically includes small institutional uses such as schools, churches, neighborhood parks, etc.	Massing standards (under development) and impervious coverage limitations would apply to ensure compatibility of infill construction.	<b>1 - 5 units/acre</b> Floor to Area Ratio: per current Zoning Code*
<b>LDA</b> Low-Density Attached Residential	Applies to two-family and attached dwellings of low densities and moderate heights. This category recognizes the historical role of these housing types as transitional districts between single-family residential areas and major thoroughfares or commercial districts. May include single-family detached dwellings.	Introduction of more contemporary housing types, such as low-density townhouses, may be an appropriate replacement for two-family dwellings in some locations, provided that adequate transitions to and buffering of adjacent dwellings can be achieved.	<b>4 - 8 units/acre</b> Floor to Area Ratio: per current Zoning Code*
<b>MDR</b> Medium-Density Residential	Applies to attached housing (townhouses, quads, etc.) and multi-family complexes of moderate density.  May also include small institutional uses, parks and open space	In new development or redevelopment, improve integration of multi-family housing into an interconnected street network and work to create an attractive, pedestrian-friendly street edge.	<b>5 - 12 units/acre</b> Floor to Area Ratio: per current Zoning Code*
<b>HDR</b> High-Density Residential	Existing “high-rise” and other concentrated multi-family residential, some of which may contain a mixed use component.  May also include limited office, service or institutional uses primarily to serve residents’ needs, parks and open space	Provide incentives for updating older multifamily buildings.  Work to create an attractive, pedestrian-friendly street edge and provide convenient access to transit, schools, parks, and other community destinations.	<b>12 - 30 units/acre</b> Floor to Area Ratio: per current Zoning Code*



Nonresidential and Mixed Use Categories	Description, Land Uses	Development Guidelines	Density Guidelines
<p><b>NC</b>  <b>Neighborhood Commercial</b>                      Current examples:</p> <ul style="list-style-type: none"> <li>• Morningside commercial core</li> <li>• Valley View and Wooddale</li> <li>• 70<sup>th</sup> &amp; Cahill</li> </ul>	<p>Small- to moderate-scale commercial, serving primarily the adjacent neighborhood(s). Generally a 'node' rather than a 'corridor.' Primary uses are retail and services, offices, studios, institutional uses. Residential uses permitted. Existing and potential neighborhood commercial districts are identified for further study.</p>	<p>Building footprints generally less than 20,000 sq. ft. (or less for individual storefronts). Parking is less prominent than pedestrian features. Encourage structured parking and open space linkages where feasible; emphasize enhancement of the pedestrian environment.</p>	<p><b>Floor to Area Ratio-Per current Zoning Code: maximum of 1.0*</b>                      2 - 3 units/acre</p>
<p><b>OR</b>  <b>Office-Residential</b>                      No current examples in City. Potential examples include Pentagon Park area and other I-494 corridor locations</p>	<p>Transitional areas along major thoroughfares or between higher-intensity districts and residential districts. Many existing highway-oriented commercial areas are anticipated to transition to this more mixed-use character. Primary uses are offices, attached or multifamily housing. Secondary uses: Limited retail and service uses (not including "big box" retail), limited industrial (fully enclosed), institutional uses, parks and open space. Vertical mixed use should be encouraged, and may be required on larger sites.</p>	<p>Upgrade existing streetscape and building appearance, improve pedestrian and transit environment. Encourage structured parking and open space linkages where feasible; emphasize the enhancement of the pedestrian environment.</p>	<p><b>Floor to Area Ratio-Per current Zoning Code: maximum of 0.5 to 1.0*</b>                      2 - 3 units/acre</p>
<p><b>O</b>  <b>Office</b>                      Current examples include the office buildings on the west side of TH 100 between 70<sup>th</sup> and 77<sup>th</sup> Streets.</p>	<p>This designation allows for professional and business offices, generally where retail services do not occur within the development unless they are accessory uses that serve the needs of office building tenants. Vehicle access requirements for office uses are high; however, traffic generation from office buildings is limited to morning and evening peak hours during weekdays. Office uses should be located generally along arterial and collector streets.</p>	<p>Provide buffer/transition to adjacent residential uses. Use high quality permanent building materials and on-site landscaping. Encourage structured parking.</p>	<p><b>Floor to Area Ratio - Per Zoning Code: Maximum of 0.5</b></p>



Nonresidential and Mixed Use Categories	Description, Land Uses	Development Guidelines	Density Guidelines
<p><b>MXC</b>  <b>Mixed-Use Center</b>                      Current examples:</p> <ul style="list-style-type: none"> <li>• 50<sup>th</sup> and France</li> <li>• Grandview</li> </ul>	<p>Established or emerging mixed use districts serving areas larger than one neighborhood (and beyond city boundaries).                      Primary uses: Retail, office, service, multifamily residential, institutional uses, parks and open space.                      Vertical mixed use should be encouraged, and may be required on larger sites.</p>	<p>Maintain existing, or create new, pedestrian and streetscape amenities; encourage or require structured parking. Buildings “step down” in height from intersections.                      4 stories at 50<sup>th</sup> &amp; France; 3-6 stories at Grandview</p>	<p><b>Floor to Area Ratio-Per current Zoning Code: maximum of 1.5</b>                      1 - 2 units/acre</p>
<p><b>CAC</b>  <b>Community Activity Center</b>                      Example: Greater Southdale area (not including large multi-family residential neighborhoods such as Centennial Lakes)</p>	<p>The most intense district in terms of uses, height and coverage.                      Primary uses: Retail, office, lodging, entertainment and residential uses, combined or in separate buildings.                      Secondary uses: Institutional, recreational uses.                      Mixed use should be encouraged, and may be required on larger sites.</p>	<p>Form-based design standards for building placement, massing and street-level treatment.                      Buildings should be placed in appropriate proximity to streets to create pedestrian scale. Buildings “step down” at boundaries with lower-density districts and upper stories “step back” from street.                      More stringent design standards for buildings &gt; 5 stories.                      Emphasize pedestrian circulation; re-introduce finer-grained circulation patterns where feasible.</p>	<p><b>Floor to Area Ratio-Per current Zoning Code: maximum of 0.5 to 1.0*</b>                      2 - 3 units/acre</p>
<p><b>I</b>  <b>Industrial</b></p>	<p>Applies to existing predominantly industrial areas within the City.                      Primary uses: industrial, manufacturing. Secondary uses: limited retail and service uses.</p>	<p>Performance standards to ensure compatibility with adjacent uses; screening of outdoor activities.</p>	<p><b>Floor to Area Ratio: Per Zoning Code: 0.5*</b></p>



Nonresidential and Mixed Use Categories	Description, Land Uses	Development Guidelines	Density Guidelines
<b>RM Regional Medical</b>	Hospitals, medical and dental offices and clinics, and laboratories for performing medical or dental research, diagnostic testing, analytical or clinical work, having a direct relationship to the providing of health services. General office uses are permitted.	Form-based design standards for building placement, massing and street-level treatment. Pedestrian circulation and open space amenities should be provided for larger sites.	<b>Floor to Area Ratio - Per current Zoning Code: maximum of 1.0</b>
<b>OSP Open Space and Parks</b>	Applies to major parks and protected open space that is publicly owned. May not include all small parks, since some are included in residential land use districts.	Performance and buffering standards for intensive outdoor recreation, parking.	<b>N/A</b>
<b>PSP Public/Semi-Public</b>	Applies to schools, large institutional uses (churches, cemeteries) and semi-public uses such as country clubs. Some small uses of these types may be integrated into other land use districts.	Performance and buffering standards for intensive outdoor recreation, parking.	<b>To be determined - may require review of large-scale development or institutional expansion</b>
<b>LAH Limited Access Highway</b>	Expressways and access ramps for two regional arterial highways (TH 62 and TH 100) occupy land within the City to serve local and regional travel needs.	<b>NA</b>	<b>NA</b>

\*Floor-to-area ratio, or FAR, refers to the ratio of a building's floor area to the size of its lot. Thus, an FAR of 1.0 could mean a two-story building covering 50% of the lot; a 3-story building on one-third of the lot, etc.

### Potential Areas of Change

Among its many purposes, the Comprehensive Plan functions as a long range tool that attempts to anticipate where change and growth will occur in the City. Identifying those potential areas of change is an initial stage in the process of guiding new construction and redevelopment when it is proposed by private property owners. It is not an attempt to stimulate change, but to acknowledge that it may occur and be proactive in shaping it. Locations identified in this section appear to be areas where change may occur during the life of this Plan. Many of these areas were identified in a group exercise at Public Meeting #2 as



suitable areas to accommodate additional households and jobs that are anticipated, based on Metropolitan Council projections, to locate in the City by 2030. **Because the City is fully developed, additional housing would have to occur through redevelopment.** The areas listed here and shown in Figure 4.4, "Potential Areas of Change," represent less than 10 percent of the total acreage of the City.

1. **North France Avenue (West 54<sup>th</sup> Street South to TH 62):** This corridor includes many duplexes interspersed with small-lot single-family dwellings and small commercial nodes. It has the potential to accommodate some additional attached housing types, with careful attention to transitions, and some additional commercial opportunities near 54<sup>th</sup> Street.
2. **Neighborhood Commercial Nodes:** These include the Morningside commercial area, Valley View and Wooddale, and 70th and Cahill. The last two have greater potential for addition of new compatible uses.



3. **Community Commercial Nodes:** These include the 50th and France district and the Grandview Heights district, both of which have experienced redevelopment and are evolving toward mixed use, while continuing to function as commercial centers.
4. **Southdale Area:** This area is the northern portion of the study area of the "Greater Southdale Area Land Use and Transportation Study" received by City Council in February 2006 (the southern portion included in that study is the Centennial Lakes area). The Southdale area is the site of considerable development pressure. Design standards and equivalent zoning updates should be developed as discussed under the Community Design guidelines.
5. **Commercial/Office Corridors:** These areas include the commercial/office development along I-494 and locations on the edges of the Southdale and Cahill Industrial areas. Long-term transition is envisioned away from single-site commercial use toward a mix of predominantly office and residential uses. Additional site-specific studies may be necessary.



Table 4.4 shows some key statistics of the Potential Areas of Change.

**Table 4.4**  
**Summary Table of Potential Areas of Change**  
**Net Acres by Land Use Category, 2000-2030 Change in Number of Dwellings and Jobs**

Future Land Use Category within Potential Area of Change	Net acres	Net Acre Density Range		Change 2000-2030	
		Dwellings	Jobs	Dwellings	Jobs
Low Density Res.- Attached- LDA	9.6	4-8 du/ac	--	10	--
High Density Res.- HDR	10.2	12-30 du/ac	2-3	300	20
Neighborhood Commercial- NC	13.6	2-3 du/ac	0.5-1	25	30
Office Residential- OR	126.1	2-3 du/ac	35-40	400	2,200
Office- O	37.1	--	40-45	--	900
Mixed Use Center- MXC	106.1	1-2 du/ac	25-30	110	400
Community Activity Center- CAC	108.5	2-3 du/ac	70-75	500	600
Industrial- I	37.4	--	40-45	--	300
Regional Medical- RM	30.5	--	45-50	--	200
<b>Total</b>	<b>459.3</b>			<b>1,345</b>	<b>4,650</b>

Source: URS, Metropolitan Council Key: du/ac= dwelling units per acre

Note: This table is done for regional planning purposes only. Projections for 2000-2030 change in households and employment are derived from the Metropolitan Council's Revised Regional Framework. It cannot be determined if or when redevelopment may occur within the identified areas, but it is presumed that 90 percent of additional households and 100 percent of added jobs will be located within the Potential Areas of Change. For purposes of planning for public infrastructure, the mix of development is estimated. Based on 2030 household and employment forecasts by TAZ, the estimated residential/employment percentage split for High Density Residential: 95/5; Neighborhood Commercial: 5/95; Mixed Use Center: 10/90; Community Activity Center: 5/95; Regional Medical: 0/100; Office Residential 5/95; and for Industrial: 0/100.

Figure 4.4 “Conceptual Land Use Framework: Potential Areas of Change” shows the areas of potential change.

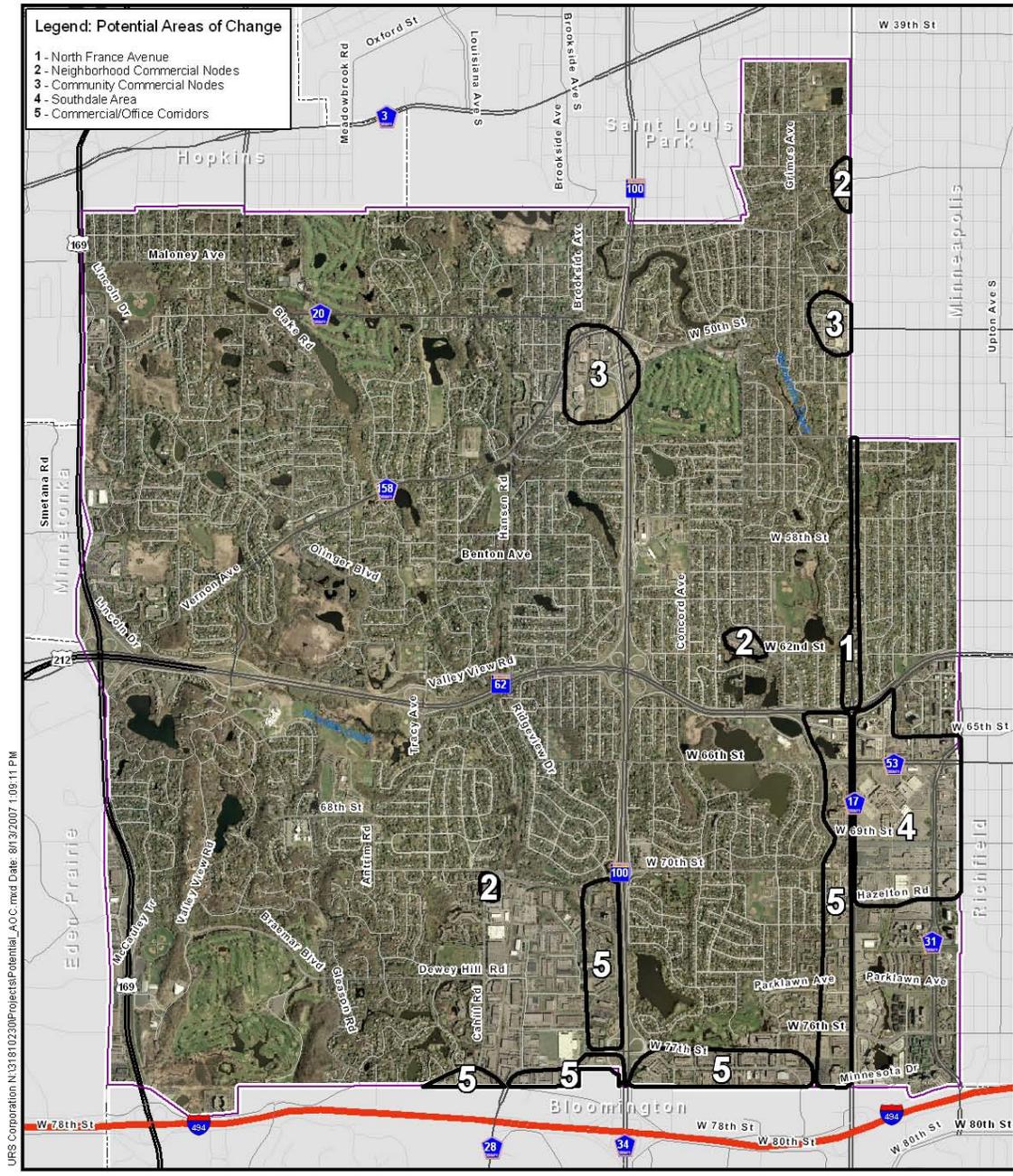


Figure 4.4



**City of Edina**  
2008 Comprehensive Plan Update

Date of Aerial Photography: August 2006

**Conceptual Land Use Framework:  
Potential Areas of Change**





## Land Use Policies

1. The City will endeavor to accommodate private redevelopment in the Greater Southdale area, Grandview Heights and the West 77th St. corridor.
2. The City will study low-density mixed-use infill potential in neighborhood commercial districts compatible with density currently allowed in those areas.
3. Edina has evolved to a large degree into a community defined by roads. The City's roads should continue to evolve to act as connectors, rather than as barriers. The City will incorporate amenities and infrastructure into its public corridors to make them beautiful, efficient, multi-modal public spaces.
4. Building on current efforts, the City will seek options that allow for single-family redevelopment that is sensitive to the community character and context of existing neighborhoods.
5. In reviewing development proposals, the City will examine how land use and transportation are integrated to ensure that new development and redevelopment expands non-motorized travel options.
6. The City will maintain the current open space<sup>1</sup> and wetlands acreage and seek to expand it whenever possible.
7. The City will seek opportunities to increase the supply of affordable housing.
8. The City will grow and develop in a sustainable manner that will protect its high quality natural environment, promote energy efficiency and conservation of natural resources, and minimize the impacts of buildings on the environment over the lifetime of each building.
9. The City will revise its development review and approval process to provide clearer direction and guidance for achieving high-quality development that is compatible with its surroundings.

## Staging of Development: Small Area Plans

Given the essentially developed character of the City, the Land Use Plan does not include a specific schedule for staging or phasing of redevelopment. However, the act of identifying the Potential Areas of Change is intended to highlight the need for Small Area Plans that focus on these areas. These studies, conducted in consultation with residents, property owners, business owners and

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<sup>1</sup> Open space is defined as lands containing creeks, greenways, forest, habitat areas, sensitive natural areas, and other areas with unique characteristics that are unsuitable for development.



commercial property owners, will produce a guide for redevelopment. A request to initiate a specific Small Area Plan can be made by community groups, business groups, the Planning Commission, or City staff. A development proposal that involves a Comprehensive Plan Amendment or a rezoning will require a Small Area Plan study prior to planning application. However, the authority to initiate a Small Area Plan rests with the City Council.

Plans may include identification of sub-areas with distinctive characteristics, recommendations for phasing of development/redevelopment, and standards for managing transitions between existing and planned uses.

These Small Area Plans may include planning principles such as:

- 1) Area or neighborhood land use pattern and design that encourages walking and transit use
- 2) High degree of connectivity to existing and new public (and active private) spaces to encourage physical activity, social interaction, and optimal land use
- 3) Smaller parking footprints
- 4) Reduction in impervious surfaces and associated storm water runoff
- 5) Water quality-water conservation measures- reuse of graywater, wastewater management
- 6) Potential for creating lifecycle housing
- 7) High quality of community design, with a system for measuring excellence, not just compliance with design guidelines.

Additional areas may also be identified for further study. See Chapter 12, Implementation, for further details.

### **Staging of Development: Community Design Guidelines**

In order for Edina to remain economically competitive, attractive to residents, businesses, and visitors, and sustainable, the community must be more than functionally responsive. Edina must also be beautiful, vibrant, safe, inclusive, and promote active living. The principles and guidelines in this chapter are intended to help the City achieve this vision by focusing on the design of the built environment and the natural environment. The community design principles apply to both City actions and private sector development. The City is responsible for designing, maintaining and improving its streets, parks, public buildings and other public spaces. The private sector is encouraged to design buildings, structures and landscape features that complement and support the public realm and fit within the context of the surrounding neighborhoods or districts.

This section provides principles and guidelines, organized into two areas (1) Citywide Movement Patterns and Public Spaces, and (2) Buildings, Site Design, and Interconnecting Spaces.



## Citywide Movement Patterns and Public Spaces

The design of the public realm, comprising the City's streets, parks, trails, paths and public spaces, should express community identity, encourage an interactive community social life, and foster a sense of welcome to visitors.

### Principles

1. Design public open and green linkages that bring both amenity and positive image to neighborhoods, corridors, and business precincts.
2. Design public streets to serve not only vehicles but also pedestrians, people with mobility aids, and bicycles, balancing the spatial needs of existing and future users within the right-of-way. Address both mobility and recreational needs and opportunities.
3. Create walkable streets that foster an active public life; streets that are energized by their proximity to a vibrant mix of activity-generating uses.
4. Preserve and make accessible natural areas and features as part of a comprehensive open space network.
5. Protect and improve the urban forest, including street trees and related landscaping, in order to provide shade and shelter for pedestrians and screening for parking and service uses.
6. Create and promote environments that make it safe and convenient for people to integrate physical activity into their daily routines.
7. Recognize and integrate Edina's historic landscape features, such as its stone walls and gateways, into the design and redesign of streets, paths and pedestrian ways.
8. Promote a clear hierarchy of street types of distinctive and differentiated character that are defined by landscape and pedestrian amenities as well as adjacent buildings.
9. Within larger redevelopment sites, promote a fine-grained and interconnected network of local streets and paths, encouraging pedestrian circulation and providing a choice of access points.





10. Within corridors served by existing or planned transit, orient buildings toward sidewalks and paths that lead to mixed use destinations and transit stops.
11. Encourage design of building entrances that open up and link directly to sidewalks and pedestrian and bike paths.
12. Open space within new development should be attractive, interesting, comfortable, and functional for pedestrians.

## Guidelines

**1. Community Design Roadway Corridors.** Identify and designate through design treatments specific City streets as primary thoroughfares, designed to connect activity centers while integrating green space and pedestrian / bicycle elements wherever feasible, including attractive lighting standards with appropriate lighting levels, to promote maximum use. The proposed community design roadway corridors shown in Figure 4.5 illustrate one potential approach to a citywide system of this type. Three major thoroughfare types are identified:

- **Primary Thoroughfare:** This classification denotes a centrally-located street that serves multiple functions. In Figure 4.5, only France Avenue south of TH 62 is shown in this category. France Avenue is the central 'spine' of the Greater Southdale district, including the hospital precinct, the Southdale shopping center, and the regional office and retail businesses that straddle France Avenue all the way to I-494. The evolution of France Avenue from its current automobile-dominated character to a more attractive and balanced design will also draw upon the "Guidelines: Medium- and High-Density Design (All Uses)" in this chapter.
- **Residential Thoroughfares:** Many of the City's major thoroughfares run through largely residential neighborhoods, including Vernon Avenue, Interlachen Boulevard and north France Avenue. Access points along some streets are limited, while others have many intersecting driveways. Mature trees, stone walls and gateways and other landscape elements give many of these streets an attractive character. Any improvements to these roads should be designed to maintain landscape character and improve bicycle





and pedestrian facilities while continuing to limit the number of access points.

- **Business District Thoroughfares:** This category includes streets that serve commercial and office centers and corridors. The design and character of these streets vary widely. Potential improvements should emphasize pedestrian amenities and landscape improvements, while consolidating access points to businesses.



**2. A Planned Bicycle Circulation System.** Plan and implement a city-wide system of on-street and off-street bike lanes and trails that link residents to key activity centers and regional trails. Specific recommendations for this system will be developed as part of the Bike Edina planning effort.

**3. Open Space Transitions.** Provide and protect green space as a transition between incompatible land uses, along major transportation corridors, and as buffers protecting waterways, trails and recreation facilities. Encourage the design of green space on private property to complement design of the public realm.



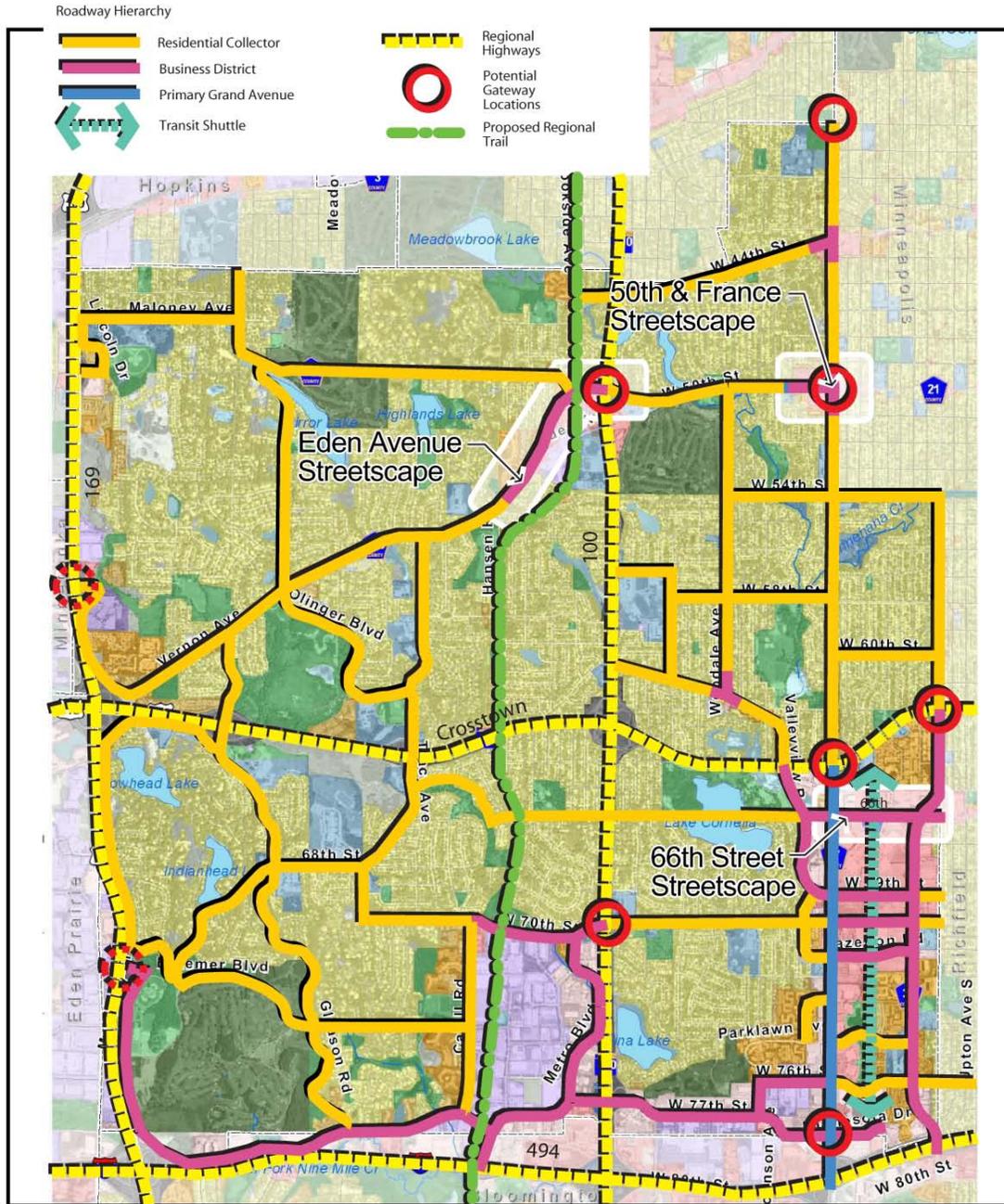
**4. Open Space Networks.** Use public and semi-public open space as a citywide network fostering activity and civic life. This system should include parks, trail corridors, informal greenways, the Minnehaha and Nine Mile Creek valleys, and local streets that complement major thoroughfares and may be better suited to pedestrian and bicycle circulation.



**5. Gateways.** Identify and develop gateways to signify neighborhoods, thoroughfares and business districts. Gateway elements should include lighting, signage, street furniture and public art, in combination with buildings and other streetscape improvements. Many of these elements are already present in districts such as 50<sup>th</sup> and France, Eden Avenue/Grandview Square, and 70<sup>th</sup> and Cahill.



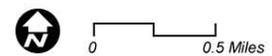
Figure 4.5 (next page) also shows locations where the City has invested in significant streetscape improvements, including 50<sup>th</sup> and France, Eden Avenue and 66<sup>th</sup> Street.



**Community Design Roadway Corridor-Proposed**  
**Figure 4.5**



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## Buildings, Site Design, and Interconnecting Spaces

As a largely developed city, Edina's future growth will be built on infill and redevelopment sites and will need to fit in, respecting and improving the character of surrounding areas. On large sites, in redevelopment areas, and in other areas whose physical contexts are no longer appropriate, new planning contexts will need to be created to ensure that each new development in these areas adds up to more than the sum of its parts. The following principles, focused primarily on aesthetic issues, provide guidance when redevelopment occurs.

### Principles

1. Design buildings to provide human scale, interest and variety that will encourage and support a pedestrian-scaled streetscape, as expressed through building massing, façade articulation, materials and details.
2. Recognize that diverse architectural styles can be employed to achieve City-building goals.
3. Locate and orient buildings to fit with their existing and/or planned context by framing and complementing adjacent streets, parks and open spaces.
4. Locate and orient vehicle parking, vehicular access, service areas and utilities to minimize their visual impact on the property and on adjacent/surrounding properties, without compromising the safety and attractiveness of adjacent streets, parks, and open spaces.
5. Regulate scale, massing, and height to provide complementary transitions to adjacent sites and nearby neighborhoods and areas.





## Guidelines: Low- Density Design (Residential)

**1. Control the scale and massing of infill housing to make it reasonably compatible with established residences.** Recent zoning changes have addressed this issue. Future zoning changes should refer to and consider the

### Recent zoning changes to address the massing issue:

- Measuring building heights from existing grade, rather than proposed grade;
- Creation of a sliding scale of setback requirements based on lot width to increase the separation between houses on narrow lots;
- The elimination of bay windows as an exception into the required setback;
- The first floor elevation of a new home may not increase the first floor elevation from the previous home on the lot by more than one foot.

Character Districts described earlier in this chapter. Other techniques that may be considered include:

- a graduated scale, or floor area ratio that relates building size to lot size;
- an impervious surface maximum to ensure that a reasonable percentage of each lot remains as green space, for aesthetics and stormwater management;
- design standards that guide the stepping back of building mass and height from adjacent residential buildings and parks.

**2. Building and garage placement.** Many neighborhoods and individual blocks have an established pattern of building placement, spacing, landscape treatments, front yard setbacks and garage placement that combine to convey a particular neighborhood character. For example, most garages in the City's older traditional neighborhoods are detached and located within the rear yard. While new construction is likely to vary from this pattern, some limits on the degree of variation may be appropriate in areas such as historic districts. For example, the following guidelines should be considered:



- The width of front-loaded garages is limited so that they occupy no more than a defined percentage of the front façade;
- Driveway width at the curb is limited;
- Front-loaded garages may be required to meet the same setback as the rest of the front façade.

These and similar techniques could be considered as part of a 'conservation overlay' option within the zoning code.



**3. Integration of multi-unit housing into transitional areas.** As mentioned under "Character Districts, Postwar Contemporary Housing," duplexes were located along many major thoroughfares in Edina as a kind of buffer or transition to the adjacent single-family housing.

Today this housing type is in need of updating or replacement in many locations, and high land and redevelopment costs create pressure for higher-density housing types. Townhouse complexes have been constructed in locations such as north France Avenue. The challenge is that in many locations the duplexes are only one lot deep, which makes it difficult to provide an adequate transition to single-family scale. The following guidelines broadly address the issue of integrating multi-unit housing into lower-density, primarily single-family neighborhood transitional areas.



**Single-family characteristics.** Attached and multifamily housing should emulate single-family housing in its basic architectural elements – pitched roofs, articulated facades, visible entrances, porches or balconies. Taller buildings should step down to provide a height transition to existing adjacent residential buildings.





**Level of formality.** Design the front and back facades with appropriate levels of formality. The front, as the more public side of the house, will receive the more formal treatment, with the main entrance, porch or steps and landscaping, while trash/recycling storage, play equipment and outdoor storage should be located in the back.

**Semi-private transitional space.** Adding a porch and providing adequate landscaping provide a sense of privacy for residents while allowing them to keep “eyes on the street.” Provide opportunities for surveillance of shared outdoor areas such as streets, sidewalks and play areas from within the home.



**Parking to the rear.** Where rear-loaded or detached garages predominate, parking spaces and garages should be located to the rear of the lot or interior of the block. If this is infeasible, garages should be recessed some distance behind the main façade of the house and surface parking should be placed within side yards to the extent feasible.

**Mechanical systems** on all buildings should be positioned so they are not visible from the public view, unless they are an integral part of the architectural design (i.e. photovoltaic roof tiles). Solar panels, satellite dishes and air conditioning systems should be positioned to the back or side yard of the house, or screened by plantings or low walls.



**Garages and outbuildings** should be designed in character with the primary residence on the site. When placed on an alley or lane, the design should contain windows that provide a view to the lane, for additional security. When attached, the garage elevation should not dominate the street elevation of the primary residence.



## Guidelines: Medium- and High-Density Design (All Uses)

### 1. A Pedestrian-Friendly Environment.

Improving the auto-oriented design pattern discussed above under “Issues” will call for guidelines that change the relationship between parking, pedestrian movement and building placement.



**Landscaping.** Provide visual screening and privacy to buffer cars from people, provide visual relief and allow stormwater infiltration in parking lots. Permeable hardscape, where appropriate, is preferred over blacktop or traditional paving. Vertical “living walls” (trellis, vine-covered fences) are preferable to materials that absorb and reflect heat.

**Parking.** Evaluate current parking standards in order to encourage shared parking and minimize the visual impact of surface parking.



- Encourage or require placement of surface parking to the rear or side of buildings, rather than between buildings and the street.
- Landscaping is essential to screen parking areas, buffer adjacent residential uses and create a pedestrian-friendly environment along streets.
- Design surface parking to maximize stormwater infiltration and allow for groundwater recharge, using infiltration swales, pervious pavement or similar techniques.
- Where vehicle parking requirements exist, implement minimum bicycle parking standards as well.
- Design parking lots or structures so they can be shared by more than one building on the site or by buildings on neighboring sites.
- Enhance the appearance of parking ramps by designing the structure with the possibility of the addition of liner buildings when development opportunities are ripe.
- Use striping, curbs and landscape treatments, centralized walkway medians and islands, and textured paving to clearly define walking spaces within parking areas and adjacent to vehicular circulation.





- Use raised crossings, speed humps, and speed tables to discourage high traffic speeds in parking lots where pedestrian volumes are high.
- Locate and screen service and loading areas to minimize their visibility from public streets and adjacent residential areas.

**2. Create Successful Mixed Use Development.** As described in the Land Use Plan section of this chapter, many of Edina's commercial, office and industrial districts are evolving towards a greater degree of mixed use. The land use plan encourages this evolution by defining land use categories that encourage combinations of compatible uses.

Mixed use development allows for a savings in time and convenience for residents who choose to live in closer proximity to where they work and shop. Community interest is served by this type of development, as the city is able to integrate additional residences and businesses more efficiently within existing city infrastructure. Pedestrian amenities and proximity of uses encourage more trips to be made by foot or bike, reducing the increase of congestion that can otherwise result from conventional development of separated land uses.



The City of Edina has several examples of successful mixed-use developments, most notably the 100-acre Centennial Lakes area and the 24-acre Edinborough project. Centennial Lakes includes office space, medical facilities, entertainment, retail, public open space and housing.



Although the development levels are moderate to high, there are many pedestrian connections on the site and the park acts as a transition between the commercial and residential uses. The central feature of the project is the 24-acre park which includes a 10-acre lake that functions as a storm water retention facility. Surrounding the park are pedestrian pathways, a bent grass putting course, a performing arts pavilion, and the Park Centrum, which is an indoor gathering space for community events. Edinborough includes condominiums and senior housing apartments. The development also includes offices and a hotel. The highlight of the project is a one-acre indoor public park situated between offices and residential buildings. Edinborough is linked with the Centennial Lakes project by a network of pedestrian greenways.



The following guidelines are directed toward creating successful mixed use environments. (Also see the citywide standards for movement patterns, public spaces and built form earlier in this section.)

**Building Placement and Design.** Where appropriate, building facades should form a consistent street wall that helps to define the street and enhance the pedestrian environment. On existing auto-oriented development sites, encourage placement of liner buildings close to the street to encourage pedestrian movement.

- Locate prominent buildings to visually define corners and screen parking lots.
- Locate building entries and storefronts to face the primary street, in addition to any entries oriented towards parking areas.
- Encourage storefront design of mixed-use buildings at ground floor level, with windows and doors along at least 50% of the front façade.



**Movement Patterns.**

- Provide sidewalks along primary streets and connections to adjacent neighborhoods along secondary streets or walkways.
- Limit driveway access from primary streets while encouraging access from secondary streets.
- Encourage enhanced transit stops, including shelters, shade and seating where feasible.
- Provide pedestrian amenities, such as wide sidewalks, street trees, pedestrian-scale lighting, and street furnishings (benches, trash receptacles, etc).



**Appropriate Parking Standards.** Mixed use developments often produce an internal capture rate. This refers to residents and workers who obtain goods and services from within the development without making additional vehicle trips. Parking ratios for mixed use development should reflect the internal capture rate and the shared parking opportunities this type of development offers.

**3. Improve Connectivity in Large-scale Superblock Development.**

**Internal and external connectivity.** As part of redevelopment or expansion of large-scale sites, reintroduce an internal local street and pathway network that connects through the site and to suitable entry points at the perimeter. The goal



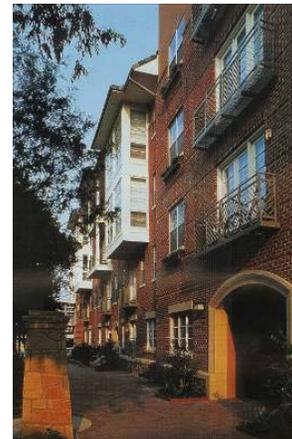
is to encourage pedestrians to reach the site and drivers upon arriving to continue all further movement by foot. As a result, the capacity of internal roads can be reduced and more area devoted to amenities, providing still more incentives to walk. Bicycle facilities should allow residents in surrounding neighborhoods to bike safely to the site. Transit stops should be provided in visible and central locations.

**“Edge” or transitional uses.** Moderately sized liner buildings should be encouraged to soften the edge of large-scale superblock development. Medium-density housing types such as townhouses combined with structured parking may also be an appropriate transitional use.



**4. Provide appropriate transitions between land uses.** Rather than discouraging movement between adjacent land uses with berms and fences, focus on creating elegant and attractive transitions between adjacent uses. Transitional areas include well-landscaped pedestrian walkways, seating areas, arcades, and other spaces that encourage public use, rather than separation.

**5. Buildings Frame the Street.** Building placement and heights can serve to define the streetscape and visually reduce the apparent width of the street. Generally speaking, wider streets can accommodate taller buildings subject to the height limitations described elsewhere in this Chapter.



**6. Façade Articulation.** Primary facades should be designed with a well-defined base, middle and top, providing visual interest at ground level. Building entries and access points should be clearly visible from the primary street. Long building facades should be divided into smaller increments using contrasting materials, textures, detailing, setbacks or similar techniques.



**7. Transparency and Natural Surveillance.** Building forms and facades should provide an awareness of the activity within the buildings through frequent doors and windows oriented toward public streets and open space.



**8. Variety of Building Forms.** Encourage an integrated mix of building types, heights and footprints within blocks, rather than single buildings or building groups.

**9. Building Height Transitions.** Taller buildings (generally four stories or higher) should step down to provide a height transition to surrounding residential buildings, including buildings across a street or pathway, and to avoid excessive shadowing of sidewalks, parks and public spaces.



**10. Building Heights.** The question of building height is particularly significant in a largely developed community, where any new building has the potential to block views or cast shadows on established neighborhoods and land uses. The design guidelines above, as well as the recommended building heights in Figures 4.6A, 4.6B, and 4.6C, provide general guidance for buildings that exceed the typical residential height of 2.5 stories:

Edina already has many tall buildings, but not all of them provide the kind of transition outlined in Principle 9 above. Building height should be considered within the larger urban design context as illustrated in the photos below.





## Building Height Issues

1. **Visual Impacts**  
*City Image / Landmarks / Views*
2. **Aesthetic Scale / Proportions**
3. **Light Access**
4. **Shadow Impacts**
5. **Density**
6. **Traffic Capacity**
7. **Utility Capacity**
8. **Cost of Land**
9. **Market Conditions**
10. **Developer Investment / Building Technology**

Visual / Aesthetics

Capacity

Financial



Because of the limited number of locations where tall buildings can be sited, and the need for sensitivity to surrounding uses, the following Height Maps have been established for those





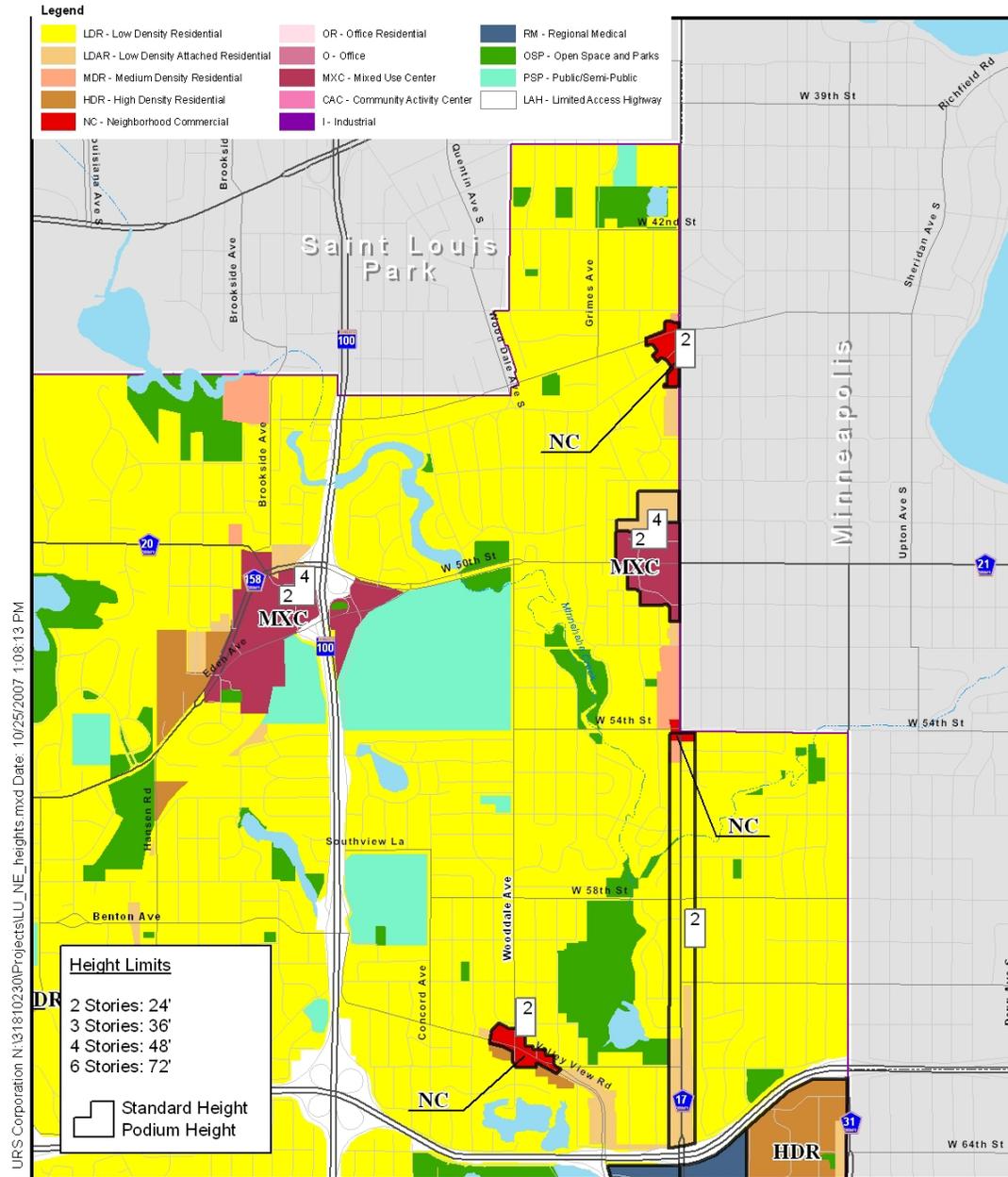
parts of the city with potential for higher density development. The maps were developed to specify the following height measurements:

**Podium Height:** The “podium” is that part of the building that abuts the street, or that provides the required transition to residential neighborhoods, parks, and other sensitive uses.

**Standard Height:** This height measurement extends to the top of the building (building height is measured as specified in the Zoning Ordinance).



*“Podium height” building examples*



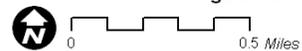
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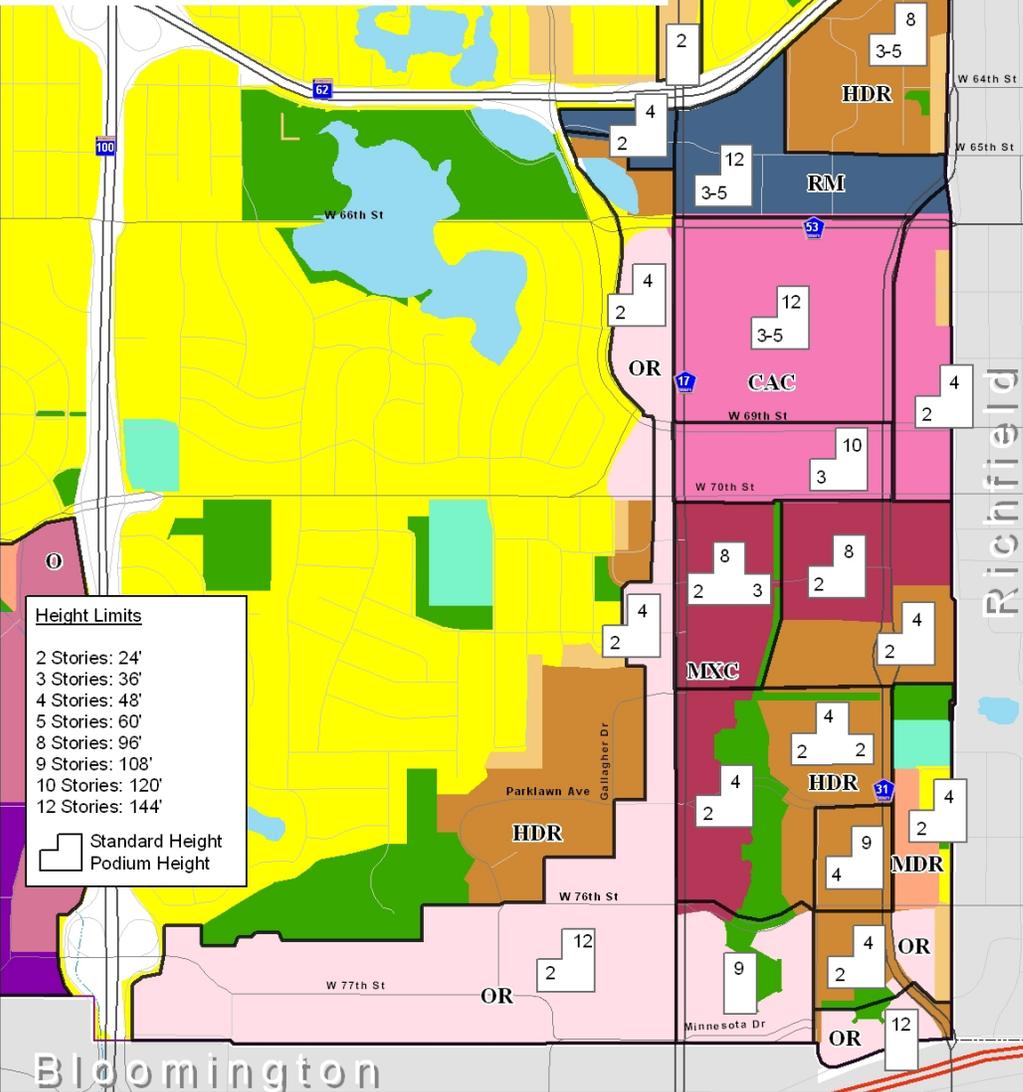
Data Source: URS

**Future Land Use Plan with Building Heights**  
Northeast Quadrant  
Figure 4.6A



**Legend**

- |   |                                 |                              |
|---|---------------------------------|------------------------------|
| LDR - Low Density Residential           | OR - Office Residential         | RM - Regional Medical        |
| LDAR - Low Density Attached Residential | O - Office                      | OSP - Open Space and Parks   |
| MDR - Medium Density Residential        | MXC - Mixed Use Center          | PSP - Public/Semi-Public     |
| HDR - High Density Residential          | CAC - Community Activity Center | LAH - Limited Access Highway |
| NC - Neighborhood Commercial            | I - Industrial                  |                              |



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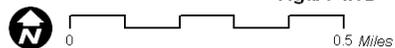
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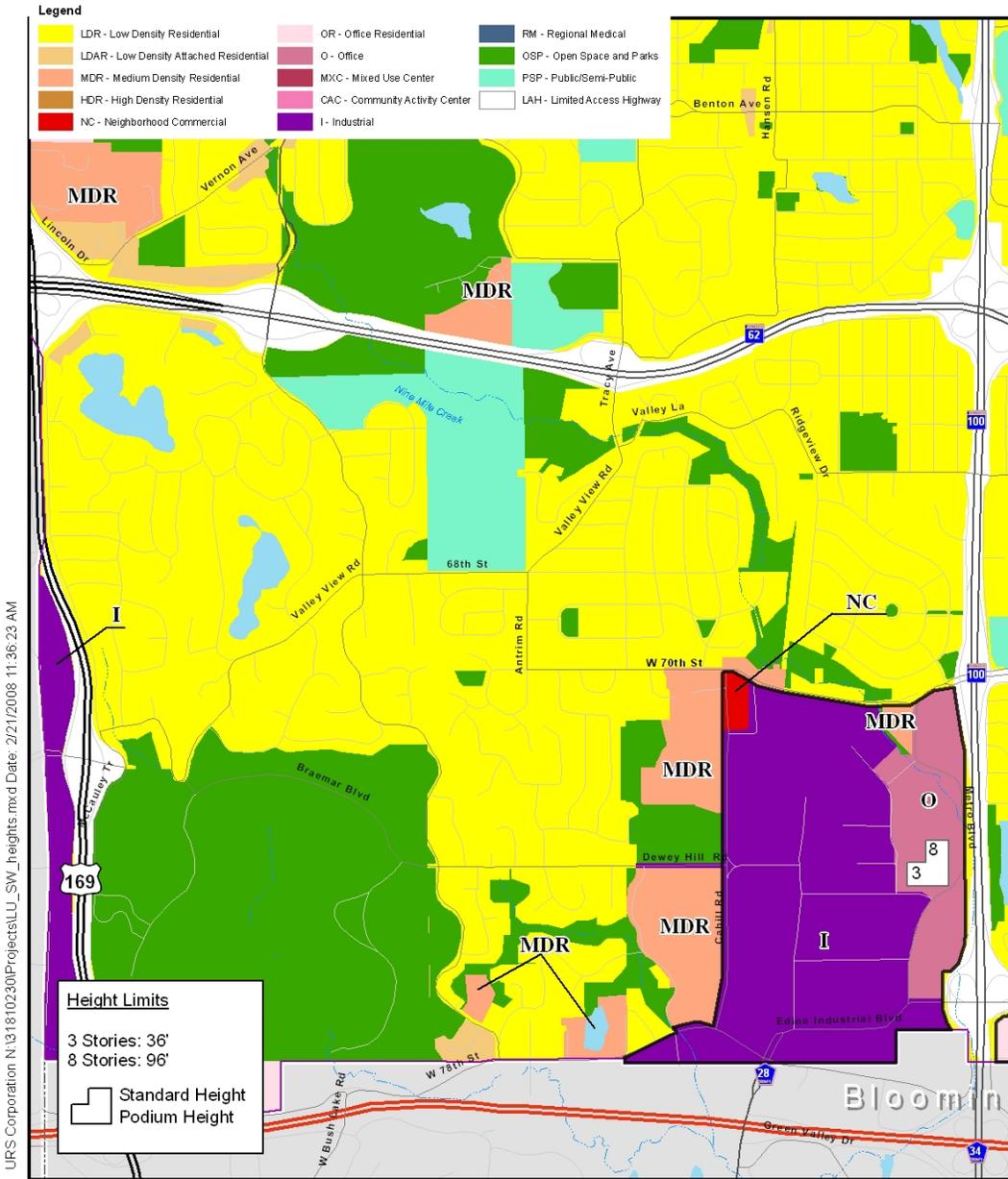
Data Source: URS

**Future Land Use Plan with Building Heights**

Southeast Quadrant

Figure 4.6B





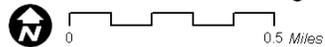
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Data Source: URS

**Future Land Use Plan with Building Heights**

Southwest Quadrant

Figure 4.6C



## **Solar Access Protection**

Minnesota State Statutes (Sec. 473.859, Subd. 2(b): COMPREHENSIVE PLAN CONTENT) state that “a land use plan shall contain . . . an element for the protection and development of access to direct sunlight for solar energy systems.”

As the City seeks to reward environmentally superior development practices, it is important for the City to promote renewable sources of energy. Chief among renewable energy sources with proven technology and ease of implementation is solar power. Although unobstructed solar access is often hindered by mature trees, topography and the location of existing structures, it is the City’s goal to minimize regulatory restrictions and maximize the ability of residents to take advantage of active and passive solar energy systems.

The City recognizes the importance of protecting solar access and maximum exposure to sunlight. To help ensure that sufficient solar exposure is available for all homeowners and businesses, the City already has ordinances for building setbacks, building height restrictions, and maximum lot coverage. It will also consider access to active and passive solar energy collection systems when reviewing variance requests or new construction.

It is expected that the Energy and Environment Commission will recommend standards that offer detailed guidance to protect solar access and reduce regulatory obstacles for the utilization of developing solar and other renewable energy technologies.

## **4.5 IMPLEMENTATION**

Implementation of the land use and community design policies, principles and guidelines will occur primarily through changes to the City’s official controls and through the development of Small Area Plans for specific neighborhoods, districts or potential areas of change within the community.

### **Zoning Ordinance Revisions**

The City will initiate revisions to its zoning ordinance necessary to ensure consistency with the Comprehensive Plan. While identification of specific changes will require additional study and public input, they may include the following:

- **Building height standards** consistent with those outlined in the previous section and Figures 4.6A, 4.6B and 4.
- **Changes in building setbacks.** The guidelines state that buildings should frame the street, and building facades should enhance the pedestrian environment.
- **Additional standards for mixed use development.** These might include requirements or design guidelines, or a desired mix of uses within large-scale developments, rather than allowing single-use office or commercial developments by right.

- **Review and revision of the Conditional Use provisions and consideration of a Planned Unit Development (PUD) option.** In order to more adequately examine development proposals that require adherence to design guidelines, consideration should be given to amending the Zoning Ordinance to incorporate these features as part of a Conditional Use process and/or a Planned Unit Development (PUD), which the Zoning Ordinance does not now provide for.
- **Provisions for urban forest protection and improvement** consistent with Plan guidance for creating a pleasant pedestrian environment, screening parking areas, providing the benefits of landscaping, and restoring environmental processes that a tree canopy provides the biological community. These provisions may include a tree preservation ordinance. Other measures may also be considered to ensure appropriate tree replacement and management of our urban forest.

### **Subdivision Ordinance Revisions.**

The City may consider changes to its street standards in mixed-use areas to encourage interconnected streets, sidewalks and walkways that are conducive to pedestrian and bicycle movement.

### **Use of Design Guidelines**

Many of the design guidelines in Section 4.4 will be applied as part of the development review process, particularly for proposals that require zoning changes, conditional use permits, or other changes from standard approval procedures. Design guidelines will also be considered as part of the site plan review process.

### **Small Area Plans**

Small Area Plans may be developed in those areas identified in Section 4.4 under “Staging of Development.”

Initiation of a specific Small Area Plan may be requested by a community group, business group, the Planning Commission, or City staff. A development proposal that involves a Comprehensive Plan Amendment or a rezoning will require a Small Area Plan study prior to planning application. However, the authority to initiate Small Area Plans rests with the City Council.

The City may also identify other areas in need of further study, and authorize preparation of Small Area Plans to guide redevelopment. These Small Area Plans will be conducted in an open, public consultative process, and may result in additional implementation actions and public improvements.

### **The Development Review Process**

The City will evaluate and update its development review process to encourage submittal of conceptual plans for preliminary review and comment by the Planning Department, Planning Commission, and community, including residents and neighborhood groups. Formal review and approval of final development plans by the

Planning Commission, Zoning Board of Appeals and/or City Council will be based upon submission of fully engineered, not conceptual, plans.



**Districts.** For the purposes of this Section, the City shall be divided into the following zoning districts:

- Single Dwelling Unit District (R-1)
- Double Dwelling Unit District (R-2)
- Planned Residence District (PRD and PSR)
- Mixed Development District (MDD)
- Planned Office District (POD)
- Planned Commercial District (PCD)
- Planned Industrial District (PID)
- Regional Medical District (RMD)
- Automobile Parking District (APD)
- Heritage Preservation Overlay District (HPD)
- Floodplain Overlay District (FD)

**District Boundaries.** The boundaries of all such districts except the Floodplain Overlay District, shall be as shown in the official Zoning Map entitled "Official Zoning Map", a composite copy of, which reduced in size, is appended to this Code. The Official Zoning Map, with all explanatory information, is adopted by reference and declared to be a part of this Code. The boundaries shown on the Official Zoning Map may be changed by amendment to this Section. The Official Zoning Map shall be on file in the office of the Planning Department and shall be open to public inspection during normal business hours of the City. The boundaries of the Floodplain Overlay District shall be as shown on the Official Floodplain Zoning Map described and identified in Subsection 850.21, as such map is to be interpreted and used as provided in Subsection 850.21.



## Chapter 5: Housing

- 5.1 Introduction
- 5.2 Current Conditions: Housing Profile
- 5.3 Trends and Challenges
- 5.4 Housing Goals and Policies
- 5.5 Implementation



### 5.1 INTRODUCTION

Housing is an integral part of a community for a multitude of reasons beyond providing essential shelter for residents. The location of housing influences transportation patterns, and the housing industry is both a main engine of the regional economy and a prime generator of revenue to fund municipal services. Housing affords owners a vehicle for building wealth and is a symbol of familial connections and personal history. It is for all these reasons that housing plays an important part in the community and in the Comprehensive Plan.

The housing chapter begins with some general statistics on the housing stock, an examination of local housing affordability and a forecast of future housing needs. (A more in-depth description of the city's housing is found in the Community Profile section.) The housing chapter concludes with a statement of housing goals, policies and implementation strategies.



#### Statistical Snapshot

A snapshot of housing conditions as of 2000, as reported by the U.S. Census, includes the following:

- *Total housing units:* 21,669
- *Tenure:* 76 percent owner-occupied, 24 percent renter-occupied
- *Building type:* single-family: 58 percent; single-family attached or duplex: 7 percent; multi-family developments with 3 to 20 units: 6 percent; multi-family buildings greater than 20 units: 29 percent
- *Age:* the median age of the housing stock is 42 years
- *Vacancy:* 3.1 percent



## 5.2 CURRENT CONDITIONS: HOUSING PROFILE

### Current Housing Supply

The 2000 Census reported 21,669 housing units in the city. From 2000 to 2006, the City issued 578 building permits for new construction, while 127 units were demolished in a single fire. Assuming that every building and demolition permit issued resulted in an additional dwelling to the city's housing stock, the city in 2006 had an estimated 22,120 housing units.<sup>2</sup> These are composed of about 13,987 single-family units and 8,119 multi-family units for a 63/37 percent split between the two building type categories.



This estimate is consistent with Metropolitan Council data. The Council estimated that in 2005 the city had 21,422 households, which would imply a housing vacancy rate of about 3 percent, which is similar to what was reported in the 2000 Census and appears reasonable for Edina's real estate market.

### Condition of Housing

As part of its 1998 Comprehensive Plan update, City staff conducted a windshield survey of all single-family homes in the city. Homes were evaluated based on exterior features of the structure and yard such as the condition of the roof, paint, yard, fence and outdoor storage. Of the 13,647 homes that were included in the survey, only 1.7 percent had identified deficiencies. The most prevalent deficiency was a roof in fair or poor condition (found in 80 percent of units judged deficient), followed by paint in fair or poor condition (48 percent). A sample viewing of the neighborhoods where the majority of the homes with identified deficiencies were located revealed that maintenance conditions of the homes had improved.

<sup>1</sup> In the 2000 Census there was a discrepancy between total Edina housing units and the sum of total housing units from the units in structure survey. The sum of units by building type estimated here uses the number of housing units from the units in structure survey.



### **Affordability Defined**

Using federal Department of Housing and Urban Development criteria, the Metropolitan Council defines affordability for housing units for purchase or rent. According to the Livable Communities Act Housing Ownership and Rent Affordability Limits released in May 2007, a home was considered affordable for purchase by a

household whose income was 80 percent of area median income if the house was priced at \$206,800 or below. A rental unit was considered affordable for a household earning 50 percent of area median income if the cost of a two bedroom apartment, including tenant-paid utilities, was \$883 or less per month.



The Council's 2006 Report to the Minnesota Legislature on Affordable and Life-cycle Housing stated that within the City of Edina zero affordable rental units were created between 1996 to 2005.

In contrast with the Council's maximum sales price of an affordable home (\$206,800), the median sale price for a home in Edina in 2005 was over double that figure, at \$435,000. The Metropolitan Council, in its "Summary Report: Determining Affordable Housing Need in the Twin Cities", determined that 20 percent of the city's housing stock was affordable to households earning 60 percent of area median income, as calculated by HUD.

### **Range of Current Housing Prices**

An inventory of estimated market values of Edina's housing stock reveals that about 20 percent or 3,467 housing units are valued at/or below the Council's affordable home purchase price. The type of housing deemed affordable within the city is overwhelmingly multi-family. One percent of single-family and duplex homes are deemed affordable for purchase by this analysis. Table 5.1 shows the estimated current market values by housing type.



**Table 5.1. Estimated Edina Market Values by Housing Type For Non-Rental Properties, 2007**

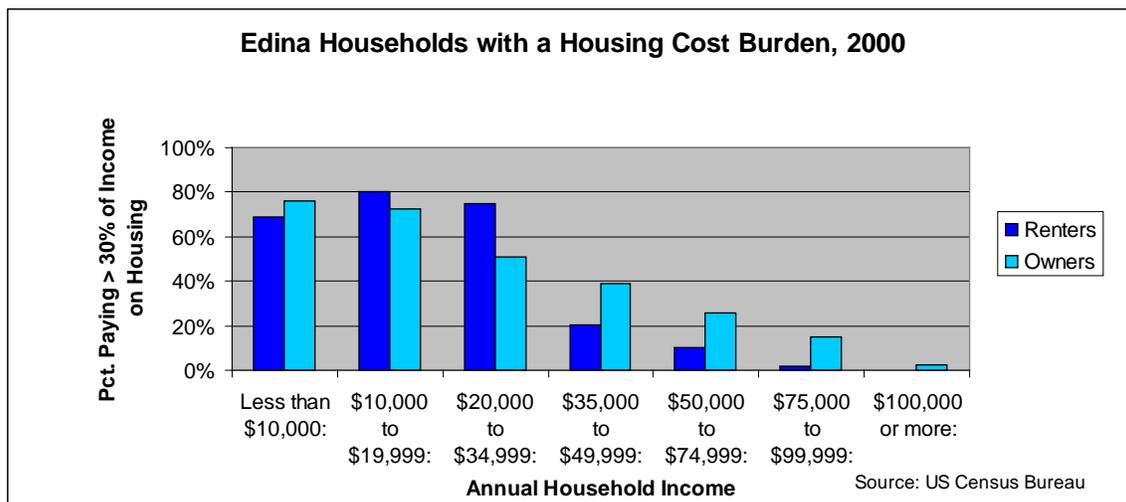
Housing Type	Under \$207k		\$208 - \$250k		\$251 - \$350k		\$351 - \$450k		Over \$451k		Total
	#	%	#	%	#	%	#	%	#	%	
Single-Family	124	3.6%	491	64.9%	3,033	80.8%	2,727	86.2%	6,097	94.3%	12,472
Duplex	21	0.6%	30	4.0%	114	3.0%	168	5.3%	150	2.3%	483
Townhouse	107	3.1%	28	3.7%	175	4.7%	124	3.9%	170	2.6%	604
Condominium	2,785	80.3%	195	25.8%	427	11.4%	145	4.6%	48	0.7%	3,600
Cooperative	430	12.4%	13	1.7%	6	0.2%	1	0.0%	0	0.0%	450
<b>Total</b>	<b>3,467</b>		<b>757</b>		<b>3,755</b>		<b>3,165</b>		<b>6,465</b>		<b>17,609</b>

Source: City of Edina

### Households with a Housing Cost Burden

Another standard of housing affordability is to identify those households with a cost burden based on the amount of household income devoted to housing costs. A household has a housing cost burden when more than 30 percent of household income is spent on housing, regardless of income level. Figure 5.1 shows the percentage of renters and owners who pay more than 30 percent of their income on housing. Predictably, households with incomes of less than \$35,000 per year have budgets most impacted by housing costs. 42 percent of persons in rental units and 19 percent of owners of single-family homes in Edina are paying 30 percent or more on housing costs.

Figure 5.1.





### City Affordability Goals

Since 1996, Edina has participated in the Metropolitan Livable Communities Act program. The Livable Communities Act (LCA) is a Metropolitan Council grant-based program to encourage communities to achieve goals in affordable and life-cycle housing production and quality of life improvements. At the program's inception, the Metropolitan Council estimated the amount of the City's existing housing stock that was affordable and the City and the Metropolitan Council jointly established goals for the criteria of affordability, life-cycle housing (housing types that are not single-family detached units) and housing density.



See Table 5.2 on next page.

**Table 5.2. Livable Communities Act Benchmarks and Goals for Edina**

		City Index	Benchmark	Goal
<b>Affordability</b>	Ownership	31%	64-77%	31%
	Rental	14%	32-45%	43%
<b>Life-cycle housing</b>	Type (non-SF detached)	43%	38-41%	43%
	Owner/renter mix	71/29%	(64-71)/ (30-36)%	71/29%
<b>Density</b>	Single-family detached	2.3/acre	2.3-2.9/acre	2.3/acre
	Multi-family	16/acre	11-15/acre	16/acre

Table 5.2 shows the Metropolitan Council's 1995 estimates and City of Edina goals:



- The *City Index* column refers to a snapshot of the Edina's affordable housing, life-cycle housing, and housing density taken from the data available in 1995.
- The *Benchmark* column is a range that represents the City Index average for communities within similar Metropolitan Council planning sectors.
- The *Goal* column indicates the affordable and life-cycle housing share, and the densities negotiated between Edina and the Metropolitan Council.
- *Affordability* refers to the estimate of the share of Edina's affordable housing stock that was considered affordable at the start of the LCA program.
- *Life-cycle Housing* includes housing types that are not single-family detached units; the figures are percentages based on Edina's total housing stock.
- *Density* means the number of housing units per acre for both single-family detached units, and multi-family units.



The Metropolitan Council has identified new affordable housing needs for all cities and townships within the Twin Cities Metropolitan Area for the period from 2011-2020. The housing plan element of local comprehensive plans is required to reflect the allocated portion of the forecasted demand for affordable housing. The City's share of this allocation is 212 affordable housing units by 2020.

### **Current City Housing Programs**

#### ***Edina Housing and Redevelopment Authority***

The Edina Housing and Redevelopment Authority (HRA) was established in 1974 for the purpose of undertaking urban redevelopment projects and assisting with the development of affordable housing. The HRA has facilitated the development of a number of low- and moderate-income housing developments, including Yorkdale Townhomes, Oak Glen, Summit Point and South Haven.



### ***Edina Housing Foundation (EHF)***

The Edina Housing Foundation is not a City board, however its members are appointed by the Edina City Council and HRA. This non-profit corporation provides financial assistance to low/moderate income individuals as well as non-profit developers and sponsors of low/moderate income housing.

### **City Housing Plans and Studies**

#### ***Housing Succession Plan for Edina's Future***

In November 2004 the City Council created the Edina Housing Task Force and charged it with the responsibility to conduct a study and prepare a plan to promote policies to adequately house City residents and workforce.



#### *Why Housing Matters*

The *Housing Succession Plan* and other input received from the Edina Housing Task Force state that deliberate attention to Edina's housing is necessary to:

- Preserve and enhance the strength of our schools;
- Maintain community character;
- Foster diversity;
- Support Edina's businesses' ability to remain competitive in regional and global markets and attract quality employees; and
- Provide lifecycle opportunities for community renewal, i.e. provide opportunities for people to live and work in Edina throughout their lives, continually renewing Edina's residential base.
- Acknowledge and support the community building principle that persons who both live and work in the same community are more invested in that community, are more involved in its schools and community governance, and contribute to a greater sense of stewardship, vitality, and long-term stability.

A mix of housing types and values is necessary, the *Housing Succession Plan* puts forward, to ensure that those who contribute to the





community can live in the community if they desire. That same mix enables newcomers and young families to join the community, to renew it with fresh talents and ideas. A mix of housing respects the desires of older citizens to remain in the community that has been the seat of their life's work and dreams. Seniors who are downsizing have moved out of Edina either because they could not find housing suitable to their needs or that they could afford. Long-time residents report that their children cannot live nearby due to the high cost of housing here, even though young people who grew up in Edina frequently want to live in Edina. During their public input, the Task Force noted, many Edina residents lamented that if they had to buy their homes today they could not afford to. And, finally, housing is increasingly a factor in business' ability to recruit and retain qualified workers.

#### *Significant Portion of Edina Households have Housing Affordability Problem*

The Task Force found that roughly 43 percent of households in Edina –about 9,000 out of about 21,000– have incomes of less than \$50,000 per year; and nearly 5,000 households have incomes of \$25,000 or less. Of the 9,000 households, approximately 7,200 pay 30 percent or more of their income for housing. Lower and moderate income workers in Edina are often priced out of its housing market, the Task Force reported.

#### *Housing Succession Plan Objective*

The objective of the *Plan* is to sustain Edina's character while enhancing housing options. The purpose of the *Plan* is to create and take advantage of opportunities over the next 15 years to ensure that a portion of Edina's housing remains affordable to seniors, young families, and working families.

The *Housing Succession Plan* was unanimously received by the City Council in November 2006 "with the understanding that it forms the philosophical basis for the Housing Chapter of the Edina Comprehensive Plan." However, it should be noted that the specific targets and strategies of the *Housing Succession Plan* were not adopted by the City Council.

### **5.3. TRENDS AND CHALLENGES**

An analysis of housing needs for Edina residents has three components: needs based on age, number of additional units and affordability. In addition, Edina is characterized by high quality, vital neighborhoods that vary widely in age, character, and the value and size of housing. Existing neighborhood character needs to be preserved. However, these neighborhoods are not static over time



and need to evolve to meet the changing needs and lifestyles of the residents and the larger community.

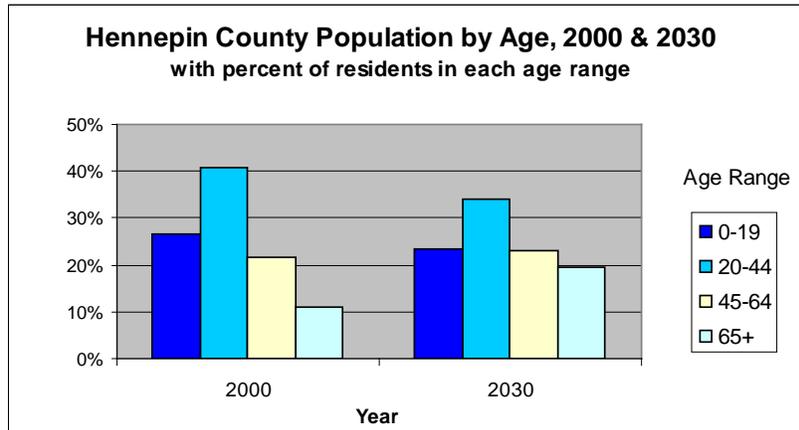
### **Future Housing Need: Aging-in-Place**

The most significant future change in housing will occur not to respond to an increase in total population, but to serve a rapidly aging population with different housing needs. The State Demographic Center predicts that Hennepin County will experience a significant increase in the number of residents over 65 years of age. (The Center does not issue population projections by age at the municipal level. Between 2000 and 2030, the Center predicts that the population of County residents 65 years and older will increase by over 106 percent, to comprise 19 percent of the total population (up from 11 percent in 2000). Figure 5.2 shows a comparison of the 2000 and projected 2030 Hennepin County population projection by age.





Figure 5.2



If the percentage increase in senior population predicted for Hennepin County is applied to Edina (after adjustment for Edina’s current higher senior population), the 23 percent of Edina residents over the age of 65 in 2000 could increase to about 35 percent of the total city population in 2030. The projected increase is from about 11,000 to about 18,000 residents in this age bracket, as shown in Table 5.3.

**Table 5.3**  
**Edina Population by Age and Percent, 2000 & 2030**  
 With Percent of Residents in Each Age Range

Years of Age	Year		Year	
	2000	2030	2000	2030
	Percent		Number	
0-19	24%	19%	11,484	10,000
20-44	27%	21%	12,614	10,437
45-64	26%	25%	12,562	12,926
65+	23%	35%	10,765	18,137
Total	100%	100%	47,425	51,500

Source: US Census, State Demographic Center, URS

Note: 2030 population projection from State Demographic Center

Older residents present unique housing challenges. Whether modifying existing homes to suit mobility needs or constructing new housing, the challenges remain similar to ensuring that senior residents receive housing that meets their needs. Residents over the age of 65 benefit greatly from accessibility to medical facilities, retail establishments, recreational opportunities and friends and



relatives. When housing is not situated in close proximity to these amenities, the physical and mental health of seniors can be undermined.

For elderly residents without significant mobility issues, housing type does not appear to be as significant as housing location. National surveys suggest that today's senior population will most likely age in place within the existing housing stock. Other data, such as the state incidence of households that contain senior residents with disabilities, supports this perception. The latest American Community Survey ranks Minnesota as the state with the lowest percentage in the nation of households with a person with a disability.



Elderly residents with special health and mobility needs may require special types of housing. For example, some seniors may benefit from congregate housing.

Others may require housing to meet a specific need such as memory care, or a range of specialized needs.

The City's ability to accommodate the projected increase in residents over the age of 65 will depend on a supply of housing both conveniently located to allow residents to safely age in place with dignity and designed to meet residents' range of special needs. Closely related to housing, though not traditionally thought of as a housing need, the transportation infrastructure will have to be flexible and accessible to meet seniors' needs.

In future, seniors will be more likely to receive health and medical services within the home. Increasingly, health care workers and nursing staff on-site will expedite the provision of medical and supportive services for residents wishing to age in place.

### **Future Housing Need: Affordable Units**

The Metropolitan Council's January 2006 study "Determining Affordable Housing Need in the Twin Cities 2011-2020" calculated that 212 more affordable housing units in Edina are required by 2020 to accommodate local need. The report noted that the "filtering" process may produce some affordable housing supply, as older units depreciate in price. The study reported that 20 percent of the City's housing stock was affordable to households earning 80 percent of area median income. Twenty percent of Edina housing stock translates into roughly 4,400 housing units. The Metropolitan Council does not report the tenure of these affordable



units. Adhering to the 2006 Metropolitan Council affordable housing allocation, the City will require about 212 additional affordable units by 2020 (Note: In May 2007, a Metropolitan Council report indicated that a home was considered affordable for purchase by a household whose income was 80 percent of the area median income if the house was priced at \$206,800 or below).

The building permits issued since 2000 reveal an 88/12 percent split in permits for new multi-family versus single-family units. In the future, given the scarcity of available land for development, the overwhelming majority of new housing units will most likely be in multi-family developments. The impact of this development pattern on housing affordability will depend on housing market dynamics and the number of housing projects



constructed within the City. In addition, another factor affecting the creation of new affordable units is the extent that the City utilizes housing programs that locate low and moderate-income households in existing units. (Some of these programs are included in the Affordable Housing Partners section at the end of this chapter).

### **Future Housing Need: Accommodating New Households**

The Metropolitan Council projects that in 2030 Edina will have a total population of 50,000 residents in 22,500 households. This is about a 7 percent increase over the estimated number of households recorded in the 2000 Census. As a component of this change, the Council expects that the average household size will increase slightly to 2.28 residents per household, from the current average of 2.24 residents per household. Table 5.4



shows this baseline projection of new households and the average number of building permits issued per year to reach the projected 2030 household figure.



**Table 5.4**  
**Baseline Projection of Housing Demand, 2030**  
**Based on the Metropolitan Council New Households Projection**

Metropolitan Council projected new households, 2000-2030	1,504
New housing units needed annually 2000-2030	50
Average annual new building permits issued 2000-2006	82

Source: Metropolitan Council, City of Edina

Meeting the housing needs of additional households may require the expansion of building types and ownership options currently available in the city.

**Affordability and Additional New Housing Units**

The Metropolitan Council determined that an additional 212 housing units constructed between 2011 and 2020 would meet Edina’s affordable housing need. The City is projected to add about 400 households within that timeframe. On an average annual basis, to meet this estimated need there would have to be 21 affordable units constructed in the City per year during the next decade. This would represent about one quarter of the total annual building permits, if the rate at which the City issued building permits from 2000 to 2006 continued from 2011 to 2020. Or in other words, if Edina increased in population as projected by the Metropolitan Council, about 20 percent of the 1,500 additional housing units would be affordable units.

**Livable Communities Act Goals**

The City established a goal under the Livable Communities Act that 43 percent of the City’s rental units be affordable. To meet this goal, the City’s housing stock would have to contain about 2,100 affordable rental units, a three-fold increase from the approximately 700 units at present. New multi-family development is the building type most likely to increase the supply of rental units in the City. If the rental units were of new construction, 70 percent of the new housing units expected to be built between 2008 and 2010 would have to be rental units. The City has met its other Livable Communities Act goals.





### **Neighborhood Quality, Vitality, and Preservation**

Maintaining and enhancing the quality of all of Edina’s neighborhoods is an important part of Edina’s livability. Some level of change in existing neighborhoods is natural and an indication of a healthy, stable neighborhood that is experiencing reinvestment. Over the past several years, the massing and scale of some single-family home additions and replacement housing have caused concern regarding compatibility with adjacent and nearby homes. This issue is discussed in more detail in Chapter 4: Land Use and Community Design.



## **5.4 HOUSING GOALS AND POLICIES**

### **The Land Use Plan and Housing Opportunities**

The land use and housing elements of the Comprehensive Plan must be integrated so that sufficient land is available to meet the housing needs of existing and potential residents, particularly in the area of affordable housing. The goals and policies of the Land Use and Community Design Plan (Chapter 4) recognize the need for Edina’s housing stock to evolve to meet the changing needs and lifestyles of current and potential residents. The Future Land Use Plan addresses the issue of land supply, while the Community Design Guidelines address how a variety of housing types can be integrated into emerging mixed use areas.

### ***Why is Housing Affordability Important to Long-Term Planning for Edina?***

The lack of workforce housing affects overall quality of life within Edina and throughout the region, as more residents spend more time commuting long distances to their jobs. As noted in Chapter 3: Community Profile, 85 percent of Edina’s 52,000 workers commute from outside Edina. Long commuting times not only affect the quality of life for the commuters and their families, but they also place a burden on Edina residents who experience roads that become more and more congested, and attendant air pollution and surface water run-off issues.



Essential workers such as school teachers, police and fire fighters, and hospital staff, as well as retail and service workers who work in Edina often cannot afford to live in Edina. This workforce which has helped to create and maintain Edina's higher property values is often priced out of its housing market.

The growing lack of affordability of single-family homes for families with children affects the viability of Edina's schools. Real estate agents, and comments heard throughout this

Comprehensive Plan Update process, indicate that the number one reason people, whether or not they had school-age children, move to Edina is the high quality school system. During the last 20 years, Edina schools have participated in open enrollment, during which time Edina's test scores have consistently moved



upward. However, Edina and its schools would benefit from serving more local families, because parental involvement in the community often occurs through children's activities and children's activities often occur through the schools.

Many comments made in this planning process noted that strong schools are a significant factor in maintaining Edina's desirability and strong property values. By 2030, it is possible that there will be fewer school-age children in Edina. The Edina community can strive to maintain the balance and diversity of home types and prices to ensure that families with children continue to have housing options in Edina. The Edina community, in partnership with non-profit and for-profit developers, can collaborate to maintain the balance and diversity of home types and augment the ladder of affordability, to ensure that families with children continue to have housing options in Edina.

### ***Is Land Available to Meet Affordable Housing Needs?***

Yes. Given the scarcity of developable land within City boundaries, the type of development which would meet the City's affordable housing needs would likely come from multi-family infill development. This is reinforced by the inventory of





homes estimated market value (Table 5.1) which indicates that over 95 percent of the affordable housing units in Edina are multi-family units. Land currently zoned for multi-family housing constitutes approximately 421 acres, or about 7 percent of all residentially zoned land. When structures built on land zoned for multi-family use are redeveloped, or when new mixed use development is constructed, there are opportunities to include affordable housing units. For instance, townhome developments in the city average about 9 units per acre.

***What Other Kinds of Housing Types and Ownership Options Should Be Considered to Meet Affordability Goals?***

Housing cooperatives, cohousing communities, and land trusts provide innovative ways for individuals to satisfy housing needs.



**Housing Cooperatives**

Additional ownership options, such as housing cooperatives or cohousing communities allow for living arrangements that could favorably impact housing affordability. A housing cooperative consists of a group of individuals who own shares in a corporation that owns or controls the land. Having a share entitles the owner to occupy a unit and participate in corporate activities in managing the development.



Housing affordability can be achieved when share ownership has income restrictions in limited-equity cooperatives. In fact, the first senior housing cooperative in the United States is the 7500 York Cooperative, a 330-member limited equity cooperative, located within the city. In addition to providing economical housing, the Cooperative offers an increased economic benefit to residents through an agency on the premises that coordinates placement of home health care aides.

**Cohousing Communities**



A cohousing community is a collaborative housing arrangement where the design and upkeep of the community is performed by its members. It differs from a housing cooperative with regard to the amount and use of communal space and cohousing members often display a high degree of commitment to community building.

### Community Land Trusts

Community land trusts provide affordable housing by separating the value of land from the value of the buildings. This model removes the market value of the land from the mortgage equation, which can reduce the cost of a home for a workforce family by 35-42 percent. Households pay for only the building or dwelling unit, and the community land trust retains ownership of the land in this form of shared-equity housing. A ground lease is signed by both parties and secures the roles of both the community land trust and the homeowner.

### Housing Goals

1. Provide an attractive living environment and promote housing that is compatible in quality, design, and intensity within neighborhoods in order to ensure the vitality and health of single-family and multi-family/mixed-use neighborhoods. Housing should



support and be supported by surrounding land uses, traffic patterns, public facilities, and connections to open space and natural resource features.

2. Promote increased housing opportunities and a diversity of housing types by promoting the creative and innovative use of land designated for residential/commercial mixed-use while complementing the character of existing development and promoting transit use and other mobility alternatives.
3. Encourage the production of additional affordable housing units to meet the City's housing needs and, at a minimum, its Metropolitan Council affordable housing need allocation (212 units). Strive to



maintain 20 percent of Edina's housing stock as affordable, with the goal of increasing the percentage of single-family homes that are in this category. Promote owner-occupied units over rental units when providing affordable housing.

4. Seek to accommodate the total projected 1,500 new households projected to locate in the City by the year 2030.
5. Promote a vision of community that is inclusive of a wide range of ages, incomes, and abilities and offers a wide range of housing options for Edina's residents. This broad vision of community is a

cornerstone to promoting workforce housing that includes a wide range of housing prices and options, based on the principle that those who contribute to the community should have the opportunity to live here. Also, this housing vision strengthens and reinvigorates community institutions and makes the City an attractive destination for young families.



6. Increase the appeal of Edina's housing stock in order to attract new residents and retain current residents.
7. Promote lifecycle housing to support a range of housing options that meet people's preferences and circumstances at all stages of life.
8. Acknowledge the interrelationship between land use and transportation, and support the expansion of existing transportation infrastructure-capacity through wise land use.
9. Recognize that housing is a long term investment and promote housing policies that offer enduring opportunities for medium and low income residents to house themselves, emphasizing home ownership.
10. Recognize that successfully reaching affordable housing goals assists the City in achieving related community goals. These goals include:
  - a. Preserving and enhancing the strength of the schools;



- b. Maintaining community character and supporting a strong tax base;
- c. Fostering diversity;
- d. Supporting Edina businesses' ability to remain competitive in regional and global markets and attract quality employees;
- e. Providing lifecycle housing opportunities for community renewal.

## Housing Policies

To achieve its housing goals the City will:

1. Provide active leadership and acknowledges its responsibility to meet its affordable housing needs for residents and its workforce through its land use and fiscal policies. The City will promote a program that will assist workers employed within the City to live in the City.
2. Research, develop, and offer resources to allow the flexibility for senior residents to age in place.
3. Seek to protect and maintain the residential neighborhoods that contain lifecycle housing and remain attractive to young families. The City will continue its program of offering assistance to income eligible property owners to rehabilitate their homes, thus maintaining the condition of the City's housing stock.
4. Collaborate with public, nonprofit and private groups in the planning and developing of housing, especially with those that focus on the provision of housing for which the marketplace does not sufficiently provide. As recommended by the Edina Housing Task Force, invite the Edina Housing Foundation and the West Hennepin Affordable Housing Land Trust to develop proposals to create opportunities for 80 families to purchase existing housing through the use of second mortgages and community land trusts. The City should also work with the Greater Metropolitan Housing Corporation to develop plans for assisting low-income seniors to transition to downsized housing.
5. Encourage repairs and improvements to existing single-family homes that extend





- their useful life, and ensure that they are designed and constructed in a manner that complements the dwelling's character and is compatible with adjacent homes and the character of the surrounding neighborhood.
6. Update the 1998 survey of housing conditions.
  7. Encourage the preservation and maintenance of, and improvements to, existing affordable housing.
  8. Encourage the development of long-term management strategies for affordable housing, in cooperation with non-profit housing organizations, to ensure the continuation of its affordability features to successive households. The City will continue to fund and expand its financial and technical support of community land trusts that provide affordable housing within the City.
  9. Expand educational outreach to the community about programs that foster affordability and maintenance.

## 5.5 IMPLEMENTATION

This chapter prescribes actions that encourage the creation of lifecycle and affordable housing, and promote property-owner maintenance of the City's housing stock.

Implementation of the elements of this chapter will require enactment of new City policies and an ongoing commitment to providing for expanded housing choice for City residents. Please see Chapter 12 ("Implementation") for phasing of the Housing chapter recommendations.

### Responsibility and Financing

**Assign responsibility for implementing all of the housing plan policies, including an annual progress report.**

**Create a financing plan for implementing all of the housing plan policies.**



## Adoption of City Policies and Programs that Support Housing Goals

Efforts by City Council, City departments and commissions are needed to implement other policies that support housing goals. These actions include:

**Update the 1998 survey of housing conditions** to identify homes that are in need of repair.

**Create a mortgage assistance program** to specifically target income-eligible workers employed within the City to enable them to live in the city. The City may choose to collaborate with other organizations to develop this program.

**Support senior residents' housing choices.** Offer resources to allow the flexibility for senior residents to age-in-place.

**Continue the home rehabilitation program.** The City should continue its program of offering assistance to income eligible property owners to rehabilitate their homes to extend their useful life in a manner that also complements the dwelling's character and is compatible with adjacent homes and the character of the surrounding neighborhood.



**Assist neighborhoods to retain their attractiveness to young families.** City programs and policies can promote such features as housing affordability, sidewalks and proximity to recreational amenities that act as magnets to encourage young families to settle in the city.

## Collaborate with Public and Private Groups to Create Affordable Units

The City has many current and potential partners to collaborate in the effort to create affordable housing in the city. Some of these partners are:

### ***Edina Housing Foundation***

The Edina Housing Foundation (EHF) is a non-profit corporation that provides assistance to low/moderate income individuals as well as nonprofit developers and sponsors of low/moderate income housing. The Foundation offers affordable housing funding opportunities to



income/asset eligible homebuyers that meet low/moderate income guidelines. Programs offered by EHF include:

- *Second Mortgage Program* – This program was revised in 2007, with a new subordinated mortgage loan program product called “Come Home 2 Edina,” which provides up to \$60,000 of assistance in the form of a second mortgage. Interest rates on the Note is (1) the lesser of 5 percent simple interest or one percent below the first mortgage rate, or (2) a participation loan involving a refinancing of the first mortgage based on a formula, but in no case is the interest more than an amount equal to 5 percent per year accrued simple interest.
- *Community Homebuyer Program* – This program provides down payment assistance through an interest free, deferred repayment loan in conjunction with FNMA Community Homebuyer program.
- *Home Partners Program* – This program provides deferred repayment loans bearing 3% simple interest for basic home improvements in conjunction with a home purchase through the FNMA Community Homebuyer program.

### ***West Hennepin Affordable Housing Land Trust (WHAHLT)***

WHAHLT is a non-profit community land trust organization originally established by the City of Minnetonka to sustain and preserve affordable homeownership opportunities for working households. In 2007 the City of Edina provided \$245,000 to the organization to purchase three properties within the city to create perpetually affordable housing through WHAHLT’s Homes Within Reach program. WHAHLT is requesting \$82,000 from the 2008 Community Development Block Grant (CDBG) budget to provide the opportunity for a fourth community land trust home in Edina. This program provides affordable homeownership opportunities using the community land trust model, which removes the market value of the land from the mortgage equation, thereby reducing the cost of a home by 35 to 42 percent.

The West Hennepin Affordable Housing Land Trust has a program known as Homes Within Reach (HWR) in the western suburbs of Hennepin County. HWR offers the opportunity for people to live in communities in which they work and or reside, creating stable communities and households, through the advantages of homeownership. By preserving and recycling available resources, the program maximizes the public and private investment being made in workforce housing.



### ***CommonBond Communities***

CommonBond Communities is the largest nonprofit developer, manager and service provider of affordable housing in Minnesota. The organization builds and manages apartments and town homes and provides on-site resident supportive services, called Advantage Center Services, to families, seniors and people with special needs.



### ***Livable Communities Act Funding***

The Livable Communities Act (LCA) is a voluntary, incentive-based approach to help the Twin Cities metropolitan area address affordable and lifecycle housing needs while providing funds to communities to assist them in carrying out their development plans. LCA funds have leveraged millions of additional dollars in private and public investment that has provided new jobs, housing choices, and business growth.

Through funds provided by the Livable Communities Act (LCA), the Metropolitan Council awards grants to participating communities in the seven-county area to help them remediate polluted sites, promote compact and connected development and redevelopment and increase the supply of affordable housing.

Funds are distributed through four LCA accounts: the Tax Base Revitalization Account, Livable Communities Demonstration Account, Local Housing Initiative Account, and Inclusionary Housing Account.

### ***For-Profit Real Estate Developers***

A number of Edinborough and Centennial Lakes private sector for-profit developments are early examples of this blending of market and non-market units.





## Chapter 6: Heritage Preservation

- 6.1 Introduction
- 6.2 Current Conditions: Historic Contexts and Inventory
- 6.3 Trends and Challenges
- 6.4 Goals and Policies: Heritage Preservation
- 6.5 Implementation

### 6.1 INTRODUCTION

The City of Edina has a wealth of heritage resources including numerous historic buildings and sites worthy of preservation. To protect and enhance these non-renewable community resources, since 1974 the City has developed specific policies and procedures that integrate heritage preservation with other community development planning.

The mission of the City's heritage preservation program is to preserve Edina's heritage resources by protecting historically significant buildings, sites, structures, objects, and districts.

The Heritage Preservation Board (HPB), appointed by the Mayor and City Council, advises the City Council, City Manager and other City boards and commissions on all matters relating to heritage resource preservation, protection, and enhancement in the community. One of the most important products of the City Heritage Preservation Program ("Program") has been the designation of significant properties as Edina Heritage Landmarks; several local properties have also been listed in the National Register of Historic Places. Several important studies of historical and architectural resources have been carried out under the auspices of the Heritage Preservation Board.

The terms *historic property* and *heritage resource* embrace buildings, sites, structures, objects, and districts that are of interest for their association with history, architecture, archaeology, engineering, and culture. The City of Edina is committed to preserving and protecting those properties which possess *historical significance* by being associated with an important historic context and retaining historic integrity of those features necessary to convey their significance.

The purpose of the Comprehensive Heritage Preservation Plan is to help City decision-makers plan for the wise use of Edina's significant heritage resources. Comprehensive plans are useful because they provide a basis for making sound



decisions; they can also lead to increased understanding and awareness of the role heritage preservation plays in the delivery of important City services. Perhaps even more importantly, a plan that is truly comprehensive in scope and integrated with other city planning will provide an efficient and effective means of evaluating the performance of the heritage preservation program.

See Figures 6.1 and 6.2 for maps depicting Designated Landmarks and Eligible Landmarks.

## **6.2 CURRENT CONDITIONS: HISTORIC CONTEXTS AND INVENTORY**

### **Historic Contexts**

It is convenient to think of historic contexts as the cornerstone of the preservation planning process because the concept itself is integral to understanding history. Historic contexts have existed since ancient times to address people's comparative historical interests in old things and to provide discipline for decisions about the importance of those interests. Heritage preservation planning establishes historic contexts and uses them to develop goals and priorities for identifying, evaluating, registering, and treating heritage resources. In 1995, the Edina Heritage Preservation Board completed a Historic Context Study that delineated some of the most important historical, architectural, and cultural patterns and themes that define historical significance for buildings, sites, structures, and districts in the City of Edina. The study also developed goals and priorities for survey work designed to identify and gather information on heritage resources.

For planning purposes, Edina historic contexts are organized in a two-tiered format. Tier 1 historic contexts represent broad, general themes in Edina history and are organized around the concept of historic landscape to denote a holistic or ecosystem approach focused on changing patterns of land use. Conceptually, each landscape represents a different historical environment, part of a 10,000-year succession of Edina cultural landscapes derived from the national landscape. The emphasis is on linking general categories of heritage resources with important broad patterns that reflect the most important forces that change the relationships between people and their surroundings. Consequently, the Tier 1 historic contexts are city-wide in geographic scope.

The Tier 1 historic contexts are:

- The Native American Landscape (10,000 B.C. to A.D. 1851)



- The Agricultural Landscape (1851 to 1959)
- The Suburban Landscape (1887 to 1974)

Tier 2 historic context study units are more narrowly defined, both in terms of their thematic and their geographical focus. As their names indicate, they represent aspects of Edina history that are reflected in the resources found at particular locations. They may be thought of as “sub-historic contexts” and in contrast with the Tier 1 study units there is more emphasis placed on cohesive streetscapes, neighborhoods, and areas that possess an identity of time and place. As planning constructs, the Tier 2 historic contexts are readily adaptable to multiple-property surveys and landmark designations.

The Tier 2 historic contexts are:

- Edina Mills: Agriculture and Rural Life (1857 to 1923)
- The Cahill Settlement: Edina’s Irish Heritage (1850’s to 1930’s)
- Morningside: Edina’s Streetcar Suburb (1905 to 1935)
- Country Club: Edina’s First Planned Community (1921 to 1950)
- Southdale: Shopping Mall Culture (1955 to 1974)
- Country Clubs and Parks: The Heritage of Recreation, Leisure and Sport (1910 to 1974)
- Minnehaha Creek: From Wilderness Stream to Urban Waterway (10,000 B.C. to A.D. 1974)

These historic context study units are intended to be revised, elaborated on, merged or discarded as new information and interpretations become available.





## Inventory

Between 1972 and 2006, the Edina Heritage Resource Survey documented more than 600 heritage resources within the city limits. Intensive surveys have been conducted in the Country Club District and at scattered individual buildings; reconnaissance-level studies have focused on the Morningside and Interlachen Boulevard neighborhoods, and on Minnehaha Creek. Nevertheless, the existing inventory is very much a “work in progress” and the documentation on file does not accurately reflect the full spectrum of heritage resources that are believed to exist. Indeed, there is a critical lack of detailed, accurate information on some types of historic buildings and several older neighborhoods which were excluded from earlier surveys. These information gaps will need to be filled by systematic survey work.

## 6.3 TRENDS AND CHALLENGES

**Heritage is integral to Edina’s identity.** Heritage preservation has moved from being an interesting avocation for a few to being recognized as an integral component of a city’s identity and an anchor and reference point for new development, as well as a foundation for a built landscape that reflects a community’s stream of history.

### Concerns:

- There is growing public appreciation of the fact that historically significant buildings, sites, structures, objects, and districts have value and should be retained as functional parts of the community in the 21<sup>st</sup> century.
- Heritage preservation should be viewed as an investment in community development that enhances the community quality of life.
- One of the prerequisites for an effective municipal preservation program is a comprehensive preservation plan.
- Since 1974, the City Council has given the Heritage Preservation Board (HPB) major responsibilities in identifying, registering, and protecting the city’s heritage resources.
- City Code §850.20, as amended in 2002, created the Edina Heritage Landmark and Landmark District zoning classifications as the City’s official register of significant heritage resources.
- The Edina Historic Context Study was prepared and adopted by the City in 1999; it established thematic study units that provide a



framework for identifying, evaluating, and registering significant heritage resources.

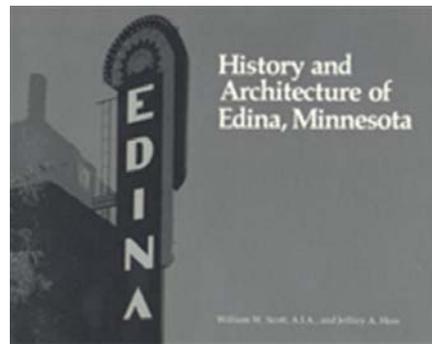
- Basic standards for heritage preservation planning have been established by the U.S. Department of the Interior.

**Historic survey and analysis are key to assessing significance.**

Communities that desire to protect and preserve their heritage resources need a system to survey and analyze heritage resources in order to assess their historical significance.

**Concerns:**

- In heritage preservation, surveys are conducted to identify and gather information on heritage resources
- The effectiveness of the heritage landmarks program depends upon the quality and comprehensiveness of the heritage resources survey.
- Heritage resource surveys and their resulting inventories form an important basis for preservation planning decisions.
- Surveys can be conducted at a variety of scales, producing different kinds of information applicable to different needs.
- The usefulness of the survey as a planning tool depends in large part on its overall accuracy and reliability.
- Professional historians, architectural historians, archaeologists, and planners will be responsible for directing the survey effort. Although surveys will be supervised by professionals, there is no reason that volunteers without professional training in the preservation disciplines cannot carry out part of the historical research and field survey work.
- The HPB is authorized to provide continuing oversight of the heritage resource identification and evaluation process.





**Defined criteria are needed for evaluation.** Heritage resources need to be evaluated to determine whether they meet defined criteria of historical, architectural, archeological, or cultural significance.

**Concerns:**

- The primary reason to evaluate heritage resources identified by survey is to compile a list of those which are worthy of preservation and will be considered in community planning.
- Only significant properties will qualify for heritage landmark zoning.
- Evaluation of heritage landmark eligibility by the HPB will use established criteria and reference to historic contexts.
- The evaluation process will be balanced and HPB findings of significance will be based solely on historical, architectural, or archaeological merits, without consideration of the economic value of subject properties or how they may be treated in planning.
- Much of the heritage resource inventory data compiled prior to 1999 is incomplete or outdated.

**A legal designation process is needed to ensure legal protection.**

Significant heritage resources need an explicit legal process to ensure their legal protection.

**Concerns:**

- The Edina Heritage Landmarks and Landmark Districts were designed to be the local government equivalent of the National Register of Historic Places and provide legal protection for significant heritage resources; in some cases, landmark designation may reinforce a National Register listing.
- Properties are nominated as landmarks or landmark districts by the HPB; the Planning Commission is given an opportunity to comment on all nominations; and only the City Council can rezone a property as a landmark or landmark district.
- Property owner notification and a public hearing on heritage landmark nominations are required by ordinance; due process involves public hearing notification and the opportunity for members of the public to rebut the findings of the HPB.
- Heritage landmark zoning may confer economic benefits or impose constraints on the use of a historic property.



**Design review is necessary to gauge adherence to standards.** Properties that are zoned Edina Heritage Landmarks or Landmark Districts need a design review system to ensure that changes meet predetermined standards.

**Concerns:**

- By ordinance, the HPB is responsible for reviewing all applications for city permits for demolition, new construction including detached garages, moving a building, or excavations in relation to properties zoned Edina Heritage Landmarks or Landmark Districts; no city permit can be issued without a Certificate of Appropriateness from the HPB.
- Certificates of Appropriateness are not required for city permits for interior remodeling, or for work which does not require a City permit.
- Design review in a landmark district applies to all properties, including non-historic properties, within the district boundaries.

**Public facilities need to enhance, not detract from, heritage resources.**

Public infrastructure projects may have detrimental impacts to heritage resources. A system needs to be devised to ensure heritage resource protection when public facilities maintenance and construction projects are carried out.

**Concerns:**

- Heritage resources are vulnerable to decay and destruction caused by city maintenance work and construction projects.
- City staff will be made aware of the location of heritage resources in relation to municipal infrastructure.

**A voluntary program is needed to complement the formal design review process.** Many proposed alterations to heritage resources do not reach the level of required design review. The City needs to develop a program to encourage voluntary compliance with historic preservation treatment standards.

**Concerns:**

- The heritage preservation ordinance does not provide for design review of many kinds of activities that may alter the physical appearance of a significant heritage resource.



- Community enthusiasm for heritage preservation can manifest itself in highly motivated, voluntary compliance with the highest standards for rehabilitation and restoration.
- Inclusion of a property in a Heritage Landmarks, Landmark District, or National Register district may make it eligible for federal or state incentives, such as investment tax credits and tax deductions for the charitable contribution of easements.
- The City of Edina does not offer financial incentives for the rehabilitation or restoration of an Edina Heritage Landmark/Heritage Preservation Resource or Historic Building.
- The Secretary of the Interior's Standards are broadly applicable to all heritage preservation projects in relation to Edina Heritage Landmarks and Heritage Landmark Districts.

**Several City properties and rights-of-way have heritage resources.** A program of maintenance, rehabilitation, and restoration should be established to ensure their preservation.

**Concerns:**

- The city is the owner of a number of significant heritage resources, including but not limited to the Cahill School, the Minnehaha Grange Hall, the Edina Mill site, and the Browndale Bridge.



**Heritage resource education can give needed perspective.** Residents and property owners need to know their city's history and understand the importance of protecting and preserving its heritage structures and historic landscapes. Many do appreciate the significance of these resources, but others will benefit from education programs and activities.



### Concerns:

- The success of heritage preservation depends on developing a broad base of community interest and involvement.
- Public education programs and activities may include but are not limited to lectures and presentations, websites, newspaper and newsletter articles, displays in public areas, walking and driving tours, historical markers, publications, and interpretive programs.
- Edina residents with professional training or an avocational interest in history, architecture, archaeology, sociology, anthropology, geography, and other fields represent an important resource for the City's heritage preservation program.

**Local funds can be augmented and leveraged.** Cities that want to administer heritage preservation need to embrace resources available from the state and federal governments to augment and leverage their funds.

### Concerns:

- The certification of local government preservation programs under the 1980 amendments to the National Historic Preservation Act has made it possible for municipal heritage preservation programs such as Edina's to exercise greater authority in the National preservation program.
- To qualify as a Certified Local Government (CLG) a local government must enforce appropriate state and local preservation laws, establish and maintain a qualified heritage preservation commission, provide for public participation in its activities, and maintain a system for the survey and inventory of heritage resources; Edina became a CLG in 1998.

Participation in the CLG program makes the city eligible for grants-in-aid from the Historic Preservation Fund administered by the National Park Service.

**Natural disasters can have major impacts on heritage resources.** Heritage resources can be particularly vulnerable to various types of natural disasters. Cities need to be prepared to reach out quickly and assist in disaster response.

### Concerns:

- Premature demolition of weakened historic buildings must be avoided.



- Heritage resources can be damaged or destroyed by structural fires, tornadoes, wind storms, thunderstorms, lightning, winter storms, hazardous materials, flooding, and other events.
- Disaster management for heritage resources needs to emphasize preparedness.
- Emergency response procedures need to be developed to give preservationists the tools they need to respond to a disaster.
- The disaster management plan needs to be shared with outside organizations.

## 6.4 GOALS AND POLICIES: HERITAGE PRESERVATION

The vision for the Program includes the following goals:

1. Ensure that Edina will be a distinctive and recognizable community, committed to preservation of historic buildings and sites that provide physical links to the past and foster a sense of community identity.
2. Preserve historically significant buildings, sites, structures, objects, and districts as functional, useful parts of the modern city so that they will be the focus of important education, edification, recreation, and economic development activities.
3. Provide historic property owners and neighborhood groups with technical assistance and education in historic preservation.
4. Sponsor heritage preservation programs that stress empowerment of individuals and communities through stewardship, advocacy, education, and partnership.

The following benchmarks have been established for the City Heritage Preservation Program. By 2020, the Program will achieve the following:

- a) Fully integrate heritage preservation with other city planning for parks, recreation, community development, public safety, public works, and education.
- b) Identify and evaluate all buildings within the Country Club District more than 50 years old to determine their heritage landmark eligibility.
- c) Survey the Morningside, Browndale Park, West Minneapolis Heights, and Minnehaha Creek neighborhoods, and Southdale Mall to determine the



- heritage preservation potential of buildings, sites, structures, objects, and districts.
- d) Re-survey the Edina Country Club District to refine and update the 1980 survey data.
  - e) Review-and update each Heritage Landmark Plan of Treatment every ten years.
  - f) Carry out archaeological surveys of all undeveloped lands within the City limits.
  - g) Develop and implement effective, voluntary, non-regulatory approaches to preserving significant heritage resources.
  - h) Develop historic property interpretation programs for selected heritage landmarks in partnership with property owners and outside agencies.
  - i) Make all pertinent information on preserved heritage landmarks accessible to the general public.
  - j) Make local history and heritage preservation a vital part of K-12 school curricula and lifelong learning programs for Edina residents.

**Policy 1: Prepare and adopt a Heritage Preservation Plan.**

**Actions:**

- 1. The City will adopt and maintain a Heritage Preservation Plan as part of the City's Comprehensive Plan.
- 2. All preservation program activities will be carried out in a manner consistent with the comprehensive plan.
- 3. The City will use the Heritage Preservation Plan to establish policies, procedures, and plans for managing the preservation, protection, and use of heritage resources.
- 4. The HPB will conduct research to augment, refine, and revise the thematic study units outlined in the 1999 historic context study.
- 5. Heritage preservation planning will be integrated with other city planning for community development.
- 6. The City will provide the HPB with the resources needed to prepare and implement a comprehensive heritage preservation plan.
- 7. Because comprehensive planning is a continuous cycle, the HPB will periodically review and update the Heritage Preservation Plan.



**Policy 2: Identify significant heritage resources worthy of consideration in community planning.**

**Actions:**

1. The HPB will carry out a comprehensive survey of heritage resources within the city limits and maintain an inventory of all properties recorded.
2. The City will create heritage resource survey plans that advance the goals and priorities of historic contexts.
3. All the information gathered on each property and area surveyed will be placed in the permanent records of the Heritage Preservation Board.

**Policy 3: Evaluate heritage resources to determine whether they meet defined criteria of historical, architectural, archaeological, or cultural significance.**

**Actions:**

1. The HPB will evaluate all properties identified by the ongoing Heritage Resources Survey and issue a finding of significance for those properties that meet defined criteria; some determinations of landmark eligibility may be provisional and it may be necessary for the HPB to conduct additional studies prior to initiating the landmark nomination process.
2. For each property evaluated as eligible for heritage landmark designation the HPB will issue a finding of significance with a report documenting its location, ownership, date of construction, the relevant historic context and property type, and the criteria on which the finding of significance was based.
3. The HPB will maintain an accurate, up-to-date inventory and map depicting the heritage resources evaluated as significant.

**Policy 4: Rezone significant heritage resources as Edina Heritage Landmarks or Landmark Districts.**

**Actions:**

1. The HPB will nominate significant historic properties and districts for designation as Heritage Landmarks or Landmark Districts.



2. A landmark nomination study will be completed for each property nominated; the nomination study will locate and identify the subject property, explain how it meets one or more of the landmark eligibility criteria, and make the case for historic significance and integrity.
3. Each landmark nomination study will include a Plan of Treatment that will develop specific approaches to design review and treatment.
4. Except in extraordinary circumstances, the HPB will not nominate a property for landmark designation without the consent of the owner.

**Policy 5: Protect heritage landmarks through design review.**

**Actions:**

1. The City will take all necessary steps to ensure that no Significant Heritage Preservation Resource is destroyed or damaged as a result of any project for which a Certificate of Appropriateness has been issued by the HPB.
2. The HPB will work with the Planning Commission to ensure that heritage resources management issues are taken into account in planning for residential, commercial, and industrial development.
3. Every application for a preliminary plat, rezoning, conditional use permit, or variance from the zoning code that may affect an Edina Heritage Landmark or Landmark District will be reviewed by the HPB, which will advise the Planning Commission whether or not the requested action will have an adverse effect on a Significant Heritage Preservation Resource.
4. When demolition or site destruction cannot be avoided, careful consideration will be given to mitigating the loss by moving the affected Edina Heritage Landmark/Heritage Preservation Resource, Landmark District or Historic Building to another location, recording it prior to demolition, or by salvaging architectural elements or archaeological data for reuse or curation.
5. In cases involving permits that are not subject to design, a reasonable effort will be made to preserve and protect important historical, architectural, archaeological, and cultural features.

**Policy 6: Carry out public facilities maintenance and construction projects in such a manner that Significant Heritage Preservation Resources are preserved and protected.**



**Actions:**

1. The HPB and its staff will work with the city manager, city engineer, community development director, and others to ensure that Edina Heritage Landmarks/Heritage Preservation Resources/Landmark District or Historic Buildings are taken into account in project planning.
2. The HPB and its staff will help project planners identify the historical, cultural, aesthetic, and visual relationships between heritage landmarks and their surroundings.

**Policy 7: Encourage voluntary compliance with historic preservation treatment standards.**

**Actions:**

1. The City will cooperate with property owners in developing plans for their properties, advise them about approaches used in similar preservation projects, and provide technical assistance in historic property rehabilitation and restoration treatments.
2. The HPB and City staff will review voluntary requests for design review of work that would not ordinarily be subject to the heritage preservation ordinance and issue Certificates of Appropriateness for projects that meet preservation treatment standards.
3. The City will consider development of financial incentives for the preservation, rehabilitation, and adaptive use of heritage resources, such as tax incentives, grants, loans, easements, and subsidies.



**Policy 8: Preserve Edina Heritage Landmarks/Heritage Preservation Resources, Landmark Districts or Historic Buildings on City property and rights of way.**



**Actions:**

1. The City will develop strategies and establish priorities for the restoration and rehabilitation of City-owned heritage resources.

**Policy 9: Provide public education regarding heritage preservation.**

**Actions:**

1. The City will provide the public with information on heritage preservation activities in the city.
2. The HPB will design and maintain a high-quality heritage preservation page on the City's website.
3. The City will develop facilities and programs that interpret heritage resources for the public.
4. The HPB will make a special effort to reach out to and involve the Edina Historical Society, neighborhood groups, and other community organizations with particular interests in historic properties or community development.



**Policy 10: Participate in the federal-state-local government heritage preservation partnership.**

**Actions:**

1. The City will continue to participate in the CLG program.
2. The City will cooperate with neighboring cities and other communities in developing their preservation programs.



**Policy 11: Be prepared to respond to disasters involving heritage resources.**

**Actions:**

1. Define the City role and responsibilities in disaster preparedness, response, and recovery relative to historic preservation.
2. Perform a risk assessment to identify the types of disasters likely to occur and evaluate the vulnerability of specific heritage resources to disasters.
3. Provide members of the City disaster management team with information on heritage resources and preservation priorities.
4. Encourage owners of historic properties to develop disaster preparedness plans.
5. Establish a disaster response team of experienced preservationists, architects, historians, and planners.

## 6.5 IMPLEMENTATION

### Ongoing

1. Carry out a comprehensive City-wide survey to identify and evaluate the preservation value of historic buildings, structures, sites, objects, and districts.
2. Rezone historically, architecturally, archaeologically, and culturally significant properties as Edina Heritage Landmarks, Landmark Districts, or Heritage Preservation Resources or Historic Buildings.
3. Increase the use of partnerships with other agencies, organizations, and individual property owners to ensure that significant heritage resources are preserved, protected, and used in a manner that is responsive to community values and consistent with appropriate preservation standards.

### Short-term

4. Update the information in the Heritage Resources Inventory and convert it to electronic form so that it can be manipulated, used, and retrieved quickly. In addition, the inventory should be made adaptable for Geographic Information System (GIS) users.
5. Redirect the resources of the Heritage Preservation Board toward an increased emphasis on education and technical assistance programs.



6. Use existing planning tools more effectively and create a better “tool box” to address emerging heritage preservation challenges.
7. Establish and allocate resources to development of a heritage resources disaster management plan.
8. Provide better public access to heritage preservation information through the media, outreach, and the Internet.

#### Medium-term

9. Consider development of an array of economic incentives for the preservation, rehabilitation, restoration, and reconstruction of significant, privately-owned heritage resources.
10. Initiate innovative demonstration projects and disseminate information on the importance of heritage preservation in developing sustainable neighborhoods.



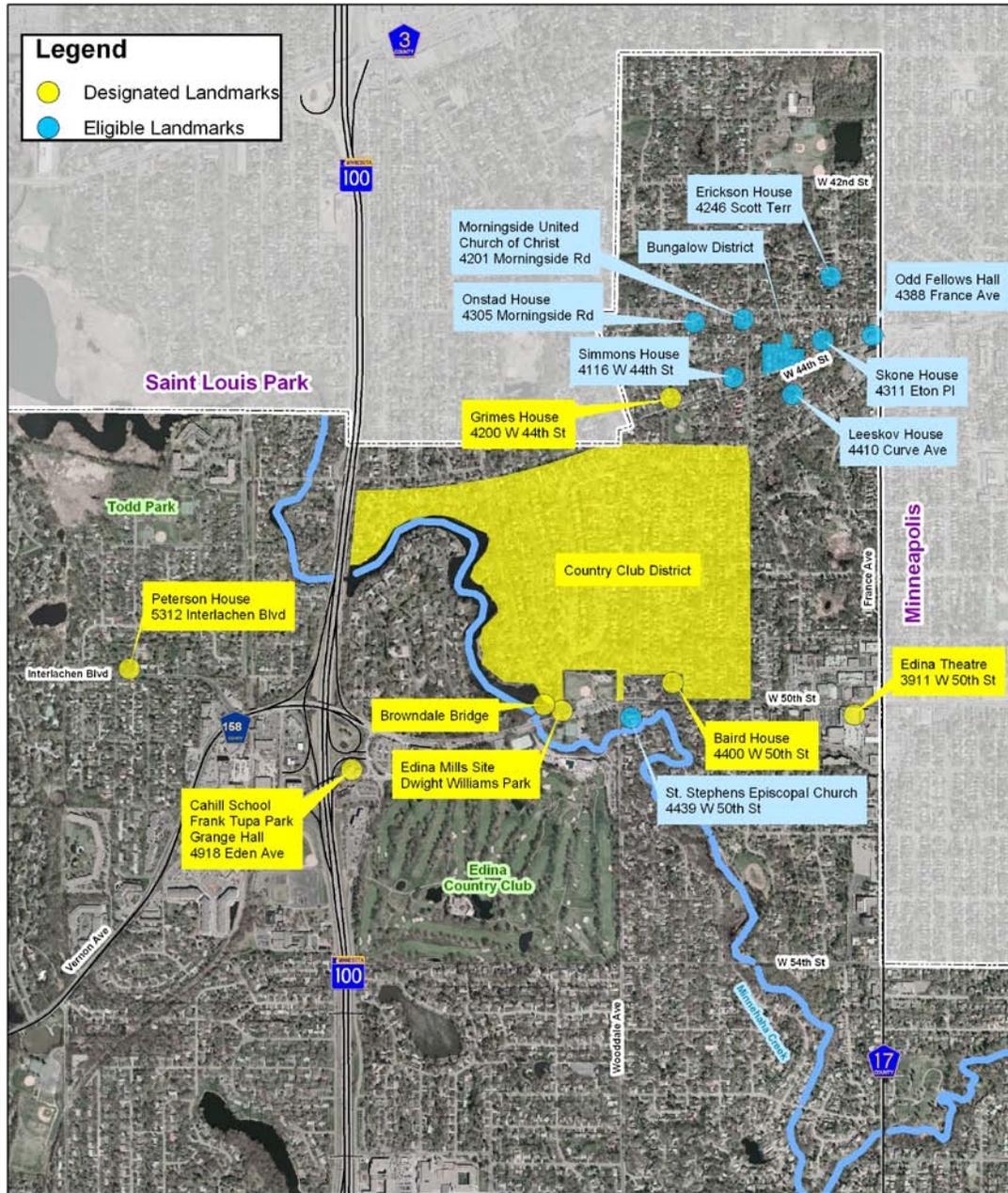


Figure 6.1

Edina Heritage Landmarks

November, 2008



City of Edina  
2008 Comprehensive Plan Update



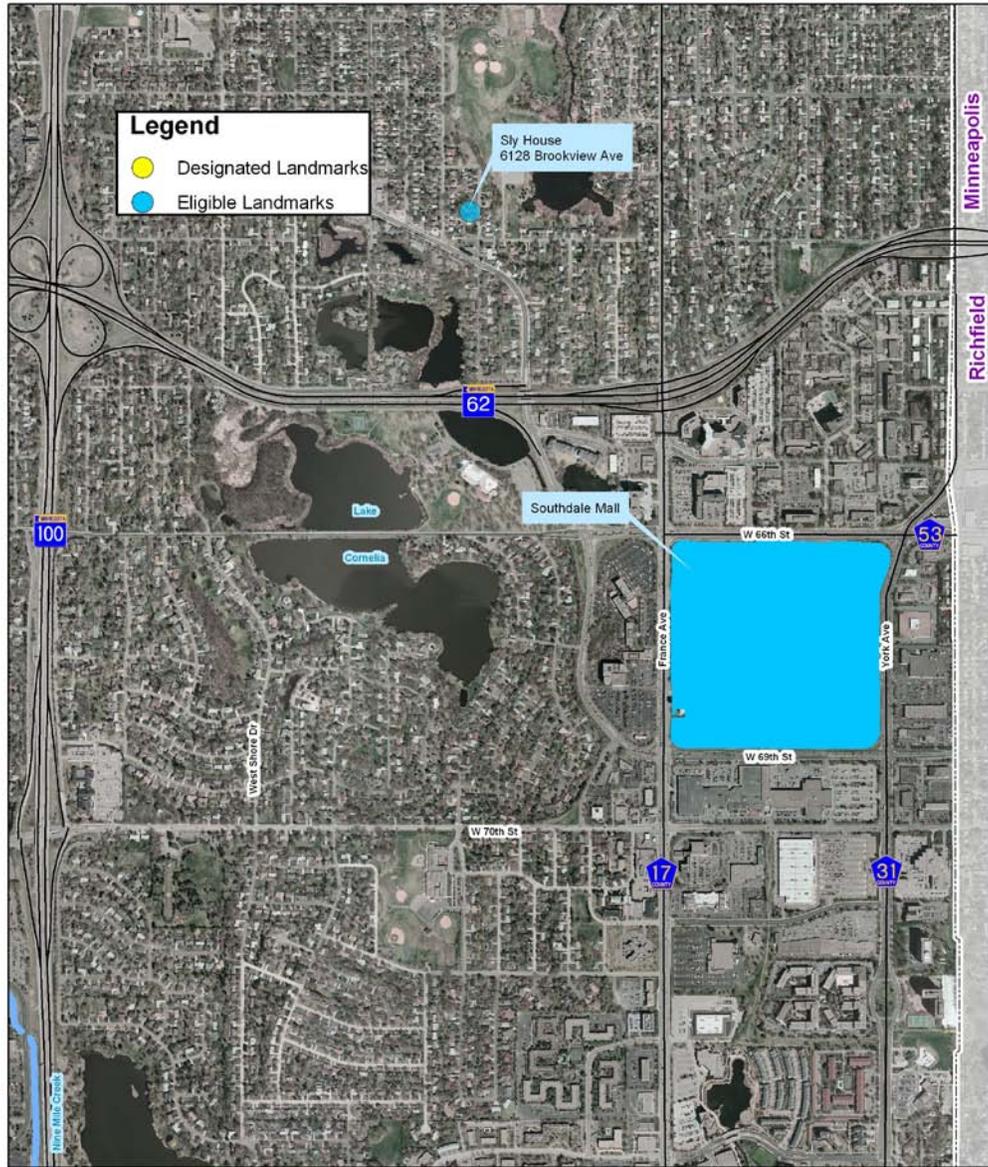


Figure 6.2

Edina Heritage Landmarks

November, 2008



City of Edina  
2008 Comprehensive Plan Update



0 0.25 0.5 Miles



## Chapter 7: Transportation

- 7.1 Introduction
- 7.2 Current Conditions
- 7.3 Trends and Challenges
- 7.4 Goals and Policies: Transportation
- 7.5 Implementation

### 7.1 INTRODUCTION

#### Background

Effective transportation planning is critically important for a community such as Edina. Residents must be provided with transportation facilities and services that meet mobility needs in an efficient and safe manner. Transportation facilities, at the same time, need to be planned and constructed so as to limit negative social, environmental, and aesthetic impacts to the greatest degree feasible. In addition, residents who cannot or choose not to drive need to have transportation options to meet their daily needs.

There is a fundamental link between transportation planning and land use planning. Successful land use planning cannot take place without taking transportation considerations into account. Conversely, transportation planning is driven by the need to support existing and future land uses which the community supports and/or anticipates. Chapter 4 of this Comprehensive Plan identifies existing and planned future land uses. The remainder of this section has been prepared with the goal of supporting the land use vision identified in Chapter 4.

In 2003, the City formed the Edina Transportation Commission (ETC). It is made up of citizens appointed by the City Council. It advises the City Council on transportation issues facing the City, including congestion, roadway improvement projects, and non-motorized transportation needs. This transportation chapter was prepared under the guidance of the ETC.

#### Objectives

There are three primary objectives of this Transportation chapter:



- To provide a guidance document for City staff and elected officials regarding the planning and implementation of effective transportation facilities and systems over the planning horizon.
- To give citizens and businesses background on transportation issues and allow them to be better informed regarding the City's decision-making on transportation issues.
- To communicate to other government agencies Edina's perspectives and intentions regarding transportation planning issues.

The preparation of the document also has provided stakeholders with the opportunity to have input into the transportation planning process.



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York Avenue, south of Hazelton Road



## Transportation Planning Context

Transportation facilities should effectively serve land uses which the City supports and/or anticipates. The remainder of this chapter was prepared with the goal of supporting the land use vision identified and discussed in Chapter 4. This includes the future land use map provided on **Figure 4.3**. Other aspects of the planning context are studies that the City has performed such as the *Northeast Edina Traffic Study* and the *Edina Promenade Urban Design Plan*.

A key aspect of transportation planning is effective coordination between different government agencies as transportation authorities. In the case of Edina, these include the Metropolitan Council, Mn/DOT, Hennepin County, and neighboring communities. As part of the process of preparing this transportation chapter, transportation planning documents prepared by other agencies were reviewed and considered. This included the following:

- Metropolitan Council *2030 Transportation Policy Plan*
- Mn/DOT *Statewide Transportation Plan*
- Hennepin County *Transportation System Plan*
- Transportation plans of adjacent communities

## Previous Transportation Plan

The previous Edina Transportation Plan was prepared in 1999. The work in this Chapter has used that document as a base. The key changes relative to the 1999 document are as follows:

- Update of transportation policies
- Revised traffic forecasts based on trends over the last 5-10 years and on an updated land use map
- Presentation of most current crash data and preliminary evaluation
- Update of roadway network planning and improvement needs
- Preliminary evaluation of additional transit service (circulator service for western Edina, and shuttle service for Greater Southdale area)
- Provision of sidewalk policy and plan
- Summary of *City of Edina Comprehensive Bicycle Transportation Plan* (2007), and inclusion of the entire document as an Appendix
- Summary of design guidelines for transportation facilities from a community/aesthetic design perspective

## 7.2 CURRENT CONDITIONS



## Roadway Network

### Overview/Existing Traffic Levels

The City of Edina within the regional roadway network is depicted on **Figure 7.1**. It can be seen that Edina is a first-tier suburb within the I-494 beltway. Important regional roadways which pass through or adjacent to the City are: I-494, Trunk Highway (TH) 169, TH 100, and TH 62 (Crosstown). Cities which are adjacent to Edina are: Minneapolis, St. Louis Park, Minnetonka, Eden Prairie, Bloomington, and Richfield. **Figure 7.2** provides an aerial photograph of Edina roadways and the land uses they support. **Figure 7.3** depicts the number of lanes on roadways in Edina, and **Figure 7.4** shows current traffic volumes.



### Functional Classification

The functional classification system is the creation of a roadway and street network which collects and distributes traffic from neighborhood streets to collector roadways to arterials and ultimately, the Metropolitan Highway System. Roads are placed into categories based on the degree to which they provide access to adjacent land versus provide higher-speed mobility for “through” traffic. Functional classification is a cornerstone of transportation planning. Within this approach, roads are located and designed to perform their designated function.

It should be noted that while functional classification is an important factor to determine the engineering/technical design parameters for roadways, aesthetic considerations in Edina will be directed by community design guidelines as discussed in Chapter 4 of this Comprehensive Plan and summarized under a heading later in this Transportation Chapter.



The functional classification system used in the City of Edina, as described below and shown in **Figure 7.5**, conforms to the Metropolitan Council standards. The Metropolitan Council has published these criteria in the *Transportation Development Guide/Policy Plan*. This guide separates roadways into five (5) street classifications, including principal arterials, minor arterials, collectors, and local streets. These classifications address the function of state, county and city streets from a standpoint of the safe and efficient movement of traffic through the City while providing satisfactory access to residents and businesses located within the City. The Metropolitan Council's criteria and characteristics for the respective functional classifications are provided in **Appendix T-1**.

Under the following headings, information is provided for each of the respective functional classes, as well the roadways that fall under those classes in Edina. The descriptions of the characteristics of the functional classes provided below are based on Metropolitan Council information. It may be noted that these descriptions represent "ideal conditions" and that not all roadways within that functional class will fit the specific description due to unique local conditions, history of the roadway, or other factors.

**Principal Arterial Roadways.** The metropolitan highway system is made up of the principal arterials in the region. Principal arterials include all Interstate freeways. Interstate freeways connect the region with other areas in the state and other states. They also connect the metro centers to regional business concentrations. The emphasis is on mobility as opposed to land access. They connect only with other Interstate freeways, other principal arterials, and select minor arterials and collectors. The principal arterials through or adjacent to Edina are:

- I-494
- TH 100
- TH 169
- TH 62 (Crosstown)

**Minor Arterials.** The emphasis of minor arterials is on mobility as opposed to access in the urban area; only concentrations of commercial or industrial land uses should have direct access to them. The minor arterial should connect to principal arterials, other minor arterials, and collectors. Connection to some local streets is acceptable. The Metropolitan Council has identified "A" minor arterials as streets that are of regional importance because they relieve, expand, or complement the principal arterial system. The "A" minor arterials in the Edina area are summarized in **Table 7.1**, below.



**Table 7.1 - “A” Minor Arterial Roadways**

Roadway	From	To	Type
France Ave. (CSAH 17)	Southern City Limit	Northern City Limit	Reliever Arterial
Valley View Rd.*	TH 62	W. 66 <sup>th</sup> St.	Reliever Arterial
66 <sup>th</sup> St.*	Valley View Rd.	Eastern City Limit	Reliever Arterial
Vernon Ave/Gleason Road (CSAH 158)	TH 62	TH 100	Reliever Arterial
TH 169 E. Frontage Rd./78 <sup>th</sup> St./Edina Ind. Blvd./77 <sup>th</sup> St./76 <sup>th</sup> St.	Western City Limit	Eastern City Limit	Reliever Arterial
W. 50 <sup>th</sup> St. (CSAH 21)	TH 100	France Ave. (CSAH 17)	Augmenter Arterial

\* Please note that another segment or segments of this roadway may have a different functional classification as identified in Tables 7.2 and/or 7.3.

All other minor arterials are considered “B” minor arterials, which have the same function as “A” minor arterials, but are not eligible for federal funds. The “B” minor arterial roadways in Edina are identified in Table 7.2, below.

**Table 7.2 – “B” Minor Arterial Roadways**

Roadway	From	To
York/Xerxes Ave. (CSAH 31)	TH 62	Southern City Limit (ultimately to American Drive, Bloomington)
Valley View Rd./W. 69 <sup>th</sup> St.*	W. 66 <sup>th</sup> St.	York Ave. (CSAH 31)

\* Please note that another segment or segments of this roadway may have a different functional classification as identified in Tables 7.1 and/or 7.3.

**Collector Streets.** The collector system provides connection between neighborhoods and from neighborhoods to minor business concentrations. It also provides supplementary interconnections of major traffic generators within the metro centers and regional business concentrations. Mobility and land access are equally important. Direct land access should predominately be to development concentrations. In order to preserve the amenities of neighborhoods while still providing direct access to business areas, these streets



are usually spaced at one-half mile intervals in developed areas. Collector roadways in the Edina are summarized in Table 7.3, below.

**Table 7.3 Collector Streets**

<b>Street</b>	<b>From</b>	<b>To</b>
Blake Rd./Interlachen Rd.	North City Limit	Vernon Ave. (CSAH 158)
Blake Rd./Olinger Blvd.	Interlachen Blvd.	Tracy Ave.
Londonderry Rd./Lincoln Dr./Vernon Ave.	TH 169	Gleason Rd.
Gleason Rd	TH 62	W. 78 <sup>th</sup> St.
Valley View Road/Tracy Ave.	TH 169	Vernon Ave.(CSAH 158)
Cahill Rd.	W. 78 <sup>th</sup> St.	W. 70 <sup>th</sup> St.
Normandale R./Valley View Rd.*	Benton Ave.	TH 62 (Crosstown)
Normandale Rd./Grange Rd.	Benton Ave.	W. 50 <sup>th</sup> St.
Minnesota Dr.	Parklawn Ave.	Edinburgh Way
Edinburgh Way	W. 76 <sup>th</sup> St.	Xerxes Ave. (CSAH 31)
Wooddale Ave.	W. 50 <sup>th</sup> St.	Valley View Rd.
7 <sup>th</sup> St. W./Lincoln Drive	TH 169	Maloney Ave.
Maloney Avenue	Lincoln Drive	Blake Road
Brookside Ave.	Interlachen Blvd.	North City Limit
44 <sup>th</sup> St.	Brookside Ave.	East City Limit
Link Rd./Eden Avenue	Vernon Ave.	W. 50 <sup>th</sup> St.
W. 49 1/2 <sup>th</sup> St./W. 51 <sup>st</sup> St.	France Ave. (CSAH 17)	France Ave. (CSAH 17)
W. 54 <sup>th</sup> St.	Wooddale Ave.	East City Limit
Southview Lane	Normandale Rd.	Concord Ave.
Concord Ave.	Southview Ln.	Valley View Rd.
W. 58 <sup>th</sup> St.	Concord Ave.	France Ave. (CSAH 17)
W. 60 <sup>th</sup> St.	France Ave. (CSAH 17)	Xerxes Ave. (CSAH 31)
Benton Ave.	Tracy Ave.	TH 100
Hansen Rd.	Benton Ave.	Vernon Ave. (CSAH 158)
Hillary Lane/Dewey Hill Rd.	Valley View Rd.	Cahill Rd.
Cahill Rd.	W. 78 <sup>th</sup> St.	W. 70 <sup>th</sup> St.
McCauley Trail	Gleason Rd.	Valley View Rd.
TH 100 West Frontage Rd/Arcadia Ave.	Benton Ave.	W. 50 <sup>th</sup> St.
Valley Lane/Ridgeview	Valley View Rd (west of	Valley View Rd.(east of



Dr./66 <sup>th</sup> St.	TH 100)	TH 100, south of TH 62)
Antrim Rd.	Valley View Rd.	W. 70 <sup>th</sup> St.
W. 70 <sup>th</sup> St.	Antrim Rd.	York Ave. (CSAH 31)
Valley View Rd.	W. 70 <sup>th</sup> St.	W. 69 <sup>th</sup> Street
Hazelton Rd.	France Ave. (CSAH 17)	York Ave. (CSAH 31)
Parklawn Ave.	France Ave. (CSAH 17)	York Ave. (CSAH 31)
York/Xerxes Ave. (CSAH 31)*	North City Limit	TH 62
Metro Boulevard	Edina Industrial Boulevard	W. 70 <sup>th</sup> St.
W. 62 <sup>nd</sup> Street	France Ave. (CSAH 17)	Valley View Rd.
W. 66 <sup>th</sup> St.*	York Ave. (CSAH 31)	East City Limit
Washington Ave.	Valley View Rd.	W. 78 <sup>th</sup> St.

\* Please note that another segment or segments of this roadway may have a different functional classification as identified in Tables 7.1 and/or 7.2.

**Local Streets** provide the most access and the least mobility within the overall functional classification system. They allow access to individual homes, shops, and similar traffic destinations. Through traffic should be discouraged by using appropriate geometric designs and traffic control devices. Local streets in the City are depicted on **Figure 7.5**.

### Jurisdictional Classification

Roadways are classified on the basis of which level of government owns and has jurisdiction over the given facility. The three levels of government that have involvement are the State of Minnesota (Mn/DOT), Hennepin County, and the City of Edina. Mn/DOT owns/maintains the Trunk Highway (TH) system, Hennepin County the County State Aid Highway (CSAH) and County Road (CR) system. The City owns/maintains the local streets, including Municipal State Aid (MSA) streets. **Figure 7.6** provides a graphic depicting the jurisdictional classification of the overall roadway network serving Edina and its residents, businesses, and institutions.

### Municipal State Aid Streets

Cities in Minnesota with populations greater than 5,000 are eligible to receive Municipal State Aid (MSA) funding from the state Highway User Tax Distribution Fund. The basic purpose of this program is to help local governments construct and maintain collector and arterial roadways which have consistent design standards and which are well integrated into the overall network of collector and arterial roadways. The State Aid office of Mn/DOT has established clearly defined design requirements for MSA streets. These requirements ensure that



capacity, operational, and safety goals are met in a uniform manner from community to community, and that street systems are well coordinated with each other.

Based on State Statute, sections 169.80 and 169.87, Mn/DOT does not allow cities to restrict truck traffic on MSA streets.

Edina's current (2007) MSA network is identified on **Figure 7.7**. These roadways are eligible to receive MSA funds for maintenance and/or improvement projects. The MSA network is reviewed every year and may be revised subject to Mn/DOT State Aid review and approval.



## Problem Locations

The primary current problem locations are identified below.

*Trunk Highway system congestion* – Peak period congestion occurs on nearly all of the trunk highway segments passing through or adjacent to the City. This includes I-494, TH 169, TH 100, and TH 62 (Crosstown Highway). In addition to the mainline congestion, queuing from ramp meters provides a source of localized congestion on the City street system as discussed under the following heading.

*Freeway interchange queues* – Peak period queuing occurs at most freeway ramps. In particular, the older freeway interchanges with TH 62 at Xerxes Avenue and France Avenue have inadequate bridge width and storage capacity to accommodate vehicles waiting at the queue. Similar problems exist along TH 100 at West 70<sup>th</sup> Street and West 77<sup>th</sup> Street.

*Through traffic on local streets* – Various residential areas experience, or perceive that they experience, large amounts of through traffic.

*France Avenue/West 50<sup>th</sup> Street Intersection* – This intersection, in the middle of a popular older commercial area, is affected by high pedestrian traffic levels as well as high vehicular traffic volumes. It is a destination for local as well as many non-local visitors.

*France Avenue from the TH 62 interchange through the Greater Southdale area* – The TH 62/France Avenue interchange does not have enough storage capacity for queued vehicles as discussed under a previous heading. The flow of traffic on France Avenue south of TH 62 is compounded by traffic accessing major medical, office, and retail traffic generators along France Avenue.

*West 70<sup>th</sup> Street east of TH 100* – This roadway segment, with a freeway interchange at one end, and a major commercial area on the other, experiences traffic volumes and speeds which cause difficulties for adjacent homeowners.

*West 77<sup>th</sup> Street/Edina Industrial Boulevard interchange with TH 100* – This interchange experiences congestion related to freeway access and local traffic.

## Safety Analysis

Five-year Mn/DOT crash data for the period 2002-2006 was obtained in Geographic Information System (GIS) format. The locations and frequencies of



crashes during this timeframe for Edina are depicted on **Figure 7.8**. Much of this data is consistent with what would be intuitively anticipated:

- The highest crash locations are at interchanges involving trunk highways
- The overall France Avenue corridor has a relatively high number of crashes, particularly at the TH 62 interchange, and at higher-volume cross streets

However, locations of particular interest are those that seem surprisingly high relative to traffic volumes, and therefore may have unique design or other problems which should be corrected. These locations include the following:

- TH 100/TH 62 interchange – While the interchanges generally have high accident counts, this one has the most crashes of the interchanges by a significant margin. The majority of these crashes appear to be where the eastbound-to-northbound loop merges onto northbound TH 100. The City should coordinate with Mn/DOT to further investigate this location and potential deficiencies that may be corrected.
- Northbound TH 100 at exit ramp to W. 50<sup>th</sup> Street/Eden Avenue
- TH 62/Gleason interchange
- France Avenue at W. 58<sup>th</sup> Street
- France Avenue at W. 65<sup>th</sup> Street
- France Avenue at Minnesota Drive
- W. 70<sup>th</sup> Street at Metro Boulevard
- Vernon Avenue at Interlachen Boulevard

These locations should be monitored and further evaluated as deemed appropriate. In addition to the locations above, the 50<sup>th</sup> Street and France intersection is an ongoing location of safety concern which should be monitored.

The Mn/DOT 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, type of accident, and other factors. For severity, the categories range from fatality to property (vehicle) damage only. The primary types of accidents include rear-end, head-on, sideswipe, right angle, left turn. Different types of intersection conditions and/or deficiencies will lead to different patterns of crash types. The outcomes for given study areas can be compared to statewide averages for a given type of facility to



assess the magnitude of the problem relative to expected conditions for that facility type.

**Existing Transit Service and Facilities**

**Paratransit**

Paratransit services are provided by Edina Dial-a-Ride Transportation. Door to door service is provided using a wheelchair lift-equipped van on a first come-first served basis. 2008 hours of operation are Monday through Friday, 9 a.m. to 3 p.m.

**Scheduled Transit**

The key transit facility in Edina is the Southdale Transit Center. This is part of the Southdale Shopping Mall. It includes a covered shelter area with route/schedule information. The Southdale Transit Center is one of the busier transit centers in the Twin Cities, with eight transit lines which stop and link at this location. There are also 100 parking spaces at a Metro Transit park and ride lot at this location.

Scheduled transit service for Edina residents is currently provided by Metro Transit (a division of the Metropolitan Council) and by Southwest Metro Transit. The existing scheduled service to Edina residents is depicted on **Figure 7.9** and summarized on **Table 7.4**, below.

**Table 7.4 – Scheduled Transit Service in Edina (2008)**

Route Number	Service Route/Area	Service Description
6	Edina (includes Southdale Transit Center), Uptown, downtown Minneapolis, University of Minnesota	High frequency local service, all day/evening, all week; 5-15 minute headways
46	Edina (includes 50 <sup>th</sup> /France), south Minneapolis, St Paul	Local service all day/evening, all week; 30-60 minute headways



114	Edina (includes Southdale Transit Center), south Minneapolis, Uptown, University of Minnesota	Commuter/student service during a.m. and p.m. rush hours, weekdays
146	Edina (Vernon Ave.), southwest Minneapolis, downtown Minneapolis	Commuter express (I-35W) service during a.m. and p.m. rush hours, weekdays
152	Edina (includes Southdale Transit Center), Lake Street, University of Minnesota	Commuter/student express (I-35W) service during a.m. and p.m. rush hours, weekdays
515	Edina (Includes Southdale Transit Center), Richfield, South Minneapolis, Bloomington (includes Mall of America), Veterans Medical Center (alternate route)	Local service, all day/evening, all week; 10-30 minute headways
538 (B-E Service)	Edina (includes Southdale Transit Center), Bloomington (includes Mall of America)	Local service, all day/evening, all week; 30-60 minute headways
539 (B-E Service)	Edina (includes Southdale Transit Center), Bloomington (includes Normandale Community College, Mall of America)	Local service, all day/evening, all week; 30-60 minute headways
540	Edina, Richfield (includes Best Buy Headquarters), Bloomington (includes Mall of America)	Local service, all day/evening, all week; 15-30 minute headways during a.m./p.m. rush hours, otherwise 30-60 minute headways
568	Downtown Minneapolis, south Minneapolis, Edina, Minnetonka (Opportunity Partners)	Weekdays only, one a.m. run from Minneapolis to Opportunity Partners; one p.m. run from Opportunity Partners to Minneapolis



578	Edina (includes Southdale Transit Center), downtown Minneapolis	Commuter express service (TH 62 and I-35W) during a.m. and p.m. rush hours
587	Edina, downtown Minneapolis	Commuter express service (TH 100 and I-394) during a.m. and p.m. rush hours, weekdays
631 (Southwest Metro Transit)	Chanhassen, Eden Prairie, Edina (Southdale Transit Center)	Weekday service, morning through evening; approximately 10 runs per day each direction

Note: all routes are Metro Transit with the exception of 631, which is Southwest Metro Transit. Routes 538 and 539 comprise what is termed Bloomington-Edina (B-E) Area Transit Service, which is planned and financed by Metro Transit, but is contracted out to private operators. B-E service uses smaller van-type buses rather than full-sized 40-foot buses.

### Pedestrian Facilities

The existing and proposed network of sidewalks and pathways serving the City of Edina is depicted on **Figure 7.10**. Potential future sidewalk strategies and improvements are further addressed in Section 7.3.





## Bicycle Facilities

The existing and proposed Bicycle facilities are depicted on **Figure 7.11**.

In 2006, the City initiated the Bike Edina Task Force (BETF), made up of interested citizens and City staff. The City of Edina applied for and received a Blue Cross Blue Shield Physical Activity Promotion grant to prepare a *Comprehensive Bicycle Transportation Plan*. This document has been prepared under the supervision of the BETF. Its primary findings and recommendations are summarized in Section 7.3 of this chapter. The full plan is attached as **Appendix T-2**.



## 7.3 TRENDS AND CHALLENGES

### Roadway Network Planning

#### Traffic Forecasting

To evaluate and plan for future network improvements, it is necessary to project what future traffic levels will be. Consistent with Metropolitan Council guidelines, traffic forecasts were made for the year 2030. These forecasts were made using the Metropolitan Council Regional Model.

The foundation of the traffic forecasting model is the use of Transportation Analysis Zones (TAZs). The boundaries of TAZs within the metropolitan area are



defined by the Metropolitan Council. The TAZs used in the forecasts for this transportation chapter are identified on **Figure 7.12**. Information regarding planned/anticipated future land use is established for individual TAZs. This data includes population, household, and retail/non-retail employment information. The TAZ information used for the Edina 2030 traffic forecasting analysis is summarized in **Table 7.5**

**Table 7.5 –Transportation Analysis Zone (TAZ) 2030 Demographic Information**

Metropolitan Council TAZ	Households	Population	Retail Jobs	Non-Retail Jobs	Total Jobs
327	203	430	17	88	105
512	597	764	208	1,016	1,224
513	2,039	3,085	2,525	2,525	5,050
514	310	540	2,420	3,630	6,050
515	1,044	1,646	840	3,960	4,800
516	1,021	2,368	24	55	79
517	481	741	531	4,460	4,991
518	1,963	4,278	200	4,300	4,500
519	729	1,821	400	2,900	3,300
520	1,240	2,928	50	750	800
521	1,299	3,327	320	960	1,280
522	965	2,892	350	830	1,180
523	746	1,844	149	816	965
524	1,982	4,277	41	639	680
525	698	1,790	360	780	1,140
526	540	1,390	8	173	181
527	902	2,206	0	961	961
528	1,186	2,441	50	1,650	1,700
529	644	1,812	10	60	70
530	176	505	0	363	363
531	604	1,618	0	91	91
532	1,176	3,175	0	135	135
533	358	603	1,987	11,263	13,250
534	30	51	13	1,211	1,224
535	18	33	16	667	683
536	1,488	3,290	16	239	255
537	61	145	72	1,224	1,296
542	0	0	6	638	644



544	0	0	6	397	403
<b>Total</b>	<b>22,500</b>	<b>50,000</b>	<b>10,619</b>	<b>46,781</b>	<b>57,400</b>

The regional model uses the social and job data from each zone, combined with roadway information, regional travel tendencies identified from Travel Behavior Inventory surveys, and other factors, to generate and allocate trips throughout the study area. The regional model is very complex; using it for specific locations or cities requires appropriate application procedures and local adjustments consistent with industry standards for travel demand forecasting. The modeling methodology is further discussed in **Appendix T-3**.

The TAZ inputs used to generate 2030 results were based on the land use information discussed in Chapter 4 of this Comprehensive Plan. The resulting traffic volumes are provided on **Figure 7.4**.

## Deficiencies and Improvement Needs

### General

The City of Edina is considered fully developed and therefore it is not expected to see substantial traffic increases over the planning horizon in many locations. However, with the anticipated redevelopment of land use in some locations, combined with regional traffic trends and considerations, there will be some areas of significant traffic growth. Taking into account projected future traffic conditions, together with current issues, the following areas have been identified for recommended improvements and/or monitoring and further evaluation:

- Gateway area redevelopment
- France Avenue (I-494 to TH 62) – TH 62/France Avenue interchange and other issues
- W. 70<sup>th</sup> Street
- East-west connector corridor
- Other interchange projects

These areas will be addressed under the following headings. The final heading will address a summary of implementation considerations and requirements. Within the context of this planning level information, individual projects will be identified to be included in the City’s Capital Improvement Programs over the next ten years (until the next Comprehensive Plan Update is required).

### Gateway Redevelopment Area Improvements



In 2007 the City prepared an Alternative Urban Areawide Review (AUAR) for an area generally bounded by TH 100 to the west, Fred Richards Golf Course/76<sup>th</sup> Street to the north, France Avenue to the east, and Minnesota Drive to the south (see **Figure 7.13**). The impetus for the AUAR was purchase by a private developer of a group of parcels within the Study Area and subsequent discussions with the City regarding their redevelopment. The City decided to review the potential for further redevelopment within the commercial and industrial area along West 77<sup>th</sup> Street adjacent to these recently acquired parcels.

The AUAR reviewed four different scenarios: 1 – Comprehensive Plan (1998), 2 – Master Plan (proposed by developer), 3 – Maximum Commercial, and 4 – Maximum Residential. Each of these scenarios required its own set of roadway improvements to accommodate the development envisioned for the given scenario. Perhaps the most notable observation is that Scenario 3 (Maximum Commercial) would require reconstruction of the W. 77<sup>th</sup> Street Bridge over TH 100 to provide additional through and turning lanes. Funding requirements may preclude the implementation of this scenario in the foreseeable future.

The AUAR identifies improvements that will be required for various types and intensities of development outcomes. The specific improvements which will be required, and the schedule of those improvements, will be dictated by the development projects which are actually proposed and occur over time. It is recommended that the City clarify to developers early in the plan review procedures for this overall area that they must address transportation improvement needs in a proactive manner. The City will coordinate with developers regarding the planning and funding of the improvements, but developers will be required to perform their “fair share” such that needed improvements are identified and implemented in advance of the added traffic volumes.

A conceptual east-west connector corridor north of I-494 has been identified for further evaluation and potential long-term implementation. This corridor, identified on **Figure 7.14** and using W. 78<sup>th</sup> Street, Viking Drive, W. 77<sup>th</sup> Street, and W. 76<sup>th</sup> Street with enhanced continuity, will be further discussed under a separate heading, below. The improvements addressed in the Gateway Area AUAR are considered short to mid-range improvements, with the east-west connector corridor being a long-range concept.



### **France Avenue (TH 62 to I-494)**

France Avenue between TH 62 and I-494 carries high volumes of traffic. The design of the roadway, 4-lane divided with turn lanes, has a high level of capacity, and roadway actually operates better than what perhaps is the common perception. For example, motorists must wait more than one signal cycle to proceed through an intersection only infrequently even at peak travel times. However, as traffic levels increase into the future as projected on **Figure 7.4**, congestion on the main portion of this stretch of roadway will become more of a concern. The largest operational problems for this stretch of roadway have to do with France Avenue's connections to TH 62 at the north, and I-494 at the south.

#### TH 62 and central areas

The primary issue at TH 62 is that there is not enough bridge width to provide storage for vehicles waiting in queues on France Avenue at the interchange. For the France Avenue/TH 62 interchange, the option to make physical improvements is severely limited based on funding availability. To reconstruct the bridge and interchange to allow more vehicle storage and better geometrics would be very costly, and neither Mn/DOT nor Hennepin County (France Avenue is a County roadway) has identified funding for such a project.

One means to improve this situation is through traffic management, attempting to spread the traffic more equally between the interchanges at Valley View Road, France Avenue, and Xerxes Avenue. Both the Valley View Road and Xerxes Avenue interchanges currently do serve to relieve the France Avenue interchange, but efforts can be made to increase this affect. Options which could be further explored include employee training for businesses in the area to promote use of the alternate interchanges as much as possible, and improved signage indicating the option of using alternate interchanges. However, it is not known how effective such measures could be, short of significant operational or infrastructure projects.

There currently do not appear to be any physical/infrastructure projects which could readily be implemented and would have clear benefits in terms of re-directing traffic from France Avenue to York/Xerxes Avenue. However, as redevelopment takes place in the Greater Southdale area, the City should promote access and street design that helps make Xerxes/York Avenue a viable alternative to France Avenue.

An important limitation of Xerxes/York Avenue in terms of serving as an alternate route for France Avenue is that it does not have an interchange at I-494. As will



be discussed under a separate heading, the City should investigate an enhanced east-west connector corridor north of I-494. This would tie into Richfield's W. 76<sup>th</sup> /77<sup>th</sup> Street corridor. A conceptual alignment is provided on **Figure 7.14**. One of the benefits of such a connector route is that it could make the use of Xerxes/York Avenue as an alternate to France Avenue more viable. East-west traffic flow would be enhanced in the southern portion of the City with connections to both France Avenue and York Avenue.

#### I-494 Area

The primary operational difficulty on France Avenue at the south end at I-494 relates to the single southbound right turn lane to accommodate both motorists using the ramp to westbound I-494 and those using the loop to eastbound I-494. This causes excessive southbound queuing in the right lane. The proximities of Minnesota Drive and W. 78<sup>th</sup> Street to the interchange exacerbate this problem. Hennepin County has identified a roadway re-striping plan which would help address this problem. This plan separates the traffic turning onto the westbound I-494 ramp from the traffic turning onto the eastbound loop. The City will work with the County to ensure that this improvement takes place.

#### **W. 70<sup>th</sup> Street**

The section of W. 70 Street between TH 100 and France Avenue is problematic because it experiences relatively high traffic levels for a roadway passing through a residential setting. The traffic levels are due in large part to the basic location and context of the segment. At one end of the segment is an interchange with major highway (TH 100), and at the other end is an important "A" minor arterial roadway (France Avenue) and a major commercial center (greater Southdale area). Traffic levels are currently at the high end of the capacity for a 2-lane roadway with turn lanes, and residents in the vicinity have difficulties with traffic conditions.



### East-West Connector Corridor

A significant transportation difficulty facing the City is that there is not a continuous east-west reliever roadway on the north side of I-494. Motorists making east-west trips north of the freeway must proceed through a series of roadway segments which are currently not well coordinated or tied into a larger roadway network. Coordinating with adjacent communities, a conceptual corridor has been identified which is depicted on **Figure 7.14** (see “Bridge and Continuity Improvement area”). This improvement area would tie into W. 78<sup>th</sup> Street west of TH 100 at its west end, and would tie into W. 76<sup>th</sup> Street at its east end. It would involve a new bridge crossing of TH 100, which would relieve traffic levels on the W.77<sup>th</sup> Street/Edina Industrial Boulevard bridge over TH 100.

The rationale behind this concept is to provide a roadway which would serve a similar function to American Boulevard in Bloomington and the W. 76<sup>th</sup>/77<sup>th</sup> Street corridor in Richfield. It would tie directly into the Richfield corridor. As stated above, it would relieve congestion through the TH 100/W. 77<sup>th</sup> Street/Edina Industrial Boulevard interchange. It would generally allow more efficient east-west movements and tie into the larger Edina network more effectively. For example, it would make Xerxes/York Avenue easier and more logical to use as an alternative to France Avenue to relieve traffic levels on France. It would allow access to France Avenue to be closed at Minnesota Drive. It would likely make this portion of Edina a more attractive location for business and office development because of improved mobility and access. The Gateway Redevelopment discussed under an earlier heading may provide the opportunity



to begin roadway reconstruction efforts associated with implementation of the overall East West Connector concept.

Because this roadway would support and improve operations on trunk highways (TH 100 and I-494), Mn/DOT and the Federal Highway Administration (FHWA) would be supportive of such a project. The City should explore the availability of state and federal funding to help advance this concept if it is deemed viable.

It should be emphasized that this long-term corridor improvement plan is only conceptual at this point. However, it is recommended that the City continue to explore the concept and discuss it with adjacent communities, Mn/DOT, and Hennepin County. The City will also coordinate roadway reconfiguration and reconstruction with the redevelopment of the Gateway area as appropriate. The potential benefits of such a corridor could be quite significant, just as American Boulevard has benefited Bloomington, and the W. 76<sup>th</sup>/77<sup>th</sup> corridor has benefited Richfield.

Since Metro Transit has five bus lines and a bus terminal on Minnesota Drive, Metro Transit is an important stakeholder in the planning and development of this overall corridor improvement concept.

### **Other Interchange Projects**

The need for reconstruction of the TH 62/France Avenue bridge and interchange has been summarized above. Three other interchange projects are important to the City of Edina:

- I-494/TH 169
- TH 169/Bren Road/Londonderry Road
- TH 62/CSAH 31 (Xerxes Avenue)

Of these projects, the I-494/TH 169 interchange has the highest priority for the City of Edina. While the interchange itself is not within the City (it is in Bloomington), its operations have an important effect on Edina residents. Many Edina residents use it to meet their transportation needs, and when it experiences severe congestion, this causes them delays. In addition, when the facility is congested, this leads to “cut-through” traffic on Edina roadways. The City looks to other agencies, primarily Mn/DOT, to secure the funding necessary to advance this important project. It also looks to Mn/DOT to provide a design which will provide good operational characteristics for an extended period of time and not need to be replaced within a relatively short timeframe.



The need for the TH 169/Bren Road/Londonderry Road interchange is being driven primarily by a planned major expansion of a large employer in Minnetonka. The City of Edina supports the efforts to improve this interchange; however, it views the responsibility to fund these improvements to lie with other government bodies and the employer which is expanding.

### **Summary of Key Implementation Considerations and Requirements**

**TH 62/France Avenue Bridge Reconstruction** – The congestion at this interchange is excessive and this has been a difficult problem for a number of years. This was identified in the transportation section of the 1999 Edina Comprehensive Plan and discussed under a previous heading in this document. The only way to adequately address the problem is to reconstruct the bridge at this location. This project would cost approximately \$15 million. Given that TH 62 is a state highway and France Avenue is a County roadway, it is incumbent upon Mn/DOT and Hennepin County to secure the bulk of this funding for this long-needed project.

The implementation actions recommended for this project include the following:

- Continue to coordinate with Hennepin County, Mn/DOT, and the City of Minneapolis to communicate the ongoing need for this project and attempt to identify funds.
- Apply for grant funding for the project.
- Coordinate with commercial and medical entities which are served by the interchange to identify their willingness to participate in the financing of the necessary improvements to help serve their own interests.

**W. 70<sup>th</sup> Street** – This issue has been addressed in detail in a separate study. The City will take appropriate and timely steps to implement the recommendations from the study. , ,

**Gateway Redevelopment Area Improvements** – The City should require, early in the plan review procedures for redevelopment projects proposed in this area, that transportation improvements be clearly identified and addressed. The City will expect developers to plan, coordinate and finance their fair share of the required improvements in a proactive manner. Any roadway reconfiguration associated with the Gateway redevelopment will need to be consistent with the long term vision of the East-West Connector roadway summarized below.



**East – West Connector Roadway** – The City should continue to coordinate with neighboring communities, Hennepin County, and Mn/DOT to advance the planning and evaluation of the general corridor identified on **Figure 7.14**. It is likely a long-term concept, but as redevelopment is proposed and implemented in the southern portion of Edina, consideration should be given to this potential corridor in terms of long term right-of-way issues and access design.

### Roadway Functional Classification

The role and importance of functional classification as a central transportation planning concept has been discussed in Section 7.2. The existing roadway functional classification map is provided as **Figure 7.5**. For “B” minor arterials and above, the Metropolitan Council determines functional classification for individual roadways. Local authorities may request changes (either from arterial to collector or from collector to arterial), but must provide sound justification for the request, and the Metropolitan Council makes the final determination. For collector roadways, the jurisdiction which owns and operates the facility has the authority to define functional classification status.

The City of Edina will coordinate with Hennepin County and/or the Metropolitan Council regarding the appropriate functional classification for the following roadway segments:

- Vernon Avenue/Gleason Road (CSAH 158) between TH 100 and TH 62
- York/Xerxes Avenue (CSAH 31) between TH 62 and American Boulevard (will also require coordination with the City of Bloomington)
- Valley View Road/W. 69<sup>th</sup> Street between W. 66<sup>th</sup> Street and York Avenue (CSAH 31)

### Roadway Jurisdictional Issues

In general, it is good policy that Hennepin County and Mn/DOT assume responsibility for and jurisdiction over the arterial network, and cities assume responsibility for the collector and local street systems. This is, to a large extent, the situation in Edina. The existing roadway jurisdictional classification system is depicted on **Figure 7.6**.

At present, there are no roadways in the City under State (Mn/DOT) jurisdiction that are being considered for turnback to Hennepin County or the City of Edina.



However, Hennepin County, in its *Transportation System Plan*, identifies three roadway segments that are candidates for turnback to the City of Edina:

- CSAH 20 (Blake Road/Interlachen Boulevard) from north City limit to Vernon Avenue
- CSAH 31 (York/Xerxes Avenue) from 50<sup>th</sup> Street to south City limit (see **Figure 7.15**)
- CSAH 158 (Vernon Avenue/Gleason Road) from TH 100 to TH 62 (see **Figure 7.15**)

At the time of the 1999 Transportation Plan, the City of Edina felt that the turnback of CSAH 20 was logical given roadway use and access characteristics, and the transfer has in fact taken place. Regarding the other segments, the City of Edina does not support either turnback option. These segments should remain under County jurisdiction for the following reasons:

**CSAH 31** – This roadway serves an inter-community function, connecting Bloomington, Edina and Minneapolis. It also links with TH 62. It carries a significant percentage of traffic not originating or terminating in Edina.

**CSAH 158** – This roadway is an arterial roadway serving an inter-community function and is therefore appropriate for Hennepin County jurisdiction. It carries a substantial percentage of traffic not originating or terminating in Edina.

In the event the City is ultimately required to accept one or both of the transfers identified above, it should ensure that the roads are brought up to the appropriate design and maintenance standards prior to accepting transfer.

### **Access Management**

Access management refers to balancing the need for access to local land uses with the need for mobility and safety on the roadway system. Arterials generally have limited access, collectors allow a greater degree of access given their combined mobility/access function, and local streets allow the most access of the roadway functional categories. Appropriate access control preserves the capacity on arterial streets and improves safety by reducing the need for traffic to divert to local streets. It separates local turning movements from higher speed “through” traffic, concentrating traffic linkages at intersections controlled with traffic signals, roundabouts, or other measures.



Mn/DOT and County roadways serving Edina are identified on **Figure 7.6**. For Mn/DOT roadways, Mn/DOT's access management guidelines apply. These guidelines are included in **Appendix T-4**. For County roadways, Hennepin County access management guidelines apply. These guidelines were established in the Hennepin County *Transportation System Plan*, and are included in **Appendix T-4**. In instances of local site redevelopment, the City will continue to work with these guidelines in the site plan review and approval process.

The City's existing ordinance on curb cut placement limits the placement and number of accesses to local and collector roadways under City jurisdiction. General guidelines include the following:

- No driveway on a local street is to be within 50 feet of a street intersection
- When properties adjoin two streets, the access should be to the lower volume street

### **Transportation Demand Management**

The primary emphasis of Transportation Demand Management (TDM) is to reduce the number of vehicular trips on congested roadways during peak travel times. Since the many or most of these trips are commuter (work) trips, TDM strategies primarily involve places of employment and associated travel behavior.

The primary methods or strategies are identified below:

- transit
- car/van-pooling
- telecommuting
- flex-time
- non-motorized commuting

In general, the policies or incentives to promote TDM activities are provided through employers. For example, employers can provide monthly discounts or passes to employees to use transit. They can provide coordination services to match up individuals for car/van pooling activities. They can 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. Regarding non-motorized commuting, the provision of shower and changing facilities is often helpful to promote bicycle commuting.

There are a number of reasons for employers to promote TDM activities. In some cases, vehicle parking is at a premium and anything they can do to reduce parking requirements is beneficial. Another example may be a large employer or group of employers accessed by congested road systems. If these employers can reduce rush hour trips into their facilities and associated congestion, it benefits their workers and makes their places of business more attractive places to work. Some employers wish to reduce vehicle trips to their facilities simply because it is “the right thing to do” for environmental reasons.

Cities can increase TDM activities through promotional activities and by coordinating with key employers to identify and implement TDM plans. Cities may require TDM plans for new developments if they are large enough to have significant traffic impacts. The City of Minneapolis actively uses this approach, for example. Cities can also form or coordinate the formation of Transportation Management Organizations (TMOs). These organizations pool resources and strategies to get the biggest “bang for the buck” for reducing traffic levels in a given area. The City of Edina is an active member of the 494 Corridor Commission, which is a TMO striving to limit single occupancy vehicle trips on I-494.

It is difficult to project the quantitative benefits of Transportation Demand Management activities with confidence. However, as fuel prices increase and congestion on major roadways in the metro region increase into the future, the demand for and potential of this approach will increase accordingly.

The City of Edina currently requires developers proposing projects with the potential for significant traffic impacts to submit TDM plans as part of the plan review and approval process. The thresholds which are currently in place requiring these plans to be generated are projects that would:

- generate 1,000 or more vehicle trips per day, or
- generate 100 or more trips during any one-hour period, or
- increase the traffic levels on an adjacent roadway by 50 percent or more

The City’s requirements in terms of commitment to TDM activities and programs within the TDM plans are currently not rigorous. For example, these plans often simply identify existing transit service within the vicinity of the proposed project to



suggest future TDM activities. It is recommended that the City evaluate the option of adding “teeth” to TDM requirements for developers, perhaps using the Minneapolis program as a guide.

### **Community/Aesthetic Design for Transportation Facilities**

Community design goals and treatments were discussed in detail in Chapter 4 of this Comprehensive Plan. Roadways are an important component in community design because they represent a significant percentage of the overall land area of any community, they represent public space over which the City has jurisdiction (the municipal right-of-way area), and because they are obviously very visible to many travelers, local and non-local.

Chapter 4 established a number of guidelines which included creating a hierarchy of thoroughfares from a character/aesthetic perspective. *It is emphasized that such a hierarchy would be distinct from the functional classification system discussed in this chapter.* While there may be significant overlap, the functional classification network is used to determine functional design parameters such as number/width of lanes and access spacing, as well as more general network planning to promote efficient movement (motorized and non-motorized) throughout the entire City. On the other hand, the community design hierarchy of thoroughfares involves aesthetic or contextual design elements such as landscaping/streetscaping, as well as guidelines that promote safe and enjoyable pedestrian and biking activity.

As discussed in Chapter 4, the recommended hierarchy of thoroughfares includes the following:

- Primary Thoroughfares – Centrally located streets that service multiple land uses. Only France Avenue south of TH 62 is in this category.
- Residential Thoroughfares – Important, linking roadways that run through largely residential neighborhoods, including Vernon Avenue, Interlachen Boulevard, and North France Avenue.
- Business District Thoroughfares – Serve commercial and office centers. Examples include York Avenue, W. 66<sup>th</sup> Street, W. 77<sup>th</sup> Street, and Metro Boulevard.

The locations of these thoroughfares are provided on **Figure 4.5**, and more detailed discussion and guidance is provided in Chapter 4.



Another important component of the Community Design Plan which pertains to transportation and roadways is the guideline for gateways. Gateways define areas with character and a sense of place, and can include such features as street or other lighting, signage, street furniture and public art, and other streetscape improvements. Many of these elements are in place in various districts throughout the City, but other locations could be identified and improved. Further detail on this topic is provided in Chapter 4 of this Comprehensive Plan.

## Transit Plan

### Scheduled Service

The City of Edina, as an inner ring suburb, has good transit service relative to much of the overall metro region. The existing service and facilities are identified on **Figure 7.9**. The Southdale Transit Center is one of the busiest transit facilities in the region, and there is generally good commuter service to downtown Minneapolis. However, transit service in western portions of the City is quite limited. Additionally, the need has been identified to evaluate additional park and ride capacity to improve the usability of commuter service for Edina residents. This will be discussed further under the facilities heading below.

As has been discussed in Chapter 3 of this Comprehensive Plan, the population of Edina is aging to a greater degree than many communities in the region. This trend will likely increase the demand for transit services in the coming years. The City should track this and other factors including increasing gasoline costs to assess on-going demand for enhanced scheduled transit service. The City



should work with Metro Transit and Southwest Metro Transit to advance such service as demand is identified. Metro Transit provides the great majority of transit service in Edina, and it would make the determination if service revisions or enhancements would be viable for its service areas. The ability to plan and provide additional transit service is subject to state and regional funding that Metro Transit receives.



### Facilities

Metro Transit's Central-South (Sector 5) Plan (revised 2004) identifies that a park and ride facility (300-500 car facility) is envisioned at TH 100 and Vernon Avenue. A park-and-ride facility in this location would be of significant benefit for City residents desiring express service to downtown Minneapolis. This is particularly true given that there currently is only limited transit service in the western portion of the City. An assessment of local traffic and other impacts will be required prior to implementing a park and ride facility at this or any other location within the City. Local mitigation measures will be provided as deemed necessary through analysis and local input.

### Local Circulator Service

As discussed above, there is very limited Metro Transit Service in the western portions of Edina. The City has had discussions with Metro Transit regarding additional service to the western areas, perhaps as circulator service. This would involve smaller vehicles which would seat between 12 and 18 riders. Metro Transit has determined that there is not enough demand in this area for it to viably provide such service, given its funding limitations. Metro Transit staff has



cited the relatively high income levels and high rates of car ownership as factors limiting the demand for additional transit service in these areas.

The City has evaluated, on a preliminary basis, the option of providing its own circulator service. This would provide service to the western portions of the City and would give those who cannot drive or choose not to an alternative travel mode to use. Information on the analysis of circulator service is provided in **Appendix T-5**. In summary, the capital costs for the lowest level of service ("baseline") evaluated would be approximately \$150,000 (three vans), and the annual operating costs would be over \$250,000. The more extensive operational scenario evaluated resulted in costs substantially higher.

The evaluation summarized above is intended to stimulate preliminary but systematic consideration of circulator service which could increase transit coverage in western Edina. To move this issue forward, a more detailed study will be required to address the following issues:

- Clarify the City's understanding of potential ridership; who will use the service and at what times?
- Preferred service type and frequency
- If fixed route, identify the optimal routes and stops
- If a hybrid fixed route/flex service, identify optimal operating parameters
- Hours of operations
- Fare structure

#### **Greater Southdale Area Shuttle Service**

Studies conducted for the City of Edina have performed preliminary assessments of potential shuttle transit service in the greater Southdale area. Most recently, the *Edina Promenade Urban Design Plan* (URS Corporation) identified a concept involving small bus or tram service shuttling passengers from the Southdale hospital complex to the north to Edinborough on the south end. The study recommends use of an alignment partially down the center of the study area, and partially along its east side on York Avenue as depicted on **Figure 7.16**

It is recommended that the City perform a study, potentially in conjunction with circulator service referenced above, to assess the viability and implementation requirements associated with proposed shuttle service for the Greater Southdale area. Such a study would address the following topics:



- Clear definitions of what function the service is supposed to provide and who its patrons would be
- Review of similar systems elsewhere
- Assessment of vehicle types
- Service delivery (City operation vs. contractor)
- Preferred route alignment (efficient running time vs. comprehensive “front door” service)
- Infrastructure improvement requirements
- Traffic control requirements
- Overall cost considerations
- Business coordination issues
- Recommendations for pilot project

### Light Rail Transit

During the public involvement portion of the Comprehensive Plan preparation process, residents expressed a desire for Light Rail Transit (LRT) service and asked about the possibility of such service in Edina. Therefore, a brief overview of LRT issues as they pertain to the City of Edina is provided below.

LRT projects are very capital intensive because they require dedicated rights-of-way with rail and electric power installations, and the cars themselves are expensive. Due to the costs involved, LRT corridors generally need to be on a regional scale to justify the necessary investments. Therefore, the planning and implementation of LRT systems are primarily the responsibility of the Metropolitan Council and the metro-area counties. Because of their size, the cities of Minneapolis and St. Paul have also been very involved in the planning process for certain corridors.

The Metropolitan Council has identified a series of transitway corridors for planning purposes. This network is included as **Figure 7.17**. The Hiawatha LRT Corridor, connecting downtown Minneapolis, the MSP International Airport, and the Mall of America, has been completed. The Central LRT Corridor, connecting Downtown Minneapolis and Downtown St. Paul has received federal funding and is anticipated to be operational in the next 4-5 years.

The transitway corridor which has the most relevance for Edina is the Southwest Corridor. This corridor would connect downtown Minneapolis to Eden Prairie, and LRT has been chosen as the transit technology. The lead agency performing the planning for this project is the Hennepin County Regional Railroad Authority. Various alignment alternatives are still under consideration, but in the vicinity of Edina they follow the railroad right-of-way which is between Highway 7



and Excelsior Boulevard. This corridor passes just north of the northwest corner of Edina. Perhaps of most interest to Edina residents are two park and ride transit stations which are currently identified for the overall line; one at Blake Road just north of Excelsior Boulevard, and the other at Excelsior Boulevard just west of TH 169.

County information indicates that the earliest the Southwest Corridor LRT line could be operational is 2015. Pending funding and other considerations, it may take longer than this. While not a formal partner in the SW Corridor planning process, the City has been tracking the project closely and will continue to do so, coordinating as needed with Hennepin County and adjacent communities.

Bus Rapid Transit (BRT) is another form of express transit service which often is less expensive than LRT. However, the costs are significant because of the need for a dedicated transitway (or, at minimum, substantial transit advantages), and the nature of the service is that these routes are regional in scale. No regional BRT routes in the vicinity of Edina are currently under consideration.

The Dan Patch corridor has been identified as a possible commuter rail corridor by the Metropolitan Council. Development of this corridor for commuter rail is beyond the time horizon of this plan (2030).

### **Metro Transit Central-South (Sector 5) Plan**

As referenced previously, Metro Transit has completed a study and plan addressing service improvements and facility planning in the Central-South sector, which includes Edina. The City looks to Metro Transit to update this document as needed in light of changing transit demand conditions such as increased roadway congestion, high fuel costs, and an aging population.

## **Pedestrian and Bike Facilities**

### Pedestrian Facilities

The goal of this section is to build upon the current City practices to create a framework for planning and implementation of future sidewalks. Sidewalks and other pedestrian facilities are an important component of the City's transportation infrastructure. Sidewalks and paths provide safe movement for individuals of all ages, decrease the dependency on motor vehicles, and encourage active lifestyles. An effective municipal sidewalk system provides network continuity



such that there is broad geographic coverage for a range of users and uses, without notable gaps.

A thorough review of the existing sidewalk and path network has been completed by City Staff. The following categories were used to evaluate existing facilities and help determine appropriate locations for future sidewalks. These categories are generally listed in descending order of priority:

- Public school walking zones
- Park and activity center walking zones
- Retail business walking zones
- Public transit facilities
- Roads where high vehicle traffic volumes create an impediment to pedestrian movements
- Roads defined as Collectors and above
- Roads with State-Aid designation
- Sidewalks internal to larger sites

Citizen- and/or business-petitioned locations will also receive important consideration as they are brought forward for City review.

A walking zone of 0.7 miles was used for public and private elementary schools, retail business centers and parks. A one-mile walking zone was used for middle and senior high schools (both public and private). These zones are consistent with the Edina School District guidelines.

Sidewalks within the City are divided into the following four categories:

**State-Aid** sidewalks are located adjacent to Municipal State-Aid Streets (MSAS) and are funded from MSAS funds.

**School Zone** sidewalks are identified by the City and Edina School District and are located within the identified school walking zones.

**Destination Zone** sidewalks are typically located along roadways that link existing systems and carry over 750 vehicles per day. Examples of destination nodes are business districts, parks and other community activity areas.



**Local / Low Volume Street Zone** sidewalks are any sidewalks that do not meet any of the above definitions, but have importance from access and system continuity perspectives.

**Figure 7.10** depicts existing and proposed future sidewalk locations based on information and criteria provided above. The construction of new sidewalks and pathways is performed in accordance with current practices as directed by the City of Edina Engineering Department.

A boulevard style sidewalk is recommended for new construction wherever feasible to maximize safety conditions for pedestrians. Sidewalks should be designed to minimize impacts to large trees, avoid steep grades, and generally accommodate other site constraints. Geometric limitations may force a sidewalk to be placed along the edge of a roadway.

Sidewalks are typically five feet wide; however, a four foot width is acceptable for boulevard style sidewalks when not maintained by the City of Edina. Boulevard widths should be approximately five feet wide to allow proper growth of sod.

Financing of the proposed sidewalks are separated into four categories:

1. **State-Aid** Costs cover any proposed sidewalk located adjacent to a State-Aid designated roadway and are paid 100 percent by State-Aid funds.
2. **Public School Zone** Costs will be split using 25 percent City funds, 25 percent School funds, and 50 percent Special Property Assessments.
3. **Destination Zone** Costs will be split between 25 percent City funds and 75 percent Special Property Assessments.
4. **Local / Low Volume Street Zone** Costs will be financed 100 percent through Special Property Assessments.

Special property assessment policy should be reviewed for each individual project. The City has the discretion to order a project assessed on a per-adjacent lot basis, per local area assessment, or a combination of both.

The City should search out additional funding sources, such as grants or partnering with other agencies, for larger projects that have regional significance. One potential important source is the Safe Routes to School Program in which Mn/DOT allocates federal funds to projects of merit selected on a competitive basis.



Sidewalks located on State-Aid roads or within the Public School Zones will be maintained by the City of Edina. Typical City maintenance includes snow removal and repair of broken or shifted sidewalks. Sidewalks located on Local/Low Volume Street Zones and Destination Zones must be maintained by the property owners.

### Bike Facilities

In 2006, the City Council appointed the Bike Edina Task Force (BETF), made up of citizens interested in bicycle issues and planning. The BETF has overseen the preparation of the *City of Edina Comprehensive Bicycle Transportation Plan*, which is hereby adopted by reference and included as **Appendix T-2**. This document provides a detailed identification of current conditions and problem areas regarding bicycle facilities within the City. It also provides a vision regarding system-wide improvements to the City's bicycling facilities.

It is the goal of the City to improve conditions for bicycling by reducing hazards and by developing and improving Edina's bicycle transportation infrastructure so as to invite Edina residents, workers, and visitors to include bicycling as part of their daily mobility activities. Bicycle improvements will be implemented to support safe, efficient, and inviting travel for children riding to school and adults riding to work, as well as recreational users. It is hoped that enhancing biking activities will remove a significant number of vehicular trips from Edina's roadway system.

The guiding principles for improving bicycle facilities in Edina are as follows:

- Improve safety conditions for cyclists, pedestrians, and motorists
- Provide safe routes for all ages and ability levels
- Improve connections to local and regional destinations
- Provide a useful and realistic transportation method within the City
- Promote bicycling to improve community health

One of the key tools that will be used by the City to improve its overall bicycling system as outlined above is a recommended route network as identified in the *Edina Comprehensive Bicycle Transportation Plan*. This network is provided as **Figure 7.11** of this Comprehensive Plan Update. It is divided into primary routes and secondary routes. The City intends to first focus on integrating the primary routes into existing infrastructure before proceeding with the secondary routes. Prior to system improvements being implemented in this manner, they will need



to be reviewed by the City's Engineering and Planning Departments to confirm technical feasibility and to refine design elements as warranted.

Implementation of bicycle system infrastructure improvements will be a relatively long-term undertaking that will be broken down into implementation phases or time periods. The planning and implementation of these improvements take into account regional trail systems and associated improvements, as well as more general infrastructure planning on the part of the City and Hennepin County.

### **Goods Movement**

No major trucking operations exist within the City. Edina has one rail line, a branch of the Canadian Pacific, which has low utilization.

Most goods movement in Edina is associated with the Cahill light industrial/warehouse area which is generally bounded by Cahill Road to the west, West 70<sup>th</sup> Street to the north, TH 100 to the east, and Edina Industrial Boulevard to the south. Trucks in this area have adequate access to Trunk Highways, primarily via Cahill Road and West 70<sup>th</sup> Street to TH 100, or via Edina Industrial Boulevard to TH 100 and I - 494. These routes do not require trucks to pass through residential neighborhoods. No major improvements to accommodate goods movement are anticipated to be required over the planning horizon. The City will continue to attempt to keep truck traffic out of residential neighborhoods.

### **Aviation**

There currently are no airports within the City of Edina. The closest airport is the Minneapolis-St. Paul International Airport (MSP), which is approximately three and one half miles east of the City. Edina is not in the influence area of MSP as determined by Metropolitan Council Guidance (*Transportation Policy Plan*, Appendix H).

Any person or organization who intends to sponsor the construction or alteration of a structure affecting navigable airspace as defined in Federal Regulation Title 14, Part 77 needs to inform the Federal Aviation Agency (FAA) of the project. This notification is accomplished through the completion and submittal to FAA of Form 7460. In the case of Edina, this requirement applies to the following circumstances:

- any construction or alteration exceeding 200 feet above ground level



- any construction or alteration of greater height than an imaginary surface extending outward and upward at a slope of 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway (Runway 17/35 at MSP)

There is currently one heliport in the City of Edina. It is located at the Fairview Southdale Hospital. Heliports are regulated through City ordinance.

## 7.4 GOALS AND POLICIES: TRANSPORTATION

The goals and policies provided in this section are based on the policies from the 1999 *Edina Transportation Plan*, the 2005 *Edina Transportation Commission Policy*, and current discussions and deliberations by the City.

### Goals

1. Maintain and enhance mobility for residents and businesses through creation and maintenance of a balanced system of transportation alternatives.
2. Implement a fully multi-modal transportation system that supports the land use vision and future land use plan for managing and shaping future growth.
3. Minimize the impacts of the transportation system on Edina's environment and neighborhood quality of life.
4. Reduce the overall dependence on and use of single-occupant vehicles by promoting land use patterns that allow for shorter vehicular trips and the use of alternative travel options.
5. Ensure that all Edina's residents, workers, and visitors, including those with transportation disadvantages, have viable travel options.
6. Promote a travel demand management program through a coordinated program of regulations, marketing, and provision of alternative travel options.
7. Provide multiple travel options for transit users, pedestrians, bicyclists, and rideshare users, as well as for drivers of private automobiles.



8. Support attractive and high performance transit service and connections.
9. Manage parking provision to encourage joint and shared use of facilities, ride-sharing (car pools and van pools), bicycle parking, and increased transit use.
10. Provide for efficient movement of goods within Edina, while minimizing the impacts of freight traffic on other trips and reducing negative impacts on land uses on freight corridors.

## Policies

### Roadway Design

1. Design roadway facilities constructed in conjunction with redevelopment projects according to the intended function.
2. Upgrade existing roadways when warranted by demonstrated volume, safety or functional needs, taking into consideration environmental limitations.
3. Emphasize improvements to management, maintenance and utilization of the existing street and highway system.
4. Design/enhance *residential street systems* to discourage through traffic and to be compatible with lower speed bicycling and walking. This includes consideration of traffic calming measures on local streets and, in some cases, collector streets.
5. Design/enhance *collector and arterial roadways* to minimize through traffic on local streets in the functional classification system, and to be compatible with other transportation modes including transit, bicycle and pedestrian.
6. Use adequate transitions and buffers including, but not limited to, earth berms, walls, landscaping and distance to mitigate the undesirable impact of high volume roadways.
7. Consider the use of sound mitigating features for residential development adjacent to high volume roadways, and make property owners and land



- developers responsible for noise attenuation at new developments near high volume roadways.
8. Encourage beautification of local roadways, where appropriate, with amenities such as boulevard trees, decorative street lighting, and monuments.
  9. Monitor and address transportation requirements associated with demographic trends, such as an aging population.

### **Roadway Function and Access**

1. Provide logical street networks to connect residential areas to the regional highway system and local activity centers.
2. Adequately control access points to the regional roadway system (including minor arterials) in terms of driveway openings and side street intersections.
3. Provide access to the local street system (including collector and local streets) in a manner that balances the need to safely and efficiently operate the street system with the need for access to land.
4. Encourage, through roadway design and signage, intra-area trips on minor arterials rather than the principal arterial system, and promote serving regional trips on the metropolitan highway system.
5. Separate, to the extent possible, conflicting uses on the roadway system in order to minimize safety problems. Give special attention to pedestrian and bicycle routes.
6. Provide access to redeveloping sites using current functional classification and standards rather than the existing access at the sites.
7. Review and update regional and local functional street classification and coordinate with adjacent cities and Hennepin County. Establish subcategory classifications and criteria for local streets if warranted. Revise local roadway classifications when warranted.



8. Review and monitor citywide traffic volumes, congestion, existing traffic calming devices and measures, accident history, vehicle violation history, speed limits and enforcement.
9. Educate public on vehicle operations including public relations campaigns that focus on individual responsibilities to each other rather than individual rights only.
10. Review and recommend traffic calming policies and consider traffic calming implementation where requested by residents.
11. Implement measures to reduce non-local, cut-through traffic in cooperation with County and State efforts by developing a local traffic calming policy to mitigate the effects of cut-through traffic. Identify the origin and destination of cut-through traffic.
12. When requested by the Edina Transportation Commission and/or the Planning Commission, review land use that may impact traffic implementations. Continue to monitor adjacent community redevelopment and other activity that potentially impacts the City of Edina.
13. Evaluate and implement measures required for school safety.

### **Roadway Maintenance and Operation**

1. Cooperate with other agencies having jurisdiction over streets and highways in Edina to assure good roadway conditions and operating efficiency.
2. Continue the implementation of the I-494 frontage road system through ongoing coordination with Mn/DOT, Hennepin County, and the cities of Richfield and Bloomington.
3. Maintain roads by repairing weather-related and other damage. Continue current on-going pavement improvement plan.
4. Use economic and environmentally sound management techniques for snow and ice removal.
5. Replace substandard bridges and bridges that present safety or traffic problems.



6. Track developments regarding the most current transportation systems and technologies, evaluate and implement as warranted.
7. Support state legislation to decrease statutory urban speed limits from 30 to 25 miles per hour.
8. Complete speed zone studies and establish speed zones for Safe Routes to School.

### **Transit/Transportation Demand Management (TDM)**

1. Participate in the I-494 Corridor Commission to encourage all forms of travel demand management in order to reduce single occupancy vehicle travel, overall vehicle miles of travel, reduce petroleum consumption, and improve air quality.
2. Review and recommend policies necessitating a Transportation Demand Management Plan and/or a mass transit component with all types of development. Review and implement substantive requirements associated with these TDM Plans, potentially including TDM escrow accounts, transit passes, preferential parking for car-poolers, and other measures.
3. Find a location for an additional Park and Ride facility to be established in close proximity to major mass transit routes including TH 100 and Vernon Ave./W. 50<sup>th</sup> Street. Review the potential need to expand capacity at the existing Southdale park and ride facility.
4. Review all major new developments in light of the potential for ridesharing including bus accessibility, preferential parking for carpools/vanpools, and mixed-use development.
5. Support High Occupancy Vehicle (HOV) bypasses and other preferential treatments for transit and high occupancy vehicles on streets and highways.
6. Include transit planning in the construction or upgrading of streets and highways.
7. Pursue development of a circulator system within the City.



## Parking

1. Review new developments for adequacy of parking based upon need, the potential for joint use of parking facilities and opportunities to encourage ridesharing.
2. Continue to limit on-street parking in and near congested commercial areas.
3. Work with appropriate commissions such as Planning and Zoning to review City Code, Section 850.08 Parking and Circulation to identify parking based upon needs.
4. Address specific parking requirements in small area plans for given study areas.

## Pedestrian/Bicycle

1. Provide accessibility to pedestrians and bicycles at major activity centers, including necessary storage facilities.
2. Create pedestrian and bicycle interconnections among major generators, with continuity across major roadways and other barriers.
3. Review and recommend construction of pedestrian and bike paths throughout Edina cooperatively with the Three Rivers Park District and Hennepin County.
4. Promote safe walking, bicycling and driving. Promote vehicle driver respect for bicycles and pedestrians along with bicyclists and pedestrian observance of signs and use of designated paths for travel.
5. Support inclusion of pedestrian and bicycle access planning when upgrading roadways, bridges and redevelopment projects.
6. Provide sidewalks and safe crossings for areas of potential pedestrian/vehicle conflicts, including high-traffic streets, commercial areas, areas with transit access, and in high-density residential locations.



7. Provide appropriate signage in areas of potential conflict between pedestrians and automobile traffic.
8. Separate pedestrian traffic from bicycle traffic to ensure desired safety conditions. When a bicycle facility is provided, consideration should also be given to providing a corresponding pedestrian way where possible. This could be as a separate facility or through striping.
9. Support recommendations of the *Comprehensive Bicycle Transportation Plan* for implementation.

### **Goods Movement**

1. Serve major truck users and intermodal facilities with good minor arterial access to the metropolitan highway system.

### **Funding and Jurisdiction**

1. Pursue and support regional or multi-community funding sources for improvements that provide regional or multi-community benefit.
2. Support research efforts into more efficient and cost-effective management, maintenance and replacement of street surfaces.
3. Support governmental jurisdiction over roadways that reflect the role of the roadway in the overall transportation system.
4. Encourage the legislature to continue a dedicated source for funding for efficient mass transit.
5. Encourage the legislature to provide stable, long-term roadway funding for capital, operating/traffic management, and maintenance.
6. Develop and support legislation permitting a transportation utility.

## **7.5 IMPLEMENTATION**

Previous sections of this chapter have examined existing conditions, as well as future issues, needs, and recommendations. This section discusses implementation of the City's transportation objectives.



## Transportation Plan Adoption

By adopting the overall Comprehensive Plan Update including the Transportation Chapter, the City Council will establish the guidelines by which decisions regarding transportation facilities and programs will be made in Edina. The City should periodically review the assumptions under which the plan was developed, including estimates of future development, changing financial resources, citizen and governmental input, and other factors which may arise, and update the plan as appropriate.

## Roadway Network

- TH 62/France Avenue Bridge reconstruction – continue to promote the advancement of this project, working with Mn/DOT, Hennepin County, and local organizations including adjacent landowners. Partner with these organizations in efforts to secure future funding for the necessary improvements.
- France Avenue – work with Hennepin County to ensure the overall operation and safety of this roadway, particularly at its interchanges with TH 62 and I-494.
- W. 70<sup>th</sup> Street – consider study recommendations, balancing local concerns with transportation network factors.
- Gateway redevelopment project area – continue to work with the local developer to define roadway needs and ensure that the developer (s) participates appropriately in the funding of improvements.
- East-west connector roadway – continue to coordinate with adjacent communities, Mn/DOT, and Hennepin County to discuss and advance this concept (identified on **Figure 7.14**) as appropriate.
- Functional classification – work with the Metropolitan Council and other agencies as needed regarding the appropriate functional classification of the following roadway segments:
  - Vernon Avenue/Gleason Road (CSAH 158) between TH 100 and TH 62
  - Xerxes/York Avenue between TH 62 and American Boulevard (Bloomington)
  - Valley View Road/W. 69<sup>th</sup> Street between W. 66<sup>th</sup> Street and York Avenue (CSAH 31)



- Jurisdictional Classification – Hennepin County has identified two roadway segments as potential candidates to turn back to the City. The City opposes these reclassifications. The City should coordinate as needed with Hennepin County to demonstrate that turning back jurisdictional authority to the City is not appropriate for the following locations:
  - Vernon Avenue/Gleason Road (CSAH 158) between TH 62 and TH 100
  - York/Xerxes Avenue (CSAH 31) between I-494 and 50<sup>th</sup> Street (CSAH 21)

### Transit

- Continue efforts to establish a park-and-ride facility at TH 100/50<sup>th</sup> Street.
- Continue to evaluate the feasibility of circulator service focusing on the western portion of the City, and shuttle service in the Greater Southdale area. Work with Metro Transit to implement such service if feasible.

### Transportation Demand Management (TDM)

- Review and potentially implement the option of increasing TDM requirements for developers.

### Non-motorized Transportation

- Use the *Comprehensive Bicycle Transportation Plan* to identify ongoing projects for feasibility review and implementation as warranted.
- Working in conjunction with roadway or other infrastructure improvement projects, construct sidewalks on an on-going basis consistent with the future network plan identified on **Figure 7.10**.
- Sidewalks not identified on **Figure 7.10** will be considered on a case-by-case basis.
- Review special assessment methodology for funding the construction of sidewalks and trails.

### Funding Considerations

Funding for transportation improvements and programs can be obtained from a variety of sources, as summarized below:



**General Ad Valorem (Property) Taxes** – Transportation projects can be funded with the general pool of municipal revenues raised through property taxes.

**State Aid** – Cities with populations of greater than 5,000 are eligible for funding assistance from the Highway User Tax Distribution Fund (funded with the state gas tax and vehicle taxes, as well as federal transportation funds through Mn/DOT). These funds are allocated to a network of Municipal State Aid (MSA) streets. Currently, the City of Edina receives an apportionment per year for improvements to its MSA streets, which are typically collector roadways higher in functional classification.

**Federal Transportation Funds** – The guidelines for direct federal funding for transportation projects are established under the Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETELU). These funds are allocated by the Metropolitan Council which serves as the Metropolitan Planning Organization for the Twin Cities metropolitan area. Roadway, transit, non-motorized, and other transportation-related projects are selected on a competitive basis based on evaluation, prioritization, and recommendation by the Metropolitan Council's Transportation Advisory Board (TAB). The process of solicitation for project proposals and resulting allocation of federal funding to selected projects occurs every two years. The next round of solicitation for proposals will take place in 2009.

**Cooperative Agreements with Mn/DOT and/or Hennepin County** – Different levels of government can cooperate on planning, implementing, and financing transportation projects which provide benefits to all the concerned agencies. The financial terms and obligations are generally established at the front end of the projects.

**Tax Increment Financing (TIF)** – This is a method of funding improvements that are needed immediately by using the additional tax revenue anticipated to be generated because of the given project's benefits in future years. The difference between current tax revenues from the targeted district and the increased future tax revenues resulting from the improvements is dedicated to retiring the municipal bonds used to finance the initial improvement(s).

**Developer Contributions/Impact Fees** – Under this approach, the impact of the additional traffic from a proposed development on the local



roadway system is projected, using standard traffic engineering procedures. Costs associated with improving the roadway system to handle the additional traffic at an acceptable level of service are assessed to the developer. This approach generally involves some level of negotiation between the local government and the developer to work out a cost-sharing agreement that allows the development to move forward.

**Assessments** – Properties that benefit from a roadway scheduled for improvement may be assessed for the cost of construction. In order to assess the owner, it must be demonstrated that the value of their property will increase by at least the amount of the assessment.

In addition to these methods, the City should always consider negotiating with business and medical centers to help fund transportation improvement projects, large or small, which would have direct benefits to those centers.

Two potential sources of transportation funding have been proposed and discussed for a number of years, but are not currently allowed under state law. They are:

**Road Access Charge** – All new developments would be charged based on the trip generation rates of the given development, without an estimation or documentation of specific traffic impacts or improvement requirements. It would be analogous to the Sewer Access Charge (SAC) for access to the Metropolitan Council's sanitary sewer system. Revenues from this source could be used to build or improve collector and arterial roadways within the local jurisdiction collecting the tax.

**Transportation Utility Billing** – All properties within the local jurisdiction would be subject to a periodic fee, based on the number of vehicle trips generated by the type of property. The pool of funding generated in this manner would be used for community-wide transportation improvements such as preventive maintenance and road reconstruction. The periodic nature of the billing would be beneficial in terms of supporting on-going or routine roadway maintenance projects through the entire network.

The City should continue to support and promote the passage of legislation at the state level which would allow these forms of dedicated local transportation revenue generation.

### **Capital Improvement Program**



The City has a Capital Improvement Program that is used to guide transportation investments within the community. The process includes analyzing projects that contribute to the maintenance and improvement of the transportation network based on the policies set forth within the Transportation Plan.

The City Council updates the Capital Improvement Program yearly to reflect the changing needs of our transportation network.

**Appendix T-1**

**Metropolitan Council Roadway Functional Classification  
Characteristics/Criteria**

**Table F-3  
Functional Classification System Criteria for Minor Arterials**

Criterion	Minor Arterial (“A” or “B”)	
	Urban	Rural
<b>Place Connections</b>	Provide supplementary connections to metro centers and regional business concentrations within the MUSA. Provide interconnection of major traffic generators within the metro centers and regional business concentrations.	Connect the MUSA with cities and towns in Minnesota outside the Twin Cities region. Interconnect rural growth centers inside the Twin Cities region and comparable places near the Twin Cities region.
<b>Spacing</b>	Metro centers and regional business concentrations: 1/4-3/4 mile. Fully developed area: 1/2-1 mile. Developing area: 1-2 miles.	Permanent Rural and Agricultural Areas: As needed, in conjunction with the major collectors, provide adequate interconnection of places identified in “Place Connections” criterion.
<b>System Connections</b>	To most Interstate freeways and other principal arterials, other minor arterials and collectors and some local streets.	To most Interstate freeways and other principal arterials, other minor arterials and collectors, and some local streets.
<b>Trip-Making Service</b>	Medium-to-short trips (2-6 miles depending on development density) at moderate speeds. Longer trips accessing the principal arterial network. Local and limited-stop transit trips.	
<b>Management</b>	Maintain the following minimum average speed during peak-traffic periods: Metro centers and regional business concentrations - 15 mph. Fully developed area - 20 mph. Developing area - 30 mph.	Retain ability to meet urban speed objective if and when area urbanizes.
<b>Mobility vs. Land Access*</b>	Emphasis on mobility rather than on land access. Direct land access within the MUSA restricted to concentrations of commercial/industrial land uses.	Emphasis on mobility rather than on land access.

\*The key objective is stated under “Management” heading in this table.

**Table F-4  
Functional Classification System Characteristics for Minor Arterials**

<b>Characteristics</b>	<b>Minor Arterial ("A" or "B")</b>	
	<b>Urban</b>	<b>Rural</b>
<b>System Mileage</b>	Suggested limits for principal arterials and minor arterials at 15-25% of system.	Suggested limits for principal arterials and minor arterials at 6-12% of system
<b>Percent of Vehicle Miles Traveled</b>	Suggested limits for principal arterials and minor arterials at 65-80% of system.	Suggested limits for principal arterials and minor arterials at 45-75% of system.
<b>Intersections</b>	Traffic signals and cross-street stops.	Cross-street stops.
<b>Parking</b>	Restricted as necessary.	Restricted as necessary.
<b>Large Trucks</b>	Restricted as necessary.	Restricted as necessary.
<b>Management Tools</b>	Traffic signal progression and spacing, land-access management/control, preferential treatment for transit.	Land-access management/control.
<b>Vehicles Carried Daily</b>	5,000-30,000	1,000-10,000
<b>Posted Speed Limit</b>	35-45 mph	Legal limit
<b>Right-of-Way</b>	60-150 feet	60-150 feet
<b>Transit Accommodations</b>	Preferential treatment where needed.	None.

**Table F-5  
Functional Classification System Characteristics for Collectors and Local Streets**

Criterion	Collector		Local	
	Urban	Rural	Urban	Rural
<b>Place Connections</b>	Interconnect neighborhoods and minor business concentrations within the MUSA. Provide supplementary interconnection of major generators within the metro centers and regional business concentrations.	Provide supplementary interconnection among rural growth centers inside the Twin Cities region and comparable places near the Twin Cities region.	Interconnect blocks within residential neighborhoods and land parcels within commercial/industrial developments.	
<b>Spacing</b>	Metro centers and regional business concentrations: 1/8 - 1/2 mile. Fully developed are: 1/4 - 3/4 mile. Developing area: 1/2 - 1 mile	Permanent Rural and Agricultural Areas: As needed in conjunction with minor arterials, to provide adequate interconnection of places identified in "Place Connections" criterion. In addition, minor collectors should be designated at an average spacing of not less than 4 miles.	As needed to access land uses.	As needed to access land uses.
<b>System Connections</b>	Sometimes to Interstate freeways and other principal arterials. To minor arterials, other collectors and local streets.	To minor arterials, other collectors and local streets.	To a few minor arterials. To collectors and other local streets.	To a few minor arterials. To collectors and local roads.
<b>Trip-Making Service</b>	Short trips (1-4 miles depending on development density) at low-to-moderate speeds. Longer trips accessing the arterial network. Local transit trips.		Short trips (under 2 miles) at low speeds. Longer trips accessing the collector or collector and arterial network.	
<b>Mobility vs. Land Access</b>	Equal emphasis on mobility and land access. Direct land access predominantly to development concentrations.		Emphasis on land access, not on mobility. Direct land access predominantly to residential land uses.	Emphasis on land access, not on mobility. Direct land access predominantly to agricultural land uses.

**Table F-6  
Functional Classification System Characteristics for Collectors and Local Streets**

<b>Criterion</b>	<b>Collector</b>		<b>Local</b>	
	<b>Urban</b>	<b>Rural</b>	<b>Urban</b>	<b>Rural</b>
<b>System Mileage</b>	Suggested federal limitations: 5-10%.	Suggested federal limitations: 20-25%.	Suggested federal limitations: 65-80%.	Suggested federal limitations: 63-75%.
<b>Percent of Vehicle Miles Traveled</b>	Suggested federal limitations: 5-10%.	Suggested federal limitations: 20-35%.	Suggested federal limitations: 10-30%.	Suggested federal limitations: 5-20%.
<b>Intersections</b>	Four-way stops and some traffic signals.	Local street traffic should be required to stop.	As required.	As required.
<b>Parking</b>	Restricted as necessary.	Unrestricted.	Permitted as necessary.	Permitted as necessary.
<b>Large Trucks</b>	Restricted as necessary.	Restricted as necessary.	Permitted as necessary.	Permitted as necessary.
<b>Management Tools</b>	Number of lanes, traffic signal timing, land-access management.	Land-access management.	Intersection control, cul-de-sacs, diverters.	.
<b>Vehicles Carried Daily</b>	1,000-15,000	250-2,500	Less than 1,000	Less than 1,000
<b>Posted Speed Limit</b>	30-40 mph	35-45 mph	Maximum 30 mph	Maximum 30 mph
<b>Right-of-Way</b>	60-100 feet	60-100 feet	50-80 feet	50-80 feet
<b>Transit Accommodations</b>	Cross-sections and geometrics designed for use by regular-route buses.	None.	Normally used as bus routes only in nonresidential areas.	None.

**Appendix T-2**

***City of Edina Comprehensive Bicycle Transportation  
Plan***



# THE CITY OF EDINA COMPREHENSIVE BICYCLE TRANSPORTATION PLAN

SEPTEMBER 19 2007



a people-centered,  
asset-based approach to  
urban planning, policy and design  
**community design group**



SEPTEMBER 19 2007

# THE CITY OF EDINA COMPREHENSIVE BICYCLE TRANSPORTATION PLAN

**Prepared for**

Bike Edina Task Force (BETF)  
The City of Edina

**Funding provided by**

The City of Edina  
Blue Cross and Blue Shield of Minnesota

**Prepared by**

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*“When I go biking,  
I repeat a mantra of the day’s sensations:  
bright sun, blue sky, warm breeze,  
blue jay’s call, ice melting and so on.  
This helps me transcend the traffic,  
ignore the clamorings of work,  
leave all the mind theaters behind  
and focus  
on nature instead.*

*I still must abide by the rules of the road, of biking, of gravity.  
But I am mentally far away from civilization.  
The world is breaking someone else’s heart.”*

*~Diane Ackerman*

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- 1.2 - Regional context
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- 1.5 - Existing bicycle infrastructure
- 1.6 - Need for improvement
- 1.7 - Policy basis

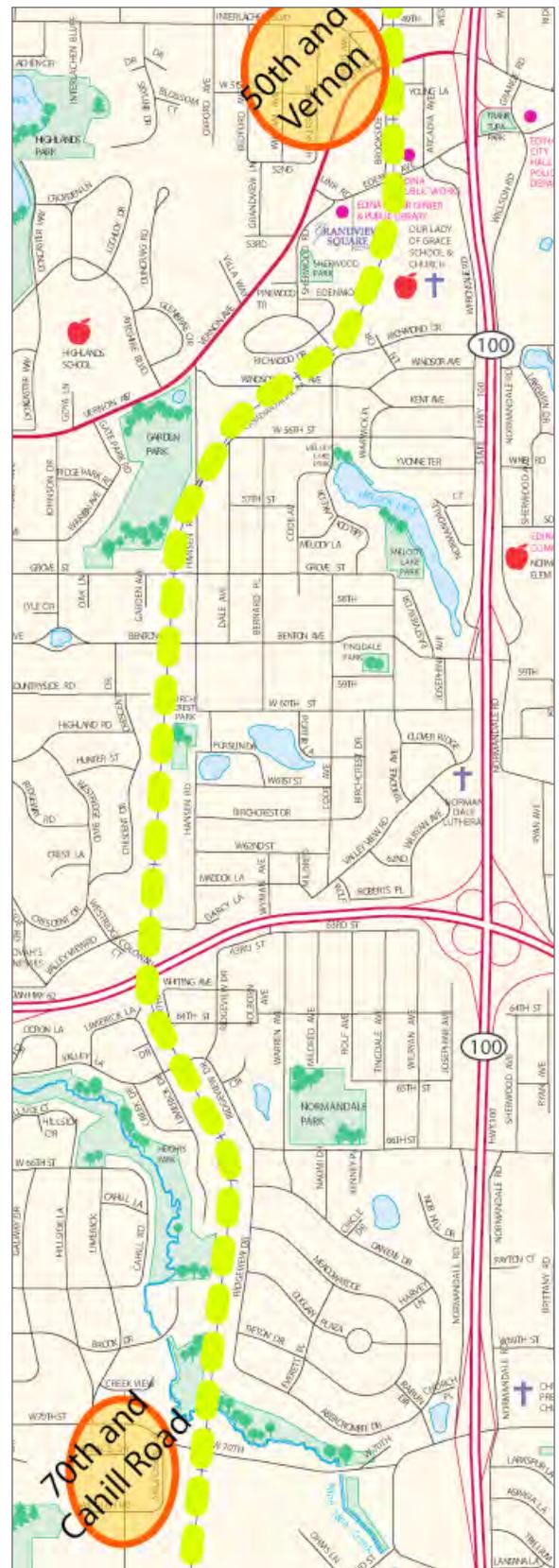
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**The Regional Canadian Pacific Trail will connect important destinations in Edina and provide access to regional bicycle transportation and recreation assets.**

## ACKNOWLEDGEMENTS

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### **Bike Edina Task Force (BETF)**

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Rebecca Foster, GIS Technician, City of Edina  
Engineering Department

### **Blue Cross and Blue Shield of Minnesota**

... And our sincere gratitude to the many people who have participated in this and similar projects through the years, and without whose guidance, patience and optimism this work would not be possible.

# Foreword

Imagine first that a network of safe, inviting and convenient bike routes exist in Edina, and that these routes connect shopping, employment and entertainment destinations in the city: 50th and France, Southdale Mall, Centennial Lakes, the City's schools, the parks, the Aquatic Center. Imagine also that this network is made up of routes that easily connect with regional trails and routes in adjacent cities: ride a greenway to the Cedar Lake Trail, take a safe and comfortable bikeway to the Minneapolis Chain of Lakes.

The City of Edina is approximately 4 miles wide in each direction. A novice cyclist, riding at an average rate of 10 miles per hour, could easily bike clear across the city in about 25 minutes. Destinations within the City would of course be much closer: imagine a fifteen minute ride to safely and comfortably arrive to 50th and France, or to school, or a park, or Southdale. All of this is possible.

A solid bicycle transportation network offers even more: the opportunity to move under your own power, to experience the sights and sounds of your neighborhood and city, to see a neighbor along the way, to re-learn the happiness of riding your bike for fun and for getting places.

This Plan is a first step towards these possibilities. We recognize that bicycle transportation is not necessarily an option that everyone will choose: some people will choose to continue making the majority of their trips by automobile, while others may prefer walking and others may decide that year-round bicycling is not for them.

But the key is on providing choices, and increasing options that allow people to take care of their daily needs in safe, comfortable, healthy, sustainable and efficient ways, that will make it possible for young and old to develop and maintain healthy lifestyles and that may help us better connect with each other.

So let us imagine ...



***A successful bicycle transportation network will be safe, comfortable and inviting for riders of all ages and skill levels.***

# Executive Summary

People bike for all kinds of reasons. Children may ride to go to school, while seniors may ride to go shopping and other adults may ride to get to work; families may ride together for recreation. The work of this Plan is to guide the creation of a bicycle transportation network that accommodates the needs of cyclists of all ages and skill levels while improving safety and convenience and encouraging use of this important transportation option.

## VISION

The guiding vision for this document is to support the gradual transformation of the City of Edina into a “progressive bicycle-friendly community where citizens can easily integrate cycling into their daily lives.”

## PLAN COMPONENTS

This Plan includes a network of recommended bicycle routes and treatments that will help support this vision. In addition, it includes specific recommendations for developing and improving other aspects of Edina’s cycling infrastructure, including provision of bicycle parking and other end of trip facilities; improving bike-related signs, signals and wayfinding; furthering the integration of bicycling and transit as a way to increase convenience for cyclists and lowering demand for automobile transportation; conducting education and encouragement programs that increase safety and invite new users to Edina’s bicycle transportation system; and guidance for operation and maintenance of the system.

In addition, the Plan provides guidance for implementation, including a recommended prioritization and timeline for development and a set of recommendations to ensure that Edina cyclists can continue to have their voice heard as implementation of this and other transportation initiatives move forward.

Brief excerpts of sample recommendations from each chapter are provided in the following sections of this summary.

### PURPOSE OF THIS PLAN

The purpose of this Plan is to improve conditions for cycling in Edina by reducing hazards, by developing and improving Edina’s bicycle transportation infrastructure, and by inviting Edina residents, workers and visitors to include this safe, comfortable and convenient transportation option into their daily mobility habits.

**Two views of 70th Street, heading east from Southdale Mall, past France Avenue:**



*How things are today ...*

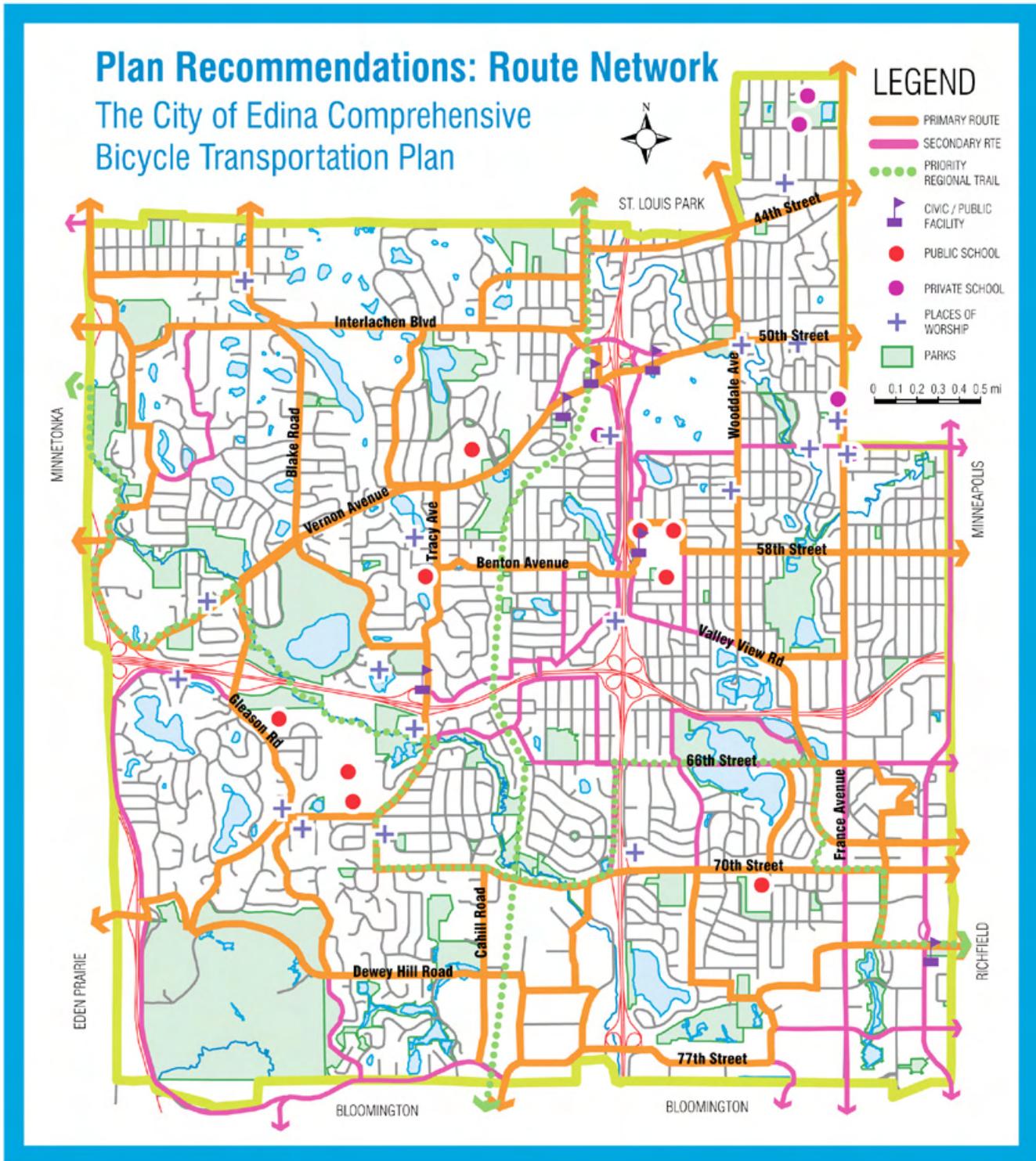


**... And how they could be. Even relatively modest investments to Edina’s present streets can greatly improve safety and comfort for Edina cyclists.**



## RECOMMENDED ROUTE NETWORK

This Plan presents a network of routes which are further grouped into Primary or Secondary routes; Primary routes provide more direct connections to destinations within and outside Edina. Regional routes, including the Canadian Pacific Regional Trail and the Nine Mile Creek Regional Trail are recommended as high priorities for development.



## PLAN OVERVIEW

Highlights from selected chapters of the Plan are provided below; please consult the complete document to see all related information and the full list of recommendations.

### GENERAL RECOMMENDATIONS

This Plan strongly recommends adopting and implementing a “Complete Streets” design policy and approach that considers the needs of all present and potential transportation network users, including cyclists, pedestrians, seniors, children, people with mobility limitations, and motorists when designing improvements to Edina’s street network.

Adopting a Complete Streets design policy will help ensure that all street construction and street improvement projects in the City of Edina anticipate and address the needs of cyclists and other users regardless of whether a particular street is included within Edina’s formally designated bicycle route network. Over the long run, embedding this Complete Streets approach into the City’s normal operating procedures will do more for cyclists and pedestrians than any one specific plan could.

### REGIONAL ROUTES

This Plan strongly recommends development of the Regional Canadian Pacific Trail and the Nine Mile Regional Trail. Opportunities for concurrent integration and improvement of both trails with Edina’s recommended bicycle transportation network should be explored. Currently no dedicated connection to the region’s growing network of dedicated facilities is provided within Edina.

### BIKE PARKING AND OTHER END OF TRIP FACILITIES

The Plan provides guidelines and recommendations for improving bicycle parking at schools, commercial destinations and other locations in Edina. Improving bike parking provision at Edina schools will support active living and community health goals.

### SIGNS, SIGNALS AND WAYFINDING

The Plan recommends installation of “blue bike lanes” at selected locations where automobile turning or entry movements require them to cross over Primary bike route facilities. Blue lanes alert motorists to the presence of cyclists and help reduce potential conflicts.

## TRANSIT INTEGRATION

This Plan recommends development of a “bike station” at Southdale Mall, where one of our region’s busiest transit centers is located. Bike stations, common in many US and European cities, are staffed, dedicated bike storage facilities, usually located near transit hubs or other major destinations. Cyclists who ride to transit can drop off their bikes to be stored and serviced as needed while they continue their journey on transit. These facilities provide long-term bicycle storage and sometimes also include shower and locker facilities.

## EDUCATION AND ENCOURAGEMENT

Sharing information with children, seniors, and other adults on safe riding rules and techniques will help improve safety and increase cycling in Edina.

This Plan recommends working with Edina public schools to implement a bicycle safety and training component as part of their physical education programs. Encouraging students’ use of a safe and convenient bicycle transportation network will help encourage a lifetime of healthy and fun physical activity.

## OPERATIONS AND MAINTENANCE

This Plan recommends establishing a Bicycle Facility Maintenance Request Program to extend the city’s reach in protecting its infrastructure investments and providing bicyclists an inviting and safe bicycling environment. This program would provide a centralized structure for collection of small-scale, low-cost improvements, such as sweeping, repairing surface problems, and replacing unsafe gratings while helping ensure prompt response to these requests.

## TIMELINE FOR IMPLEMENTATION

This Plan includes a recommended timeline for prioritizing and carrying out improvements to Edina’s bicycle transportation network. Recommendations are presented as short-term (0 to 2 years), medium-term (2 to 4 years) and longer-term (4 to 7 years) priorities for implementation. For example, signing of all Primary routes is recommended over the short term, while installation of bicycle signal heads is recommended over the longer term.

## HOW WILL WE MAKE IT HAPPEN?

Making this Plan real will require ongoing, day-to-day work on the part of public officials, City of Edina staff, and Edina citizens.

This Plan recommends the following as components of its implementation strategy:

### *Bicycle Coordinator*

This Plan recommends the creation and funding of a new “Bicycle Coordinator” position within the City of Edina to coordinate implementation of the Plan, to attend to and coordinate response to bicycle network maintenance and operations issues, and to advocate for the needs of cyclists as transportation and land use projects are designed and implemented in Edina and in surrounding communities.

### *Bicycle Advisory Committee*

This Plan recommends the formation of a Bicycle Advisory Committee as a formal citizens group with responsibility for providing citizen direction for implementation of Plan recommendations.

### *Formal representation in Edina transportation decision-making*

The Edina Transportation Commission advises the City of Edina on issues relating to transportation and transportation improvements over its surface street network. This Plan recommends including at least one representative from the Bicycle Advisory Committee as a formal member of the Edina Transportation Commission; doing so will help ensure that the perspective and voice of Edina cyclists is included during deliberations on improvements to Edina’s transportation network.

# Section I

## Background

*This section provides an overview of existing conditions in Edina, and summarizes reasons to address and improve the city's bicycle transportation infrastructure.*

### IN THIS SECTION:

- I.1 - VISION AND PURPOSE**
- I.2 - REGIONAL CONTEXT**
- I.3 - URBAN FORM AND DEVELOPMENT PATTERNS**
- I.4 - DEMOGRAPHIC CHARACTERISTICS**
- I.5 - EXISTING BICYCLE INFRASTRUCTURE**
- I.6 - NEED FOR IMPROVEMENT**
- I.7 - POLICY BASIS**

# 1.1 Vision and purpose

Improving the conditions for bicycling in Edina has been an important priority for Edina residents, community leaders and elected officials for several years. This Comprehensive Bicycle Transportation Plan builds on the work already completed by the Bike Edina Task Force (BETF), City of Edina staff, and Edina citizens towards the creation of a more bicycle-friendly Edina.

## VISION

“The City of Edina will be a progressive bicycle-friendly community where citizens can easily integrate cycling into their daily lives.”

## PURPOSE OF THIS PLAN

The purpose of this document is to serve as a tool to guide the efforts of Edina citizens, elected officials and City of Edina staff as they work towards increasing the city’s bicycle orientation.

It provides short, medium and long-term recommendations for improving the City’s bicycle transportation network with the goal of making it safer and more convenient for people of all ages and skill levels to choose cycling as a preferred mode of transportation for taking care of their daily needs.



## 1.2 Regional context

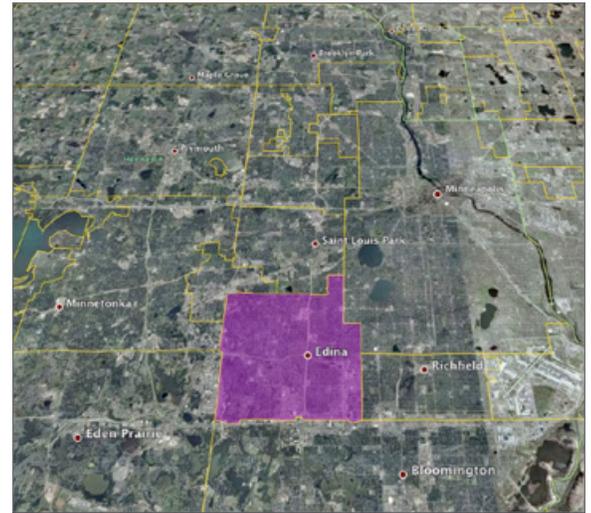
The City of Edina is a fully developed first-ring suburb situated immediately southwest of Minneapolis in Hennepin County, with a land area of approximately 16 square miles and a population of 47,425 people.

The City is within close proximity of many important regional destinations, including the Minneapolis Chain of Lakes, St. Louis Park's Miracle Mile, Bloomington's Mall of America, and the Minneapolis / St. Paul International Airport. Southdale Mall, a regional shopping destination, is located within the city.

Edina is a major employment generator for the Twin Cities Metropolitan region. Approximately 49,790 people work in Edina, a number that is more than twice as large as the number of its residents in the labor force (22,547 people).

Edina is well connected to the regional automobile transportation network: Minnesota State Highways 62 (running east-west) and 100 (north-south) traverse the City. Minnesota State Highway 169 runs along the City's western boundary while Interstate Highway 494 runs along its southern boundary. Minnesota State Highway 7 is within three miles of the City while Interstate Highway 394 is within five miles.

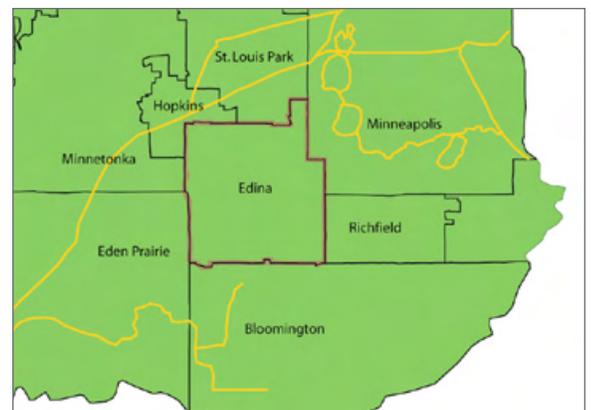
Important regional bicycle trails, including the Cedar Lake LRT Regional Trail, and the Minneapolis Chain of Lakes are within close proximity of Edina. No regional trails run through Edina, however, and connection to existing bicycle transportation and recreational trails in adjoining communities is poor.



**Edina and surrounding jurisdictions.**



**Southdale Mall is a major regional draw.**



**There are no bicycle trails connecting Edina to facilities in adjoining communities.**

# 1.3 Urban form and development patterns

First incorporated in 1888, the City of Edina is a fully developed first-ring suburb. Like other communities that grew and developed in the years after the Second World War, its landscape and mobility infrastructure are oriented to automobile transportation, and pose several important challenges to comfortable and efficient use of other modes of mobility.



*Southdale Mall and its surroundings in 1958.*

## PRESENT LAND USES

### RESIDENTIAL USES

Most of the land comprising the city of Edina (53% of total land area) is occupied by single family detached residences. Another 4% of total land area is occupied by apartment and other multi-family structures. Most of these are located along York, France and Vernon Avenues, and along Cahill Road.

### COMMERCIAL USES

About 4% of Edina’s land area is dedicated to retail and other commercial uses. Important commercial areas in the city include 50th and France, 70th and Cahill, 50th and Vernon, and Southdale Mall.

An additional 4% of Edina’s land is used for office space. Most of these uses are concentrated along the eastern side of the city’s southern border, and also just west of Highway 100 along Metro Boulevard.

### INDUSTRIAL USES

Slightly more than 3% of Edina’s land is used for industrial purposes. Most of these uses are located between Cahill Road and Metro Boulevard just south of 70th Street.

### INSTITUTIONAL USES

Almost 5% of Edina’s land is dedicated to institutional uses, including schools, libraries, hospitals and government institutions

### PARKS AND RECREATION

About 16% of Edina’s land is dedicated to parks and recreational uses, including golf courses.

## CONNECTIVITY

Highways 100 (running north-south) and 62 (running east-west) intersect near the center of Edina. Although the freeways provide automobile transportation network connections to point outside Edina, they create discontinuities and literal barriers for surface movement within and across Edina.

Edina's citizens in fact normally discuss their city in terms of "quadrants," implicitly recognizing the role of the freeways in separating one section of Edina from another and also recognizing the differing character of land use, density, and development intensity in each.

## FUTURE LAND USE

The City of Edina 2008 Comprehensive Plan does not contemplate any significant land use changes over the residential portions of Edina.

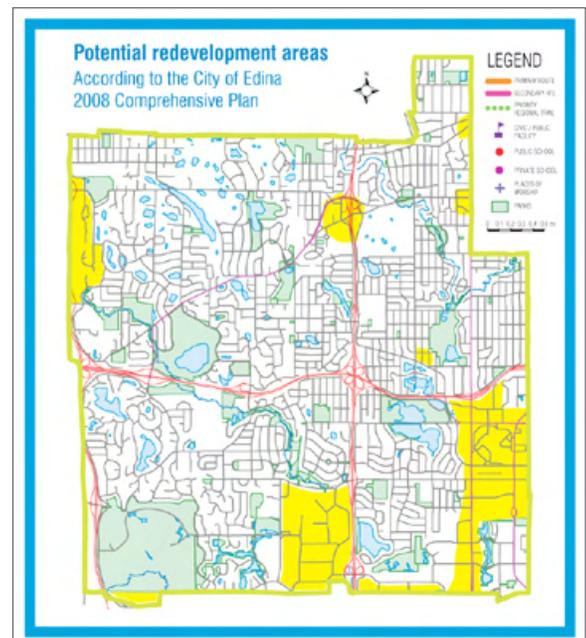
Given that Edina's landscape is now fully developed, the only places where changes in land use may occur are those that currently host warehouse/industrial sites and low density commercial areas. The 2008 Comprehensive Plan will direct proposals for more intense land uses to these locations.

The amount of land potentially available for redevelopment is about 17% of Edina's surface area. Major areas of potential change include the Cahill industrial area, the Greater Southdale area, and smaller commercial nodes at 50th and Vernon, and 70th and Cahill.

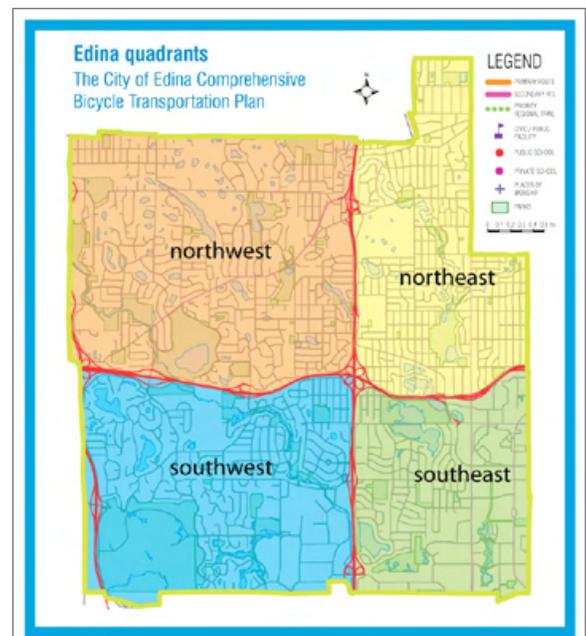
Most of the forecast growth in employment and residents will be directed toward these locations.

## IMPLICATIONS FOR THIS PLAN

- Convenient connections to potential redevelopment areas should be provided
- Providing bicycle network connections for Edina employees, visitors and customers who travel into, out of, and through Edina should also be emphasized
- Provision of high quality bicycle routes can help address issues of connectivity between quadrants while also improving connections to adjacent jurisdictions



**Areas where redevelopment is expected to occur according to the City of Edina 2008 Comprehensive Plan (shown in yellow).**



**Edina citizens often discuss their city in terms of quadrants. Can a convenient bicycle network help change perception of the city to a reconnected whole?**

# 1.4 Demographics and population characteristics

Located immediately southwest of Minneapolis in Hennepin County, the City of Edina has a total area of 16.0 square miles, of which 15.8 square miles are land and 0.2 square miles are lakes and other water bodies.

The 2000 US Census counted 47,425 people residing in Edina, in a total of 20,996 households. Of those, 12,870 were family households.

## POPULATION DENSITY

Edina’s 2000 population density was 4.7 people per acre. There were 21,669 units of housing, yielding an average density of 2.15 dwelling units per acre.

## HOUSEHOLDS

Of the 20,996 households living in Edina in 2000:

- 27% included children under the age of 18
- 54% were married couples living together
- 39% were non-family households
- 34% were made up of individuals living alone
- 19% of all households were made up of an individual living alone who was 65 years of age or older

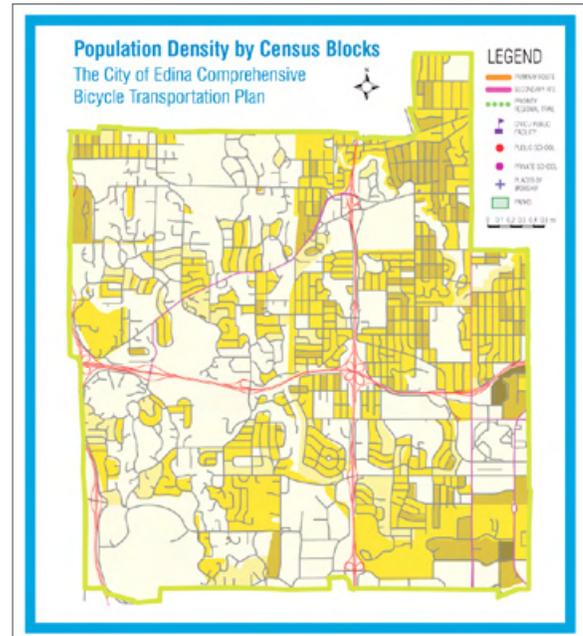
Edina’s 2000 average household size was 2.24 and the average family size was 2.91 persons.

## AGE DISTRIBUTION

Approximately one quarter of Edina’s population (22.9%, or 10,838 persons) are children under the age of 18. Of those, 8,292 children are between the ages of 5 and 18. Another quarter of Edina’s population (22.7% or 10,765 persons) are senior adults 65 years of age or older. Median age for the city is 44 years.

## INCOME LEVELS

Median household income in 2000 was \$66,019, while median income for a family was \$93,496. Per capita income for the city was \$44,195. About 2.0% of Edina families had incomes below the poverty line. By contrast, the county-wide median household



**Population densities across Edina. Higher densities are shown in darker color.**

## CENSUS HOUSEHOLD OR FAMILY?

- A “household” is a person or group of people occupying a housing unit.
- A “family household” consists of a householder (the person who owns or rents the housing unit) and one or more people living together in the same household who are related to the householder by birth, marriage, or adoption.
- A “non-family household” is a person living alone or a householder who shares the home with non-relatives only.

income was \$51,711, with a median family income of \$65,985 and a per capita income of \$28,789.

## POPULATION AND EMPLOYMENT TRENDS

The population level of Edina has grown slightly over the last twenty five years, going from 46,073 persons in 1980 to an estimated 47,425 persons in 2000 (an increase of 2.9% over that time). The Metropolitan Council estimates a 2006 population of 46,896 persons living in 21,100 households.

The Metropolitan Council similarly estimates a total 49,790 jobs in Edina in 2006, and forecasts an additional 9,000 jobs by 2030.

## COMMUTE TO WORK

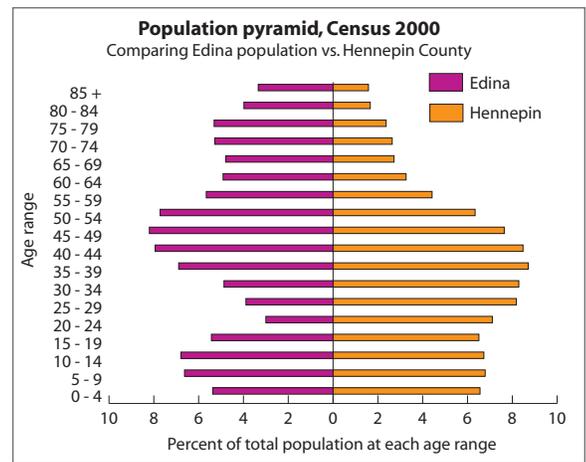
A total 6,055 Edina residents (about 27% of total residents) also work in Edina. Another 5,467 residents (about 24%) work in Minneapolis, while 4,853 residents (about 22% of total residents) work in the neighboring communities of Bloomington, Eden Prairie, Minnetonka and St. Louis Park. Only about 12% of all jobs in Edina are held by Edina residents.

Although the 2000 Census does not specifically report a category for bicycle commuting in Edina (including it under “other means” of travel to work), a total of about 0.5% of all workers can be estimated to have made their journey to work on a bicycle.

By comparison, the national average is 0.4%, while the 2005 Minneapolis figure for workers who ride their bicycle to work is 2.4% (the second highest in the nation after Portland, Oregon).

## IMPLICATIONS FOR THIS PLAN

- Approximately one quarter of Edina’s population is under the age of 18. Providing safe routes to schools, parks and recreational centers is a priority.
- Approximately another quarter of Edina’s population is older than 65. This portion is expected to increase to about a third of Edina’s total population. Convenient and safe routes to shopping and other activities, as well as to civic and senior centers will be key. Additionally, regional trails should provide ample space for the adult tricycles which are sometimes favored by seniors.
- Providing convenient bike routes to employment centers may help decrease demand on Edina’s automobile network.



**A comparison of the age profiles of Edina’s population with those of Hennepin County shows Edina has a higher proportion of seniors in its population. This trend is expected to continue, with a potential 70% increase in Edina’s senior population by 2030.**

## HOW DO EDINA CITIZENS GET TO WORK?

This is how Edina’s 22,547 workers arrived to work according to the 2000 US Census:

Means of travel	Number of workers	Percent of total
Drove alone	18,269	81.0%
Carpooled	1,469	6.5%
Transit	722	3.2%
Walked	361	1.6%
Biked (estimate*)	112	0.5%
Other (estimate*)	75	0.3%
Work at home	1,539	6.8%

\* Extrapolated from 2000 Census data and regional trends.

## DID YOU KNOW?

- Almost one half (49%) of all trips made by Dutch seniors 65 or older are made by bicycle
- Almost one out of every five trips (18%) made by German seniors are by bicycle
- About 0.2% of US senior trips are by bike

Source: John Pucher and Lewis Dijkstra, *Promoting Safe Walking and Cycling to Improve Public Health: Lessons from The Netherlands and Germany*. *American Journal of Public Health*, Vol. 93, No. 9, September 2003.

# 1.5 Existing bicycle conditions and infrastructure

In general, Edina does not presently provide adequate facilities or infrastructure to accommodate and encourage cycling. There are no signed or striped bike routes within the City, there are no designated connections to the growing network of regional bicycle facilities and shared-use trails, and bicycle parking and other end-of-trip facilities are seldom provided.

Additionally, Edina’s landscape has been impacted by earlier state and federal transportation policies that prioritized automobile movement at the expense of other modes. Combined with prevailing land use and site planning practices, they have shaped an urban environment that works against the comfortable use of bicycling as a means of transportation within the City and over a significant portion of its existing street network.

Fortunately there is also some good news. Engaged citizens are advocating for improvement of cycling conditions; Edina’s elected officials have shown strong support for improvement; leaders within the City’s Engineering, Planning and Public Works departments have shown an open and welcoming attitude to making important improvements for all modes of mobility within the City. And there is a growing awareness in our state and nation about the importance of providing increased options for transportation in our cities.

The time is right for making the changes that are necessary to make cycling a viable transportation option for riders of all ages and skill levels in Edina.

At present, it is possible (though not necessarily inviting) to ride a bicycle in Edina, and arrive to useful destinations. A number of streets through the City are already functioning as informal bike routes. Relatively modest investments can help create bicycle transportation networks and connections linking places of employment with regional trails, schools with residential areas, neighborhoods with shopping and entertainment districts.

Making these connections real is the work of this Plan. It includes recommendations for improvement (found in Section II) that can serve as incremental changes towards a bigger transformation. The aim of this chapter is to provide additional



**On France Avenue today.**

*“Even the longest journey must begin where you stand.”*

*-- Lao-Tzu, Chinese philosopher, 6th Century BC*

detail on present conditions in order to clarify areas that need to be addressed and to help set up benchmarks for improvement.

## SURFACE STREETS

No cycling facilities are presently provided along Edina's street network. Nevertheless, a number of streets are already utilized by cyclists for connection and movement to destinations within and outside of Edina. Among those streets which appear to be favored by Edina cyclists at present are:

- Wooddale Avenue
- 58th Street
- 44th Street
- 70th Street
- Vernon Avenue
- Tracy Avenue
- Gleason Road
- Valley View Road
- Benton Avenue
- Interlachen Boulevard
- Olinger Boulevard

In general, lower speed limits create more comfortable conditions for cyclists. An automobile speed limit of 25 miles per hour has been found to provide for safe and efficient use of surface streets by pedestrians, cyclists and motorists. Additionally, lower speed limits significantly decrease the severity and risk of injury to pedestrians, cyclists and motorists as a result of automobile crashes.

The majority of surface streets in Edina have posted speed limits of 30 miles per hour, which, though not ideal, provides usable conditions for cycling if actual travel speeds stay within those limits.

However, several important streets and potential bicycling routes in Edina have significantly higher speed limits. Notable exceptions to the 30 mph limits are portions of Vernon Avenue (with speed limits of 40 mph in a segment that includes Olinger Boulevard and Tracy Avenue), France Avenue (40 mph between 66th Street and the southern city limit; 35 mph between 54th Street and 6th Street), 66th Street (35 mph between Normandale Road and the eastern city limit, including the segment serving the Edina Aquatic Center and Rosland Park) and York Avenue (between 66th Street and the southern city limits).

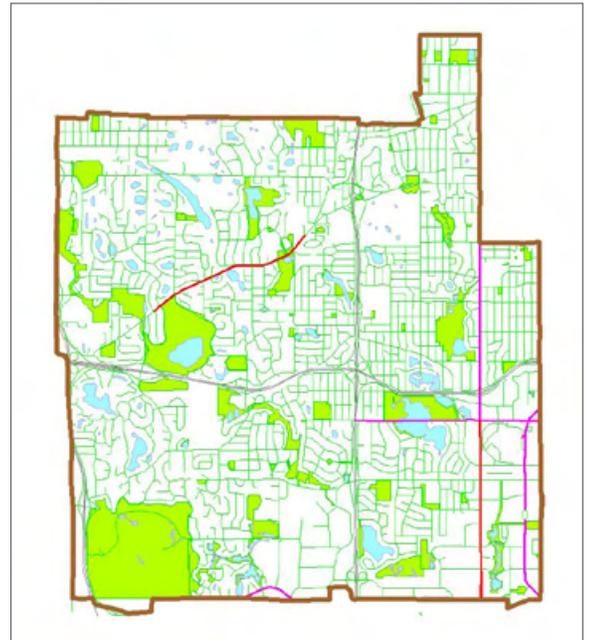


**A cyclist heading south on Valley View Road just past Highway 62 towards Southdale Mall.**

### DID YOU KNOW?

A recent Twin Cities survey of potential bicycle commuters found that 79% of respondents said that on-street bike lanes would be an important factor in deciding whether or not to use a bicycle as transportation.

*Source: Minnesota Center for Survey Research, University of Minnesota Center for Transportation Studies, 1999.*



**Speed limits over Edina's surface streets: green is 30 mph, purple is 35 mph, and red is 40 mph. Highways are shown in grey.**

Some surface streets, like France Avenue south of Highway 62, present inhospitable riding conditions and are a barrier to bicycle and pedestrian movement along and across them.

Some factors that increase discomfort for cyclists using a particular road include the number of lanes of traffic carried by that road, the speeds at which automobiles actually travel on them (which is often higher than the posted speed limit), and the amount of space which is available for riding closest to the right edge of the road. Although cyclists in Minnesota have the legal right to use the full right-most lane for travel, the majority of actual and potential cyclists are not likely to do so, especially if they are riding by themselves or if the road is heavily used by automobiles.



**On France Avenue today.**

## REGIONAL CONNECTIONS

The Twin Cities region is nationally known for its extensive system of regional bicycle trails, which provide an expansive network of grade-separated trails. Used for recreation and transportation, these trails provide safe and convenient access to many of our region’s assets. They also invite novice cyclists to use their bikes for transportation by providing them with comfortable, car-free spaces in which to ride. The Midtown Greenway, the Cedar Lake Trail, the Kenilworth Trail, and the Gateway Trail are among the many trails that criss-cross our region. Unfortunately, no regional bicycle trails run through or within Edina. Additionally, connection to nearby trails, including to the Cedar Lake LRT Regional Trail, is not provided, signed or otherwise identified.



***A growing network of regional trails connects cyclists to our metropolitan area’s many employment, education, entertainment and recreational assets.***

***Photo: West River Road near the University of Minnesota, in Minneapolis.***

## END OF TRIP FACILITIES

End of trip, or ancillary facilities, are those provisions made for cyclists at the beginning and end of their trip. These include bicycle parking racks or lockers, showers and changing space for commuters, and bike stations where bikes may be dropped off with an attendant and where maintenance may be performed while the cyclist is at their destination.

With the exception of a limited number of bicycle parking racks, there are virtually no end of trip facilities in Edina. A brief inventory, performed with the help of members of the Bike Edina Task Force (BETF), follows below:

## BICYCLE PARKING

### AT SHOPPING AND RETAIL DESTINATIONS

- Southdale Mall has six bicycle racks that could accommodate 64 bicycles. Two of those racks, accommodating a total of 14 bicycles, are located to serve the Mall's Transit Center (the fourth busiest in Metro Transit's system), and are located in the mall's smoking area. By comparison, Southdale provides 6,725 parking spaces for automobiles - bicycle parking is less than 1% of all vehicle parking provided
- A total of 12 "inverted U" bike parking racks are provided at 50th and France, potentially accommodating a total of 24 bicycles
- No bicycle parking facilities are provided at 70th Street and Cahill Road
- No bicycle parking facilities are provided at 50th and Vernon Avenue

### AT EDINA PUBLIC SCHOOLS

In general, adequate bicycle parking facilities are not provided at Edina public schools. Several schools (including the City's High School) have no bicycle racks at all, while others provide an insufficient number of bicycle parking spaces and include substandard bike parking racks.

For guidance on number of racks to be provided please see Appendix A.4. For guidance on recommended types of bicycle racks please see Appendix A.5.

Following is a brief survey of existing bicycle parking provision at Edina schools conducted by members of the Bike Edina Task Force in August of 2007. Where provided, enrollment figures are approximate for school year 2006-2007 (approximate total enrollment for all Edina public schools is 7,500 students).

#### Elementary schools

- Concord Elementary School (675 students): Three bike racks, accommodating a maximum of 75 bicycles, are provided. Racks are located in the automobile parking lot at some distance from the school's main entrance. Racks are of a substandard type that does not easily allow bikes to be secured.
- Creek Valley Elementary School (550 students): No bike racks are provided.
- Cornelia Elementary School (550 students): Five bike racks,



***Bicycle parking is not provided at the 70th Street and Cahill Road commercial area.***

accommodating a maximum of 75 bicycles, are provided. Bike parking is located at the rear of the school and is visible from classrooms, near the bus entrance. Racks are of a substandard type that does not easily allow bikes to be secured.

- Highlands Elementary School (550 students): Three bike racks, accommodating a maximum of 37 bicycles, are provided. Racks are located 130 yards from the school's front door.
- Countryside Elementary School (550 students): Three bike racks, accommodating a maximum of 30 bicycles, are provided. Racks are located outside the perimeter of the school's automobile parking lot, requiring students who ride their bikes to cross the lot and street entrance to get to the school.
- Normandale French Immersion School (625 students): One bicycle rack, accommodating a maximum of 12 bicycles, is provided. Rack is of a substandard type that does not easily allow bikes to be secured.

### Middle schools

- South View Middle School (1,125 students): Six bike racks, accommodating a maximum of 90 bicycles, are provided. Racks are located across a service road from the school. Racks are of a substandard type that does not easily allow bikes to be secured.
- Valley View Middle School (1,250 students): Four bike racks, accommodating a maximum of 48 bicycles, are provided. Racks are located on the east side of the building, away from principal entrances. Racks are of a substandard type that does not easily allow bikes to be secured.

### High School

- Edina High School (1,725 students): No bike racks are provided. One 2.25 acre automobile parking lot accommodating approximately 300 cars is provided.

### AT EDINA PARKS AND RECREATIONAL FACILITIES

Citizens of Edina are justifiably proud of the city's excellent park system and programs. Unfortunately, there generally is poor provision of bicycle parking facilities at Edina parks and other recreational facilities.



***A significant number of Edina schools do not provide adequate bicycle parking facilities for students.***

***Photo: At South View Middle School.***



***Only a few parks in Edina provide adequate bicycle parking facilities. Where available, they are well used.***

***Photo: At Rosland Park.***

A brief summary of existing bicycle parking facilities at selected Edina parks, from a survey conducted by members of the Bike Edina Task Force in August of 2007, is given here.

Guidance on the number of racks recommended for recreational facilities is given in Appendix A.4; guidance on the types of bicycle racks recommended is given in Appendix A.5.

### **Edina Parks and Recreation Centers**

- Alden: No bike parking is provided
- Aquatic Center: Two bicycle racks accommodating a maximum of 10 bicycles are provided.
- Arden: No bike parking is provided
- Arneson Acres: No bike parking is provided
- Braemar: One bicycle rack accommodating a maximum of 10 bicycles is provided. The park includes accommodation for approximately 800 automobiles
- Bredesen: One bicycle rack accommodating a maximum of 10 bicycles is provided. The park includes accommodation for approximately 60 automobiles
- Birchcrest: No bike parking is provided
- Chowen: No bike parking is provided. The park includes accommodation for approximately 7 automobiles
- Creek Valley Park: No bike parking is provided
- Fox Meadow: No bike parking is provided
- Garden: No bike parking is provided. The park includes accommodation for approximately 400 automobiles
- Highlands Park: No bike parking is provided
- Kojetin: No bike parking is provided
- Lake Edina: No bike parking is provided
- McGuire: No bike parking is provided
- Melody Lake: No bike parking is provided
- Normandale: No bike parking is provided. The park includes accommodation for approximately 20 automobiles
- Pamela: No bike parking is provided. The park includes accommodation for approximately 35 automobiles
- Rosland: One bicycle rack accommodating a maximum of 5 bicycles is provided
- St. Johns: No bike parking is provided
- Sherwood: No bike parking is provided
- Strachauer: No bike parking is provided. The park includes accommodation for approximately 20 automobiles
- Tingdale: No bike parking is provided
- Todd: No bike parking is provided
- Utley: No bike parking is provided. The park includes accommodation for approximately 45 automobiles
- Van Valkenberg: No bike parking is provided. The park includes accommodation for approximately 90 automobiles
- Walnut Ridge: No bike parking is provided. The park includes accommodation for approximately 26 automobiles
- Weber: No bike parking is provided. The park includes accommodation for approximately 60 automobiles
- Wooddale: One bicycle rack accommodating a maximum of 10 bicycles is provided. The park includes accommodation for approximately 35 automobiles
- York: No bike parking is provided

### **OTHER END OF TRIP FACILITIES**

There are no other end of trip facilities existing in Edina.

## CURRENT BICYCLE USE

Observation indicates that a significant number of people ride bicycles in Edina. There are several streets that are commonly mentioned as preferred, informal bike routes for travel through the city. However, as noted in Chapter 1.4 (Demographics and population characteristics) there is a general lack of actual counts and other data about the number of people using bicycles for transportation in Edina (as is the case in most other communities in our state).

Fortunately, there are a couple of resources that may help in providing a baseline for understanding current use and for providing benchmarks for improvement.

The first is the Edina Parks and Recreation system survey conducted in Fall 2006 and which showed that improvement of Edina's cycling infrastructure is a priority for a significant majority of Edina households. This survey is explored in more detail in Chapter 1.6 (Need for improvement).

The second resource is the recently conducted bicycle and pedestrian counts taken in Edina on two days during mid September of 2007. This count activity, performed for the first time in Edina in 2007, is part of Transit for Livable Communities' (TLC) metropolitan bike and walk traffic count efforts, which were conducted simultaneously throughout the region and which aim to establish benchmarks for use of the region's bikeways by bicycle commuters.

Two locations were chosen, and activity was measured for two days during the commuting time range of 4:00 to 6:00 p.m. In that time period an average of 21 bikers and 35 pedestrians were counted at 44th Street and Brookside Avenue while 17 bikers and 14 pedestrians were counted at 70th Street and Cahill Road.

Members of the Bike Edina Task Force received training from TLC, conducted the counts and summarized the data. It is recommended that this activity be continued into the future and expanded to additional locations to help provide a clearer picture of bicycle use and trends in Edina.



**An Edina cyclist riding south on Valley View Road, towards Southdale Mall.**



**Some locations in Edina are designated for cycling even though they present hazardous conditions. For example, the western side of the Centennial Lakes trail mixes pedestrians and cyclists on a narrow path, does not provide adequate sight distance, and is in general not suitable for biking. Developing facilities that provide separate, sufficient and safe space for cyclists and pedestrians is recommended instead.**

# 1.6 Need for improvement

There are many sound reasons to make the necessary investments to improve Edina’s bicycle transportation infrastructure. An accessible, safe and useful bicycle transportation network is consistent with and in fact furthers the City’s long-term goals and objectives, as articulated in the City’s Vision Statement, which is included in Edina’s 2008 Comprehensive Plan Update:

*Edina will be the preeminent place for living, learning, raising families and doing business distinguished by:*

- *A dynamic and sustainable community*
- *A livable environment*
- *Effective and valued City services*
- *A sound public infrastructure*
- *A balance of uses*
- *Innovation*



**On Eden Avenue.**

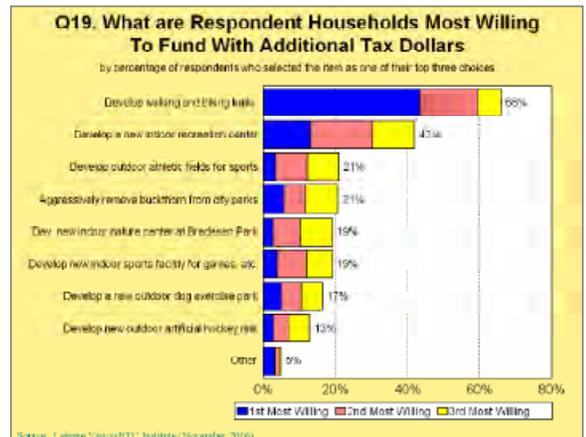
In addition, the improvements this Plan recommends help address the following needs and conditions:

## TO RESPOND TO CITIZEN AND COMMUNITY INTEREST

The citizens of Edina have consistently expressed a desire for improvement of bicycling facilities in their city.

Most recently, the City hired a consultant to survey Edina households about Parks and Recreation system services and priorities during the fall of 2006. The survey, which received almost a thousand responses (and is statistically valid for the population of Edina as a whole) found:

- 86% of respondents had a household need for walking and biking trails.
- 64% of respondents said walking and biking trails were among the top four most important facilities; 32% ranked walking and biking trails as their first choice, the highest percentage for any facility.
- 84% would use walking and biking trails for exercise and fitness; 84% for enjoying the outdoors; 25% for transportation.
- 89% of respondents were supportive of the City developing walking and biking trails; 65% were very supportive.



**From the Parks and Recreation survey.**

- 66% of respondents said walking and biking trails were among the top three actions they would be willing to support with tax dollars; 44% ranked walking and biking trails as their first choice to support with tax dollars, the highest percentage for any action.

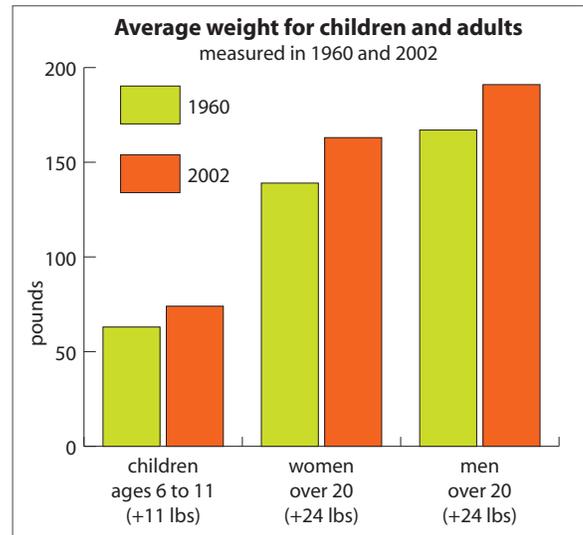
## TO IMPROVE COMMUNITY HEALTH AND ENCOURAGE ACTIVE LIVING

A growing body of research demonstrates connections between a community’s built environment, the opportunities it provides for physical activity, and the health of its population. Places with an infrastructure that supports walking and biking have populations that are more physically active and have lower levels of obesity. A population that engages in regular, moderate physical activity has lower incidence of heart disease, stroke, hypertension, diabetes, colon cancer, osteoporosis, depression, and breast cancer.

The Centers for Disease Control and Prevention (CDC) recommends 30 minutes of moderate physical activity 5 days per week. In 2005, only half of all Minnesotans met this guideline, about the same as the national average. According to data collected by Hennepin County, only 43% of residents of Bloomington, Richfield and Edina met the guideline in 2002 (the most recent data available). Although these exceed the federal goal of 30% of adults meeting the guideline, they fall short of the Prevention Minnesota goal of 75% of adults being moderately active 5 to 7 days per week.

Nationally, the effects of reduction in regular physical activity and the corresponding increase in sedentary lifestyles have especially impacted young people, with dramatic increases in obesity and diabetes. Children who are overweight are likely to become overweight adults. Likewise, children who learn the importance and pleasure of routine physical activity also carry these lessons throughout life.

A mobility and transportation system that encourages healthy habits of activity and decreases reliance on automobile travel also brings improvements to other aspects of community health, including increased community connectedness and mental well-being, decreased air pollution and injuries due to car crashes, and enhanced feelings of independence and empowerment.



Source: National Center for Health Statistics, US Centers for Disease Control and Prevention (CDC).

### DID YOU KNOW?

Just three hours of bicycling per week reduces the risk of heart disease and stroke by 50%.

Source: Bikes Belong Coalition, based on US Surgeon General’s Report on Physical Activity and Health.

## TO INCREASE MOBILITY AND TRANSPORTATION OPTIONS

Bicycling is a safe, fun and active choice for transportation. It is a quiet, nonpolluting, energy-efficient and versatile way of getting around, and one that can provide additional mobility options to automobile drivers and non-drivers alike, including children and senior adults.

A functioning bicycle transportation network can reduce the demand for automobile travel by providing another means of travel (and one that brings additional benefits to the rider).

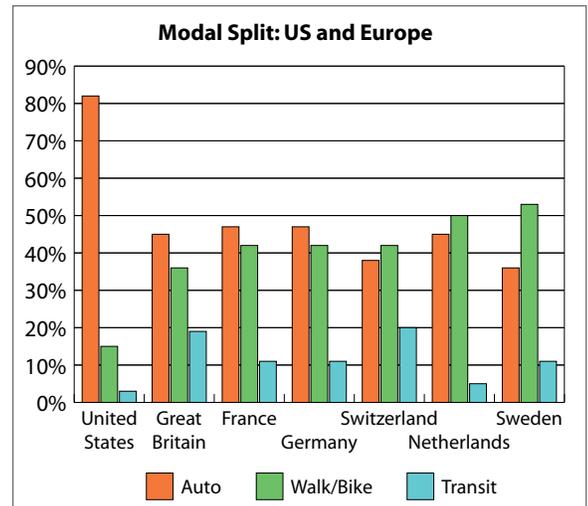
Recent studies point out that about one half of all trips in the Twin Cities region are less than four miles in length; in fact, two out of five trips (40%) are less than two miles. Most of these trips are presently made by automobile.

A novice cyclist, riding at a comfortable pace, can easily cover two miles in 12 to 15 minutes; four miles (the east-west and north-south length of the city of Edina) would take about 20 to 25 minutes. If comfortable and safe bicycle accommodations were available in Edina, all of the destinations within it would be just a brief ride away. Riding to school, or the senior center, or the grocery store or Southdale would cease being the exclusive domain of the automobile and allow people a greater set of choices on how to get around.

## TO INCREASE SAFETY FOR CYCLISTS

Many people cycle in Edina today, even without adequate facilities. But because facilities are not available, many cyclists will ride in ways that actually increase hazards to them and to other users of Edina's streets. It is not uncommon to see Edina residents riding on sidewalks (where motorists and pedestrians don't expect them), or against traffic on streets where a striped automobile parking row is provided. Many more potential riders will choose to not ride because they perceive the present conditions to be unsafe.

Creating a network that lets cyclists and motorists know when and where to expect each other will help increase safety and the perception of safety for new and experienced riders, and will help decrease potential conflicts. Creating facilities for cyclists will also help decrease discomfort and hazards for pedestrians and improve safety and conditions for both types of users.



Source: Peter Calthorpe: *The Next American Metropolis: Ecology, Community, and the American Dream.*

### DID YOU KNOW?

Almost half of all vehicle trips in the Twin Cities are less than four miles.

Source: US Department of Transportation, Federal Highway Administration, 1995 Personal Transportation Survey.



**Lack of safe and comfortable bike facilities encourages unsafe riding.**  
Photo: On 77th Street today.

## 1.7 Policy basis

Current local, state and federal policies offer strong support for making improvements to bicycle transportation facilities in jurisdictions throughout the Metro area.

Making investments to improve Edina's bicycle transportation network is consistent with policies and positions from local, state and federal planning and transportation agencies and bodies.

A brief list is included in this chapter.

### **CITY OF EDINA COMPREHENSIVE PLAN**

The 2008 City of Edina Comprehensive Plan (currently under development) responds to ten objectives that provide a broad statement of the values and directions for shaping change in Edina. Three of those objectives are directly addressed by an improved bicycle transportation network in Edina:

#### **Objective 4**

*“Develop and maintain a coordinated and balanced transportation system that provides a variety of choices among transportation modes.”*

#### **Objective 9**

*“Improve community health and fitness.”*

#### **Objective 10**

*“Maintain a quality, sustainable environment.”*

Please see Appendix A.1 to read the complete list of 2008 Comprehensive Plan objectives.

### **METROPOLITAN COUNCIL**

The Metropolitan Council explicitly supports improvement and provision of bicycle facilities as part of transportation investments in cities within its jurisdiction.

The Council's 2030 Transportation Policy Plan includes several policies that strongly recommend provision of cycling facilities. A brief excerpt is provided here; the full section can be found in Appendix A.2.



**On Wooddale Avenue today.**

## Policy 15

### *Develop and Maintain Efficient Pedestrian and Bicycle Travel Systems*

“Safe, high-quality, continuous, barrier-free pedestrian and bicycle facilities must be developed, maintained and improved to function as an integral part of the region’s transportation system. Compact, mixed-use development with facilities for pedestrians and bicyclists helps reduce short automobile trips. Over the last 10 to 15 years, the region has made an effort to direct a higher level of transportation investments to special facilities for pedestrians and bicyclists, either as freestanding projects or as part of larger transportation projects. As the region promotes the development of mixed-use centers, providing facilities for these non-motorized modes becomes an increasingly important component of planning at the city, county and regional level. As recognized in the federal surface transportation law, well-developed pedestrian and bicycle systems help promote energy conservation, reduce the pressure on the highway system, and preserve the environment. In addition, recent research indicates that residents of places designed with accommodations for bicyclists and pedestrians are more active and therefore healthier than residents of other areas.”

### **MINNESOTA DEPARTMENT OF TRANSPORTATION**

The Minnesota Department of Transportation (Mn/DOT) has in recent years adopted policies that strongly advocate for the provision of adequate facilities for bicyclists.

Mn/DOT’s official vision for the role of bicycle transportation in the state’s overall transportation network states:

*“Minnesota is a place where bicycling is a safe and attractive option in every community. Bicycling is accommodated both for daily transportation and for experiencing the natural resources of the state.”*

Mn/DOT’s role in making this vision reality is included in its mission statement regarding bicycle transportation:

*“Mn/DOT will safely and effectively accommodate and encourage bicycling on its projects in Minnesota communities, plus in other areas where conditions warrant. Mn/DOT will exercise leadership with its partners to achieve similar results on their projects.”*

### **WHAT IS THE METROPOLITAN COUNCIL?**

The Metropolitan Council is the regional planning organization serving the Twin Cities seven-county metropolitan area.

The Council provides and manages regional services including public transportation, wastewater treatment, and regional and municipal planning.

It sets up the rules and framework for regional investments in transportation, parks and open space, and other systems, and provides funding for implementing projects meeting regional goals.

Starting in 2008, Mn/DOT will require all new construction projects over which they have jurisdiction to include “safe and effective” bicycle accommodations. Only highway construction projects are excepted from this requirement.

## FEDERAL POLICIES

### AASHTO GUIDANCE

The American Association of State Highway and Transportation Officials (AASHTO) is a standards-setting body that publishes specifications and policies guiding highway design and construction practices throughout the United States. Its policies regarding provision of bicycle facilities are strongly supportive:

*“All highways, except those where bicyclists are legally prohibited, should be designed and constructed under the assumption they will be used by cyclists. Therefore, bicycles should be considered in all phases of transportation planning, new roadway design, roadway construction and capacity improvement projects, and transit projects.”*

### FEDERAL AGENCIES

The Federal Highway Administration (FHWA)’s Non-motorized Design Guidance, governing implementation of the Transportation Equity Act for the 21st Century (TEA-21) and subsequent authorizations, states:

*“Bicycle and pedestrian ways shall be established in all new construction and reconstruction projects in urbanized areas (unless prohibited by law, excessive cost, or demonstrated absence of need).”*

### FEDERAL LAW

The Transportation Equity Act for the 21st Century (TEA-21) authorized the Federal surface transportation programs for highways, highway safety, and transit for the 6-year period between 1998 and 2003. After temporary extensions, the act was reauthorized as SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users) in 2005 to govern transportation spending until 2010. It states:

*“Bicycle transportation facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation projects, except where bicycle and pedestrian use are not permitted.”*

## TEA-21 AND SAFETEA-LU

Many of the recent changes in state and federal transportation policies regarding bicycling facilities are the result of federal legislation governing federal surface transportation investments.

TEA-21 (The Transportation Equity Act for the 21st Century) authorized the Federal surface transportation programs for highways, highway safety, and transit for the 6-year period between 1998 and 2003. After temporary extensions, the act was reauthorized as SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users) in 2005 to govern transportation spending until 2010. It states:

*“Bicycle transportation facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation projects, except where bicycle and pedestrian use are not permitted.”*

The Act further includes seven planning objectives that must be addressed in regional transportation plans. Four of these objectives are consistent with directing improvements to bicycling facilities and infrastructure:

#### Objective 2

*“Increase the safety and security of the transportation system for motorized and non-motorized users”*

#### Objective 3

*“Increase the accessibility and mobility options available to people and for freight”*

#### Objective 4

*“Protect and enhance the environment, promote energy conservation and improve the quality of life”*

#### Objective 5

*“Enhance the integration of connectivity of the transportation system, across and between modes, for people and freight”*

# Section II

## Recommendations

*This section includes recommendations for addressing the various systems that can help improve conditions for cycling in Edina and bring the vision guiding this work closer to reality.*

### IN THIS SECTION:

- 2.1 - ROUTE SELECTION PRINCIPLES**
- 2.2 - RECOMMENDED ROUTES**
- 2.3 - GENERAL RECOMMENDATIONS**
- 2.4 - RECOMMENDED TREATMENTS**
- 2.5 - REGIONAL ROUTES**
- 2.6 - END OF TRIP / ANCILLARY FACILITIES**
- 2.7 - SIGNS, SIGNALS AND WAYFINDING**
- 2.8 - TRANSIT INTEGRATION**
- 2.9 - EDUCATION AND ENCOURAGEMENT**
- 2.10 - OPERATIONS AND MAINTENANCE**

## 2.1 Route selection and recommendation principles

Several project principles guide the selection of routes presented in this Plan. These principles were derived from guidance provided by Bike Edina Task Force (BETF), City of Edina staff, and members of the public.

### GOALS AND GUIDING PRINCIPLES

1. Increase safety and convenience for Edina cyclists
2. Increase opportunities for bicycling as a transportation option
3. Create a network of routes that is within reasonable distance of the greatest number of Edina residents and workers
4. Provide safe and convenient bicycle access to major destinations within Edina, including commercial and entertainment areas, employment centers, and civic institutions; provide safe and convenient connections between Edina quadrants
5. Provide safe and convenient connections to adjacent communities and other locations outside of Edina
6. Provide connection to existing and proposed regional commuter and recreational bicycle trails
7. Provide safe and convenient routes to schools, recreation centers, and other institutions serving the needs of young people in Edina
8. Provide safe and convenient routes to destinations serving the needs of senior adults in Edina
9. Recommend practical, cost-efficient improvements that increase the bicycle-friendliness of Edina's existing surface street network
10. Improve the quality and quantity of end of trip facilities in Edina

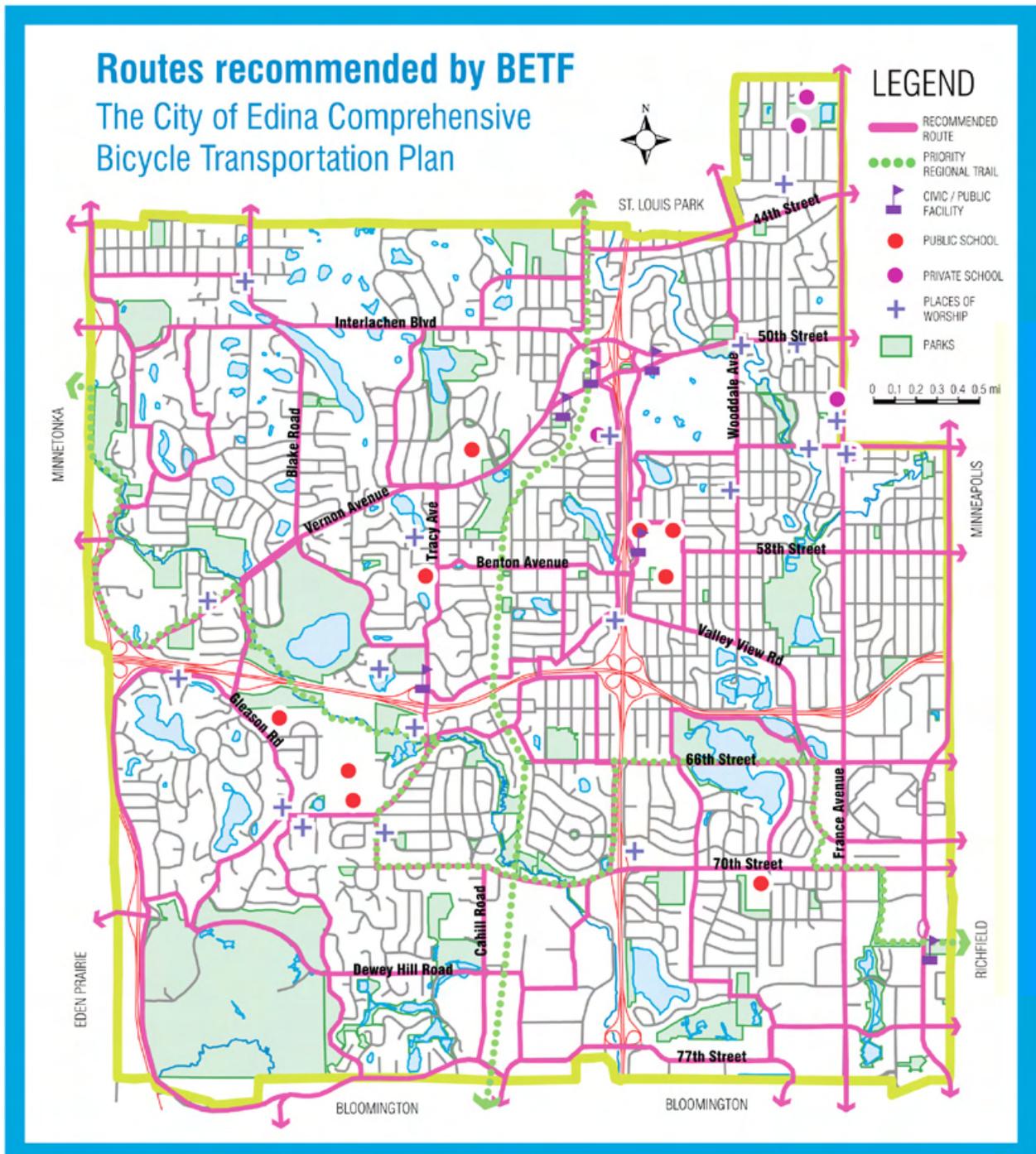


*An Edina family cycling on 66th Street near Southdale Mall.*

## FOUNDATION

The routes recommended in this Plan are based on the routes identified, selected and recommended by the Bike Edina Task Force (BETF) as part of the work they completed in Fall 2006. All of the routes selected and recommended by BETF are carried forward and identified for designation as recommended routes (with some additions, route hierarchy and implementation recommendations) by this Plan as included in Chapter 2.2 (Recommended Routes).

A map of the original routes developed by BETF follows below:



## PRINCIPAL DESTINATIONS

The Bike Edina Task Force identified the following as priority destinations and objectives for Edina cyclists and for this Plan:

- Connection to the Cedar Lake LRT Regional Trail
- Connection to shopping, entertainment and commercial areas in Edina, including Southdale, 50th and France, 50th and Vernon, and 70th and Cahill
- Provision of safe, inviting and comfortable routes to schools in Edina
- Provision of safe, inviting and comfortable routes to parks, civic and recreation centers, including the Edina Aquatic Center and other destinations sought by children and families



***The Cedar Lake LRT Regional Trail, adjacent to Edina's northwest border, is one of the top connections desired by Edina cyclists.***

The Bike Edina Task Force recommendations inform and are carried forward by this Plan. In addition, they are supplemented by recommendations to connect employment centers, locations of high residential density, potential growth and development areas (as identified by the City of Edina's 2008 Comprehensive Plan), and to address the mobility needs of Edina seniors.

## METHODOLOGY

Route segments initially identified through BETF's work and by this Plan were evaluated using several criteria, which depended on a number of inter-related factors, responded to identified needs, and followed accepted bicycle transportation, route network and human factors design practice.

The goal was to identify a network of Primary routes that would help connect major destinations and aid movement through Edina while serving as a backbone for a wider network of Secondary routes that extend the network's usability and access, and improve safety and convenience for bicycle travel over all of Edina's surface streets.

## BALANCING CONSTRAINTS

Among the variables considered in this iterative process are the following:

- The need to maximize the number of potential destinations while minimizing the number of recommended Primary routes in order to reduce network complexity
- The need to create a network that could be easily communicated and understood
- The desire to make use of existing bicycle transportation

assets in Edina by directing enhancements to those routes that Edina cyclists are already using

- The desire to minimize implementation expenses and potential hurdles by recommending solutions that work within the existing street geometry and right-of-way constraints

### ROADWAY SUMMARIES

Recommended streets were assessed through riding and through an inventory of geometric constraints, existing traffic conditions, potential to provide connections to other routes or destinations, present use and other related characteristics, including:

- Total roadway width (curb-to-curb)
- Number of automobile driving lanes
- Presence of parking lanes or sidewalks
- Average daily traffic
- Present automobile speed limits
- Functional classification
- Available right of way
- Potential locations or other routes accessible from route
- Ease of access to route for potential users

It is recommended that road condition summaries be updated and refined as needed by the Edina Bicycle Coordinator and Bicycle Advisory Committee (part of the recommendations presented in Chapter 3.2).

### DESIGNING ON-STREET FACILITIES

Guidance for configuration recommendations applying to on-street bicycle facilities was obtained from accepted practice and several resources including the Minnesota Department of Transportation Bikeway Facility Design Manual.

In general, this Plan recommends provision of minimum 5 ft wide bicycle lanes wherever Primary routes are located in streets with speed limits of 30 mph or above and with average daily traffic (ADT) volumes exceeding 1,000 vehicles in two lane roads or 2,000 vehicles in four lane roads. Where ADT exceeds 5,000 vehicles in two lane roads or 10,000 vehicles in four lane roads, this Plan recommends a minimum provision of 6 ft bike lanes along those roads. Additional guidance on this topic can be found in Appendix A.6 of this Plan.

Roadway summary: Interlachen Boulevard	
Total roadway width (ft)	34
Total automobile driving lanes	2
Driving lane width (ft)	12
Number of parking lanes (side)	0
Sidewalks (side)	0
Number of shoulders provided	2
Shoulder width (ft)	5
Average daily traffic (2005 AADT)	11,800   10,200
Speed limit (mph)	30
Functional classification	"B" Minor Arterial
Available right-of-way (ft)	65

Roadway width includes driving lanes, parking lanes and shoulders. Where it varies, a representative value is used. Multiple AADT values for a street are provided when available.

Sample roadway summary for Interlachen Boulevard.



2005 ADT (average daily traffic) figures in the vicinity of Vernon Avenue and Eden Avenue. Please see Appendix A.9 for complete figures for Edina streets.

## 2.2 Recommended routes: Prioritization and hierarchy

This Plan recommends establishing a Primary and Secondary network of bicycle routes as a way of aiding understanding and implementation of Edina's bicycle transportation network.

### PRIMARY ROUTES

Primary routes are those that provide:

- Connection to regional assets and convenient travel to points outside Edina
- Easy access to major destinations within the city
- A network of routes to access the City's schools and major recreational centers
- Connection to locations identified by the City of Edina 2008 Comprehensive Plan

In general, Primary routes are located within close proximity of population concentrations in Edina, and are easily accessed from surrounding areas (for example, they are not located adjacent to a freeway, where the freeway itself becomes a barrier to access).

Many Primary routes (with some notable exceptions like 77th Street), are at present already functioning informally like bike routes. A significant number of Edina cyclists can be observed on recommended routes like Wooddale Avenue, 44th Street, Vernon Avenue, 70th Street, and others. Most of these routes at present have sufficient room to accommodate potential reconfiguration for inclusion of bicycle facilities.

Primary routes are recommended for priority implementation.

### SECONDARY ROUTES

Secondary routes work in concert with Primary routes to establish a finer-grained network of routes and are most useful as means for reaching Primary routes and for some local trips. In many cases, these routes travel through residential neighborhoods and offer opportunity for extending the reach of Primary routes to ensure maximum usability and access to this transportation network for Edina residents. Guidance for implementation and wayfinding measures is provided in the following chapters.

#### ON ROUTES: A CAVEAT

The process of selecting and recommending specific streets for Edina's bicycle transportation network necessarily entails choosing among alternatives, and finding compromises that respond to the need to maximize safety, comfort and convenience for cyclists of all skill levels while minimizing distance, delay, or unfavorable travel conditions.

Care has been taken to include those streets that can help provide safe and convenient access to schools, recreation centers, and access to shopping and entertainment destinations.

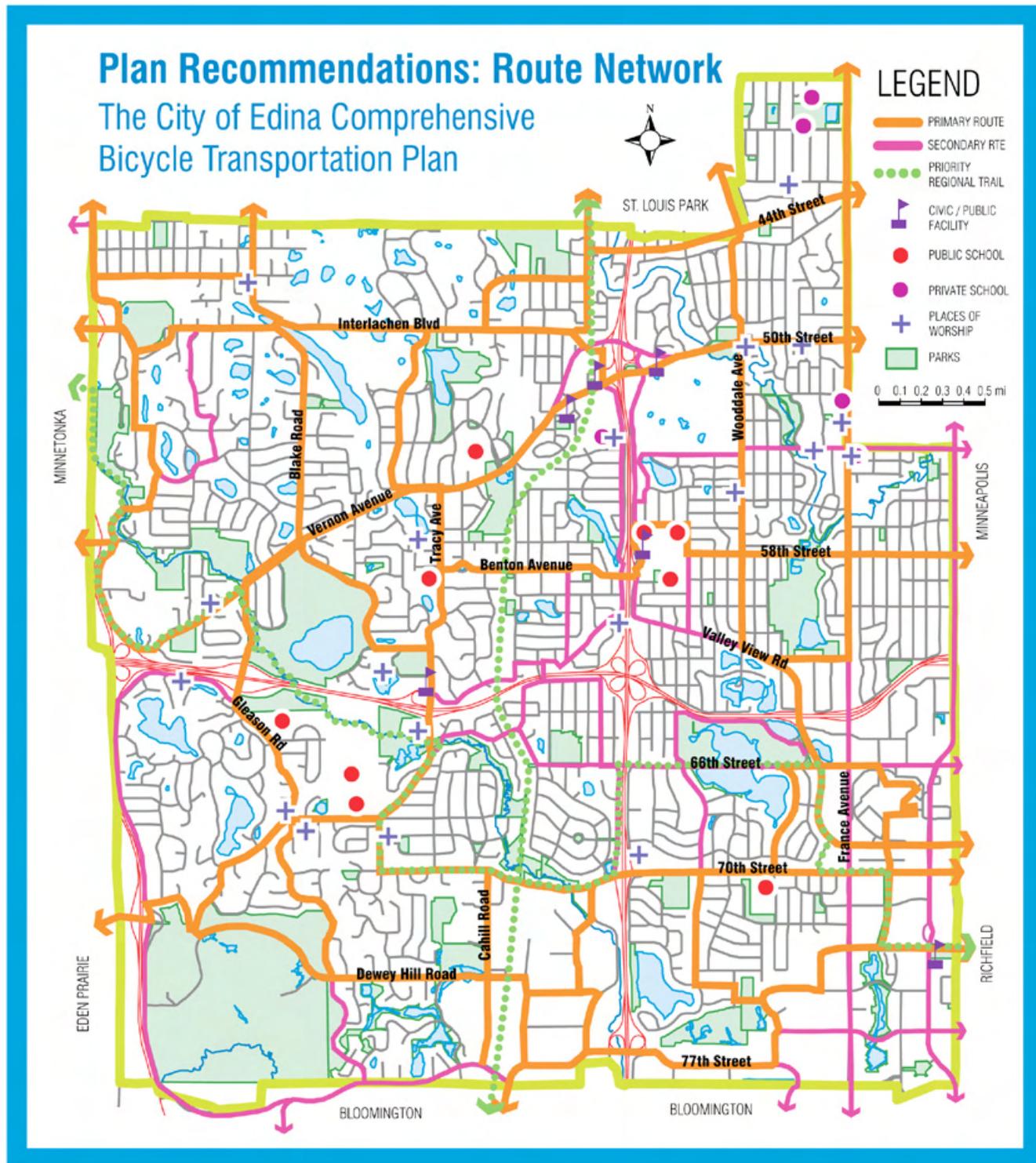
The choices presented in this chapter as primary components of bicycle circulation in Edina will allow us to focus resources and to more easily implement, communicate and encourage use of cycling to serve the greatest number of people, trips and destinations in and through Edina in the safest and most comfortable and convenient way.

#### EVERY STREET A SAFE STREET

The fact that a network of routes is identified and recommended for implementation in this Plan should not be interpreted as implying that travel on the rest of Edina's surface streets is deprecated. One of the central recommendations underlying this work is that every street in Edina must be safe and comfortable for cyclists, pedestrians, motorists and all other users.

## RECOMMENDED ROUTE NETWORK

A map showing the recommended network of routes for Edina's bicycle transportation network is provided below. Routes are classified as part of a Primary or Secondary network; as discussed earlier, Primary routes are those that more directly provide connections to destinations within and outside Edina. Regional routes (the Canadian Pacific Regional Trail and the Nine Mile Creek Regional Trail) are included as a high priority component of this Plan.



## ASSESSMENT OF NETWORK FUNCTIONS

The proposed Primary route network meets the goals and objectives set out by the Bike Edina Task Force (BETF) and the City of Edina as guidance for this Plan.

### ACCESS TO DESTINATIONS

The proposed Primary route network provides direct access to important destinations in Edina including 50th and France, Southdale Mall, 70th and Cahill, and 50th and Vernon, as well as providing connections to adjacent municipalities and regional trails including the Cedar Lake LRT Regional Trail.

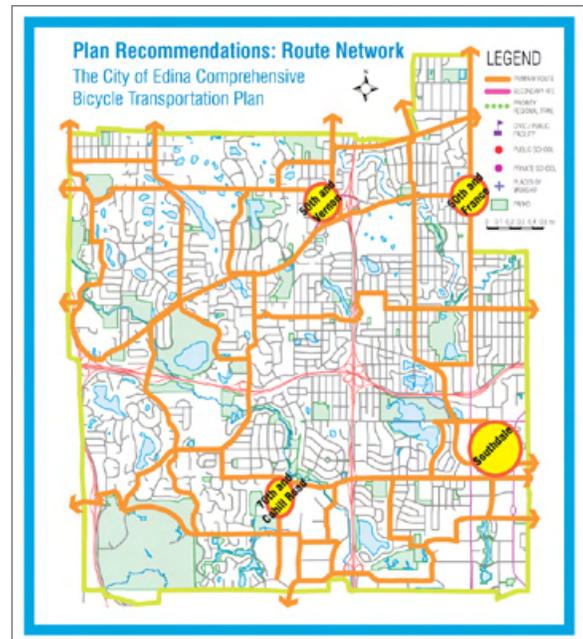
### SAFE ROUTES TO SCHOOL

One of the purposes of this Plan is to improve provision of safe routes to school so that children may be able to safely ride there. To this end, this Plan recommends establishing a high quality core of routes serving schools in Edina.

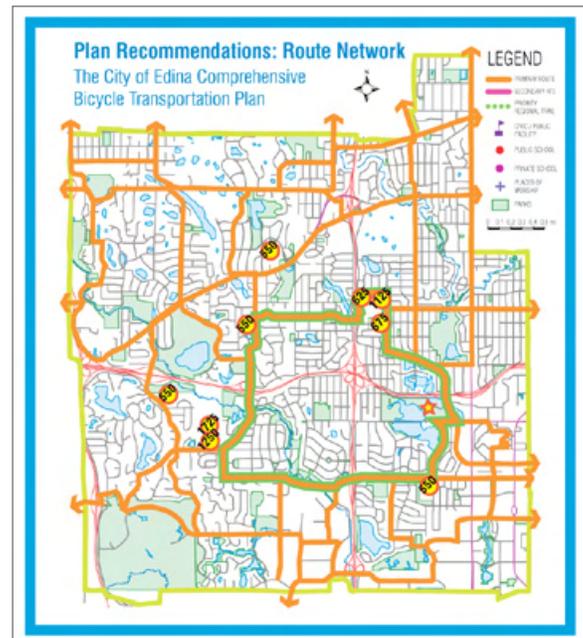
This core of routes is formed by several Primary routes, including Benton Avenue on the north; Tracy Avenue, Valley View Road and Antrim Road on the east; 70th Street on the south; and Cornelia Drive, 66th Street, Valley View Road and Concord Avenue on the east. These core routes include streets providing some of the best cycling conditions in Edina today (with some exceptions), and, linked together, form a circulation pattern that allows a rider relatively easy access to and between all four Edina quadrants as well as proximity to major destinations.

Functioning as a kind of hub, these routes provide direct service to seven of the City's nine public schools, including the City's high school and its two middle schools (where students are of an age when parents are more likely to feel comfortable letting them ride to school on their own). Working in concert with the rest of the recommended Primary routes, this hub will provide safe and convenient access to schools and parks, including the Edina Aquatic Center (one of the top destinations sought by children and families).

The set of routes making up this hub are recommended for short-term, high priority implementation. The possibility of designating these group of streets as "Bike to School" routes and providing enhanced treatments should be explored.



**Primary routes (shown in orange) provide convenient connection to major retail and entertainment destinations in Edina.**

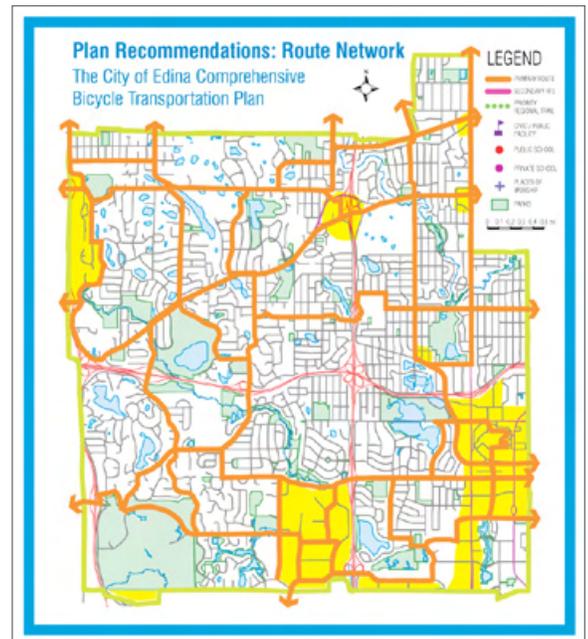


**A hub formed by several Primary routes helps provide safe access to Edina public schools. Schools (and 2006-2007 enrollment) is shown on the yellow circles; school core routes are shown in orange and green. The Edina Aquatic Center, another important destination for Edina children and families, is shown with a star.**

### ACCESS TO EMPLOYMENT AND GROWTH CENTERS

The Primary routes proposed by this Plan provide access to existing employment centers in Edina and to areas designated by the City of Edina 2008 Comprehensive Plan as potential areas of change, where the City anticipates new development will take place and where it foresees accommodating population and employment growth over the next decade.

Providing safe and convenient Primary route connections to these sites is consistent with the City's 2008 Comprehensive Plan Land Use policies, which include considering "how land use and transportation are integrated to ensure that new development and redevelopment expands non-motorized travel options."



**Potential redevelopment areas in Edina are shown in yellow. The City foresees accommodating growth in employment and population in these areas. Primary bicycle routes are shown in orange.**

## 2.3 General recommendations

These recommendations should be kept in mind when designing or implementing improvements to surface streets in Edina. Given that bicycles are legal vehicles for use on the same surface roads that automobiles travel on, many of these general recommendations revolve around clearly and consistently assigning space to automobiles and cyclists so that they may safely and comfortably coexist on Edina’s roadways.

### IMPLEMENT A “COMPLETE STREETS” DESIGN POLICY

“Complete Streets” is a design philosophy that considers the needs of all present and potential transportation network users.

Complete Streets laws and policies ensure that a community’s roads and streets are routinely designed and operated to provide safe space and access for all users, including pedestrians, bicyclists, motorists and transit riders, and to ensure that they work for people of all ages and abilities, including older people, children, and people with disabilities.

Adopting a Complete Streets design policy will help ensure that all street construction and street improvement projects in the City of Edina anticipate and address the needs of cyclists, pedestrians and other users, regardless of whether a particular street is included within Edina’s formally designated bicycle route network. Over the long run, embedding this Complete Streets approach into the City’s normal operating procedures will do more for cyclists and pedestrians than any one specific plan could.

This Plan strongly recommends adoption of a Complete Streets policy and design approach as a priority for the City of Edina.

### DECREASE THE WIDTH OF AUTOMOBILE LANES

Decreasing the width of automobile travel lanes can help calm traffic while freeing up valuable road space for bicycle lanes. The Institute of Transportation Engineers (ITE), in *Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities*, a study sponsored by the Federal Highway Administration (FHWA), recommends using a roadway’s *target* (or desired) speed as guidance for the width of travel lanes provided.



On Lincoln Drive.

### MORE ON COMPLETE STREETS

You can find more resources on complete streets through the following organizations:

- Complete the Streets ([www.completestreets.org](http://www.completestreets.org))
- Walk and Bike for Life ([www.walkandbikeforlife.com](http://www.walkandbikeforlife.com))
- The Pedestrian and Bicycle Information Center ([www.pedbikeinfo.org](http://www.pedbikeinfo.org))



A complete street provides safe and comfortable space for all roadway users.

In general (and consistent with AASHTO Green Book guidance), the study finds 10 ft travel lanes are suitable for local and collector streets with operating speeds to 30 mph, while lane widths from 10 to 11 ft are suitable for use in arterials with operating speeds to 35 mph.

### DESIGNATE AUTOMOBILE SPACE

Marking the right edge of the automobile driving lane (or “fog line”) can help calm traffic and designate safe spaces for cyclists to ride on. This practice will in fact also increase safety for motorists as it will discourage automobiles from passing on the right, especially on wider roads and bridges.

### DECREASE AUTOMOBILE TRAVEL SPEEDS

One of the factors that most influences cyclists’ (and pedestrians’) perceptions of the relative safety of a street is the speed of the automobiles that travel there. Streets with high speed limits are less welcoming to pedestrians or cyclists. Several streets which could serve as important bicycle routes in Edina are made less inviting by high speed limits currently in place. Vernon Avenue, for example, is posted as a 40 mile per hour road along some of its length.

City of Edina Engineering staff and leaders are currently working alongside City Engineers from other municipalities to lower statewide speed limits for local and collector streets to 25 mph. These efforts should be supported and continued. In the meantime, Minnesota statutes currently allow cities and other jurisdictions to lower speed limits to 25 miles per hour without need of any additional engineering or traffic study if a bicycle lane is provided. According to Minnesota Statute 160.263 Bicycle lanes and ways, Subdivision 4: “Speed on street with bicycle lane”

*“Notwithstanding section 169.14, subdivision 5, the governing body of any political subdivision, by resolution or ordinance and without an engineering or traffic investigation, may designate a safe speed for any street or highway under its authority upon which it has established a bicycle lane; provided that such safe speed shall not be lower than 25 miles per hour. The ordinance or resolution designating a safe speed is effective when appropriate signs designating the speed are erected along the street or highway, as provided by the governing body.”*

### THE THREE SPEEDS OF TRAFFIC

One of the biggest issues affecting bicyclists’ (and pedestrians’) comfort and safety is the speed of automobile traffic around them.

There is clearly a disconnection between the *design speeds* of our streets and roadways (how fast cars can travel and still make turns and meet sight distance requirements), a roadway’s *posted speed limits* (how fast cars can legally travel), and that roadway’s *actual speeds* (what motorists actually do). Needless to say, common experience is that for many streets, actual speeds are closer to design speeds than to posted speeds.

An effective way of decreasing a roadway’s actual speeds is by providing visual cues to drivers that require them to slow down in order to feel appropriate control of their vehicle. Or, as the Institute of Transportation Engineers recommends in their Context-Sensitive Solutions (CSS) report:

*“Context-sensitive solutions for the urban environment often involve creating a safe roadway environment in which the driver is encouraged by the roadway’s features and the surrounding area to operate at lower speeds.”*

Narrowing travel lanes is one of the most effective tools to accomplish this. Many US cities, including the City of Chicago, now routinely narrow travel lanes down to 10 foot widths (and Chicago does so specifically to free up additional road space to provide bike lanes for cyclists).

Narrower lanes do not increase risk to motorists or present any adverse impacts on safety. In fact, they have even been used in Minnesota highway projects where lack of available right-of-way and cost constraints made standard freeway lane widths (12 ft) unattainable. Recently completed portions of Highway 100, for example, include 11 ft lanes where space available was limited.

Research and experience, including an upcoming NCHRP report, find there is no safety advantage to 12 or 11 foot lanes over 10 foot travel lanes where posted speeds are 35 mph or less.

## SEPARATE CYCLISTS AND PEDESTRIANS

Cyclists and pedestrians have different travel characteristics. Mixing both types of users in the same facility increases hazards to both. Designating bicycling space in sidewalks or side paths is not recommended as it increases the potential for crashes between bikes and pedestrians, and, by making cyclists less visible to motorists, puts cyclists at significantly greater risk of automobile crashes. Risk to cyclists is in fact 5 times greater when riding on sidewalks than when riding on a street, even if that street has no bike facilities at all.

## PROVIDE ON-STREET BIKE FACILITIES

Providing bike lanes invites additional riders and greatly improves safety for cyclists, decreasing risk to cyclists by half (over riding in a similar street without lanes). A street with bike lanes is in fact safer to ride on than shared-use or recreational paths (because of greater potential for bicycle-pedestrian conflicts on those paths).

## CHECK INTERACTIONS BETWEEN TRAFFIC CALMING AND CYCLING SPACE

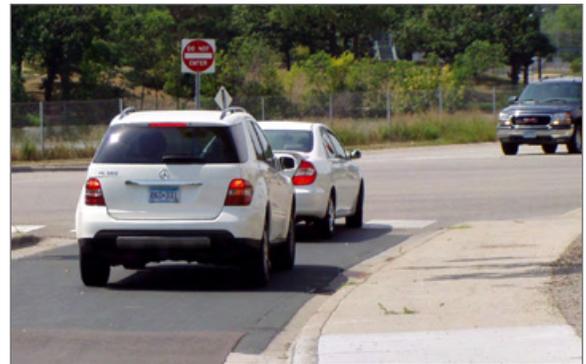
Calming automobile traffic through neighborhoods and commercial areas is an important goal, and one that brings benefits to pedestrians and cyclists. Sometimes, however, traffic calming measures can negatively impact cyclists, especially if they include physical barriers or changes in road configuration that narrow or remove space that could accommodate bicycles. Other options for traffic calming, including painting lane limits and decreasing lane widths can yield the same traffic calming benefits without decreasing space for bicycles. Marking bike lanes on a street is in fact a traffic calming measure because doing so reduces the amount of road space available to automobiles, providing visual cues to motorists that help decrease average speeds and their variability. All proposed traffic calming measures in Edina should be reviewed for their potential impact on bicycle conditions.

## BIKE FACILITY RELATIVE DANGER INDEX

A comparison of relative risk of injury due to collisions for several types of facilities that cyclists commonly ride on. Median risk is 1.0:

Type	Risk index
Major streets, no bike lanes	1.28
Minor streets, no bike lanes	1.04
Streets with bike lanes	0.5
Shared-use paths	0.67
Sidewalks and sidepaths	5.32

Source: William Moritz, University of Washington: "Survey of North American Bicycle Commuters: Design and Aggregate Results," Transportation Research Board, Vol 1578, 1997.



**Some traffic calming measures that physically narrow the roadway make it more difficult for cyclists to arrive at an intersection and be noticed by automobiles before entering it. Using paint to channel traffic preserves space for cyclists and is cheaper, too. Pictured: 65th Street, near Valley View Road.**

## 2.4 Recommended treatments

Improving Edina's bicycle infrastructure will require making physical changes that provide additional space for cyclists, establish route designations, and enhance the functioning of traffic signals to better accommodate the needs of cyclists.

The purpose of this chapter is to provide a guide to the types of improvements that are recommended for implementation in Edina, to provide a means to prioritize short, medium, and long-term improvements, and to provide an illustration of what these improvements could look like when implemented - how much space they would require, and where and how they would be located.

It is important to note that these sample treatments are presented as concepts that will require further investigation before implementation - these are not final designs, but preliminary recommendations that have a high potential for improving cycling conditions given the constraints and conditions present in specific places and streets in Edina.

It is also important to note that the improvements presented in this chapter are not meant to include every single street that is recommended as part of Edina's Primary and Secondary bicycle transportation network, and that the choices for types of treatments are similarly not meant to include every single possibility that could be applied (for a more exhaustive list of potential treatments, please see Appendix A.3 Types of bicycle facilities).

Decisions on final configurations and treatments will have to be made during the Plan's implementation, and will require the guidance of the City of Edina's Bicycle Advisory Committee and Bicycle Coordinator (recommended in Chapter 3.2) so that final designs can be integrated and coordinated with other concurrent bicycle transportation and roadway improvement projects.

When phasing is discussed, short-term is used to indicate implementation within 2 years of Plan adoption, while medium-term is 2 to 4 years forward and long-term is 4 to 7 years into the future.



***The blue bike lane and sign (on upper right) alert motorists to yield to cyclists when driving over the bike lane to enter the right turn lane.***

***Photo: Portland, Oregon.***

## 2.4.1 Sample treatment options

A brief overview of some of the improvements recommended over Edina’s bicycle network, along with a brief listing of specific locations where they are to be applied, is given below. A more complete list of bicycle network improvements in use in the US and abroad is included in Appendix A.3 Types of bicycle facilities.

### BIKE ROUTE SIGNS

Bike route signs direct cyclists to their destination, guide them through neighborhoods efficiently and also alert motorists to the presence of cyclists on the road. Bicycle route signs in Edina should include distance, direction and destination information.

#### WHERE TO APPLY THEM

- Bike route signs are recommended for installation over Edina’s entire Primary network.
- Their installation should be done over the short term. They can immediately be applied on streets that provide enough room for cyclists at present. Streets needing additional improvement before bicycling is comfortable should first be improved and then signed.



*Effective bicycle route signing includes destination, direction and distance elements.  
Photo: Portland, Oregon.*

### ROUTE DOTS

Bicycle “route dots” are small wayfinding symbols painted on the pavement along bicycle routes where they pass through residential or low traffic areas, especially where the route does not follow an obvious road (for example, where a route goes through several turns in a residential neighborhood).

#### WHERE TO APPLY THEM

- Route dots are recommended for installation over Edina’s Primary and Secondary bike network.
- Route dots should be applied where a route requires a cyclist to choose between multiple directions and in the absence of other treatments that would also serve a wayfinding function such as bicycle lanes or sharrows (shared lane arrows).



*This route dot tells a cyclist to veer to the right to remain on this route.  
Photo: Portland, Oregon.*

## BIKE LANES

Bike lanes delineate road space for exclusive use by cyclists. The minimum width recommended for implementation of on-street bike lanes in Edina is 5 ft wide. Please see Appendix A.6 and A.7 for additional resources and guidance on bike lane treatments.

Bike lanes are typically striped along the surface of existing roads, either adjacent to the curb or to on-street parking. Integral bike lane-gutter pan curbs provide an extra-wide gutter pan that also serves as a bike lane and avoids the gutter pan-pavement seam that often decreases the available lane width available for cycling. Because these curbs are built of concrete, they typically provide additional contrast for the bike lane when built adjacent to asphalt pavements.

### WHERE TO APPLY THEM

- Bike lanes are recommended for all streets included in the Primary route network recommended by this Plan, including Benton Avenue; 70th Street; Tracy Avenue; Vernon Avenue; Eden Avenue; Interlachen Boulevard; and Dewey Hill Road, among others
- Bike lanes should be painted or provided using contrasting materials along designated “Bike to School” routes

## BLUE LANES

Blue lanes are short, painted sections of bike lanes that are located in places where potential crossing conflicts between automobiles and bicycles may occur.

### WHERE TO APPLY THEM

- At locations where freeway entrance and exit ramps cross a road where a bike lane is present. In Edina, they are recommended at Benton Avenue and Highway 62; at Tracy Avenue and Highway 100; 70th Street and Highway 100; and Valley View Road and Highway 62, among others
- Where it is important to alert drivers of the potential presence of cyclists in locations where multiple turning movements require an automobile to cross over a bike lane (for example to enter a right-turn lane). In Edina, they are recommended on 66th Street, 70th Street and Valley View Road near Southdale Mall; on 70th Street near Metro Boulevard; and on the eastern segments of Valley View road near Highway 62, among others



**Six foot wide bike lane on an integral bike lane-gutter pan curb design. Use of concrete next to an asphalt roadway brings additional contrast to the lane.**

**Photo: Lowry Avenue, Minneapolis.**



**Recommended blue lane treatment on 70th Street near Highway 100.**

## BICYCLE LOOP DETECTORS

Bicycle loop detectors help cyclists cross busy intersections and multi-lane roads by recognizing the presence of bikes and tripping signal changes at traffic lights. They are often combined with pavement markings to encourage cyclists to position their bikes where they can be detected. Improving detection of bikes at intersections will help improve cyclist safety and convenience.

### WHERE TO APPLY THEM

- Bicycle loop detectors and pavement markings should be applied wherever a Primary route crosses a multi-lane road, including near France Avenue and Valley View Road south of highway 62, among others



***A cyclist positioning his bike over a bicycle loop detector to trip a traffic signal.  
Photo: Portland, Oregon.***

## UNDERPASSES

In general, this Plan does not recommend construction of underpass or overpass structures, recommending instead that surface roads be improved to safely handle cyclists. Many underpasses provide unfriendly conditions that deter cyclist use, while overpasses typically require a significant amount of effort to climb and traverse. Both are also expensive to build.

It is important to note that underpass structures can be designed to be more inviting and comfortable.

### WHERE TO APPLY THEM

- The underpass structure currently existing under York Avenue and providing movement into Richfield just east of Centennial Lakes is in bad condition and does not provide sufficient space (or light) for comfortable use, especially to accommodate additional travel over this Primary route. This structure should be replaced with a more suitable design following guidance from the Minnesota Department of Transportation Bikeway Facility Design Manual



***An improved tunnel under York Avenue should be more spacious and comfortable.***

## 2.4.2 Overview of recommended street configurations

This Chapter provides a brief overview of recommended preliminary configurations and treatments for selected streets making up Edina's Primary bicycle route network.

The configurations included in this chapter are presented for illustration purposes only. They are not meant to include every single street that is recommended as part of Edina's Primary route network. Similarly, the choices for types of treatments are not meant to include every single possibility that could be applied.

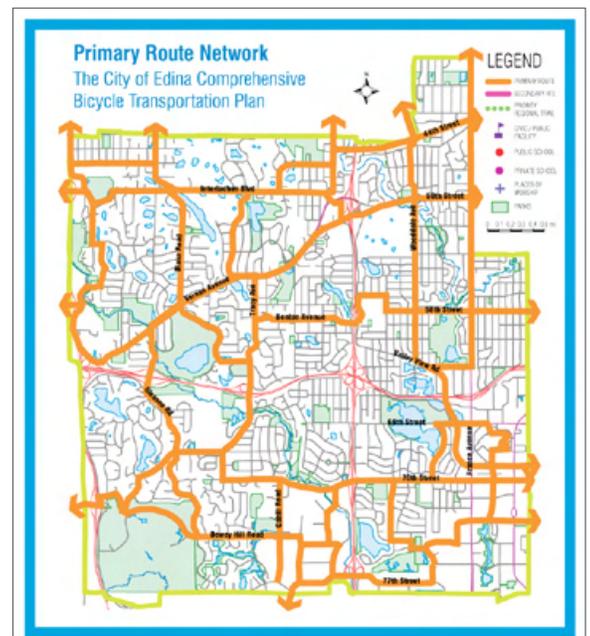
Preliminary recommendations are made following the methodology presented in Chapter 2.1.

Decisions on final configurations and treatments will have to be made during the Plan's implementation, and will require the guidance of the City of Edina's Bicycle Advisory Committee and Bicycle Coordinator, as well as the participation of the City's Engineering and Public Works Department.

Streets are presented in alphabetical and then numerical order. Improvement recommendations are phased over the short, medium and long-term.



***A cyclist riding near Gleason Road. Although this street presently provides enough space to accommodate cyclists, lack of on-street facilities discourages riding on the road.***



***Routes recommended for Edina's Primary route network (shown in orange). The full network, including Secondary routes, is described in Chapter 2.2.***

## ANTRIM ROAD

Antrim Road currently presents excellent cycling conditions. Automobile traffic moves along at a reasonable pace, and the street's wide parking lanes (on both sides) function almost like bike lanes.

### RECOMMENDED TREATMENTS

Two options are provided, relating to the present provision of on-street parking on both sides of the street. This street is part of the "Bike to School" bike route network discussed in Chapter 2.2.

### SHORT / IMMEDIATE TERM

- Sign the route using recommended design; include markings designating this street as a "Bike to School" route
- Delineate right edge of driving lane ("fog line") to limit automobile displacement. Driving lanes should be 10 ft wide
- Alternative A: If keeping parking on both sides of the street, parking lanes should be 7 ft wide. Provide two bike lanes, 5 ft wide each (minimum)
- Alternative B: If parking can be consolidated on one side (the east side is recommended in order to more conveniently serve church and shelter pedestrians on sidewalk), parking lane should be 9 ft wide. Provide two bike lanes, each 7.5 ft wide (minimum)

### MEDIUM TO LONG TERM

- Consider application of colored pavement to mark bike lanes as a "Bike to School" route
- Consider installation of integral bike lane-gutter pan curbs

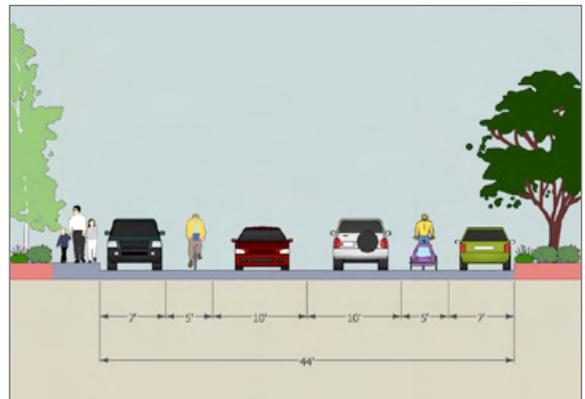
### LONGER TERM

- If Alternative B is chosen, roadway cross-section can be reduced in the future and provide a 4 ft planted boulevard adjacent to sidewalk on eastern side of street (to decrease impermeable area and improve aesthetics and pedestrian orientation). Parking lane should be 8 ft wide and bike lanes should be 6 ft wide (minimum)

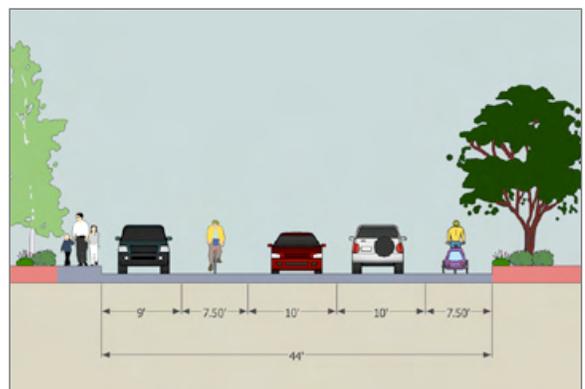


Southbound on Antrim Road today.

### Two potential configurations for Antrim Road:



Alternative A: Parking on both sides, with space for cyclists and automobiles within the existing roadway.



Alternative B: Parking on one side, and space for cyclists and automobiles.

## BENTON AVENUE

Benton Avenue is fairly wide and generally calm, presenting good cycling conditions along its length. The bridge over Highway 100 provides much more automobile road space than is currently necessary.

### RECOMMENDED TREATMENTS

This street is part of the “Bike to School” bike route network discussed in Chapter 2.2.

#### SHORT / IMMEDIATE TERM

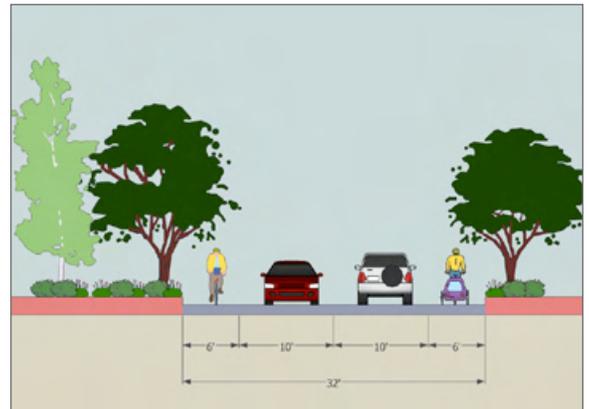
- Sign the route using recommended design; include markings designating this street as a “Bike to School” route
- Delineate right edge of driving lane (“fog line”) to limit automobile displacement. Driving lanes should be 10 ft wide
- Stripe two 6 ft wide (minimum) bicycle lanes

#### MEDIUM TO LONG TERM

- Apply blue bike lanes near Highway 100 exit and entrance ramps
- Consider application of colored pavement to mark bike lanes as a “Bike to School” route
- Consider installation of integral bike lane-gutter pan curbs



*Westbound on Benton Avenue, approaching the bridge over Highway 100.*



*Recommended roadway configuration for Benton Avenue.*

## DEWEY HILL ROAD

Dewey Hill Road presents excellent cycling conditions and provides convenient east-west connections between Braemer Park, Lewis Park, Cahill Road (with access to 70th and Cahill), and Metro Boulevard. This street connects one of the areas considered for more intense mixed-use development by the 2008 Comprehensive Plan.

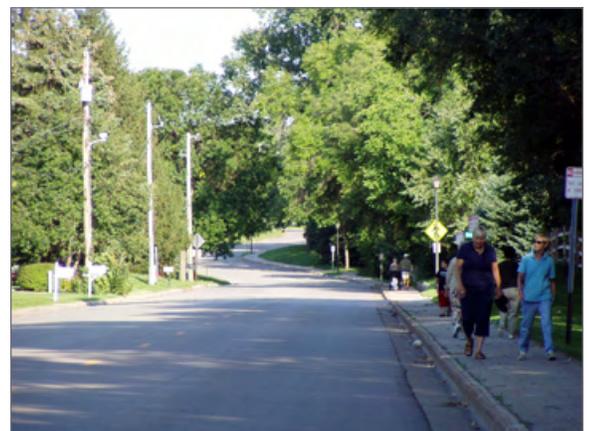
### RECOMMENDED TREATMENTS

#### SHORT / IMMEDIATE TERM

- Sign the route using recommended design
- Delineate right edge of driving lane (“fog line”) to limit automobile displacement. Driving lanes should be 10 ft wide
- Stripe two 5 ft wide (minimum) bicycle lanes

#### MEDIUM TERM TO LONG TERM

- Consider installation of integral bike lane-gutter pan curbs



*Eastbound on Dewey Hill Road. The sidewalk on this street is a popular walking route.*

## EDEN AVENUE

Eden Avenue is a comfortable biking street, and is a more inviting option for connecting Vernon Avenue to 50th Street than travelling over those streets near Highway 100. It provides good access to Grandview Square and is a potential access point for the recommended Regional Canadian Pacific Trail. A Park and Ride facility between Vernon and Eden is in early phases of concept development.

### RECOMMENDED TREATMENTS

#### SHORT / IMMEDIATE TERM

- Sign the route using recommended design
- Delineate right edge of driving lane (“fog line”) to limit automobile displacement. Driving lanes should be 10 ft wide
- Stripe two 6 ft wide (minimum) bicycle lanes

#### MEDIUM TO LONG TERM

- Consider application of colored pavement to mark bike lanes
- Consider installation of integral bike lane-gutter pan



**Deteriorated roadway shoulders present a hazardous condition for cyclists along Interlachen Boulevard.**

## INTERLACHEN BOULEVARD

Interlachen Boulevard presently provides an uncomfortable environment for cyclists. High vehicle speeds, lack of bicycle facilities, and poor condition of shoulders work against use of this important route.

A configuration accommodating cyclists and pedestrians on an 8 ft sidewalk (proposed by others) was recently rejected by the Edina City Council as it created hazardous conditions and did not meet recommended practice.

### RECOMMENDED TREATMENTS

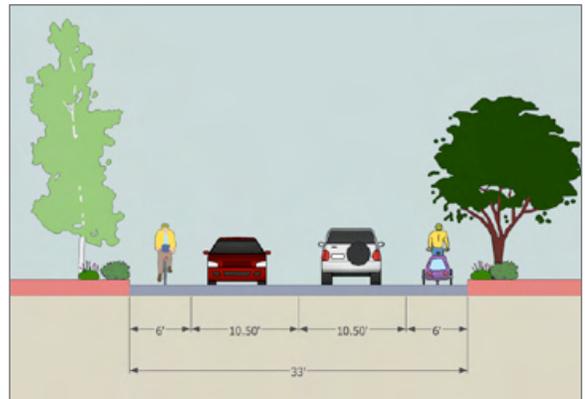
#### SHORT / IMMEDIATE TERM

- Repair shoulders
- Decrease width of automobile travel lanes to 10.5 feet
- Sign the route using recommended design
- Stripe two 6 ft bike lanes on paved shoulders

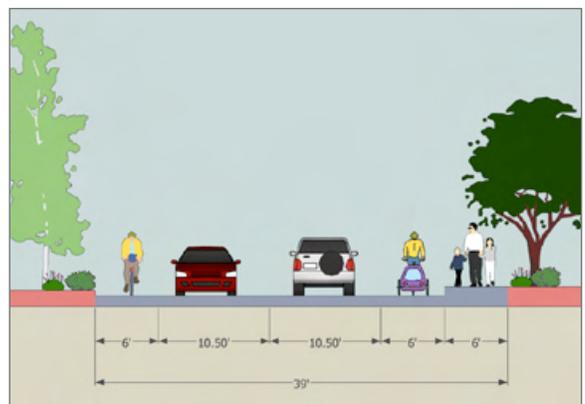
#### MEDIUM TERM TO LONGER TERM

- Consider installation of integral bike lane-gutter pan curbs
- Provide pedestrian facilities on one or both sides of the road

**Two potential cross-sections for Interlachen Boulevard:**



**Alternative A: Space for cyclists and automobiles within the existing roadway.**



**Alternative B: Space for cyclists, pedestrians and automobiles.**

## GLEASON ROAD

Gleason Road provides good connections between Vernon Avenue to Edina’s southern border, and travels along the edge of important Edina parks, including Bredesen and Braemar Park. The portion between Vernon Avenue and Dewey Hill Road is designated as a Primary route.

### RECOMMENDED TREATMENTS

#### SHORT / IMMEDIATE TERM

- Replace hazardous grates with approved design
- Sign the route using recommended design
- Delineate right edge of driving lane (“fog line”) to limit automobile displacement. Driving lanes should be 10 ft wide
- Stripe two 6 ft wide (minimum) bicycle lanes

#### MEDIUM TO LONG TERM

- Apply blue bike lanes near Highway 62 exit and entrance ramps
- Consider application of colored pavement to mark bike lanes
- Consider installation of integral bike lane-gutter pan



*Hazardous grate on Gleason Road.*

## TRACY AVENUE

Tracy Avenue presents good cycling conditions along its length, and also provides important connections to points north.

### RECOMMENDED TREATMENTS

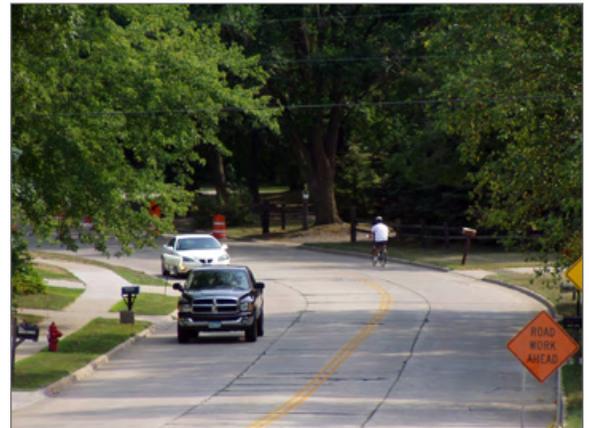
This street is part of the “Bike to School” bike route network discussed in Chapter 2.2.

#### SHORT / IMMEDIATE TERM

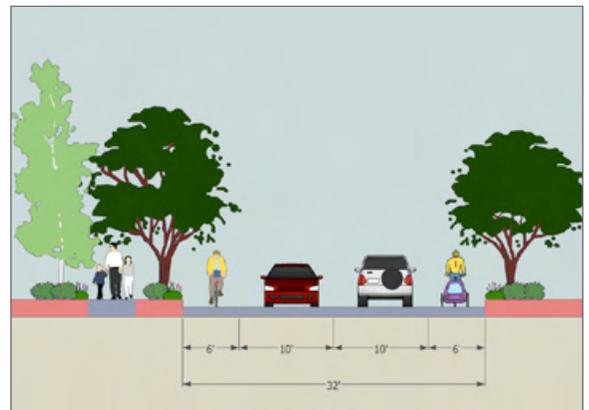
- Sign the route using recommended design; include markings designating this street as a “Bike to School” route
- Delineate right edge of driving lane (“fog line”) to limit automobile displacement. Driving lanes should be 10 ft wide
- Stripe two 6 ft wide (minimum) bicycle lanes

#### MEDIUM TO LONG TERM

- Consider application of colored pavement to mark bike lanes as a “Bike to School” route
- Consider installation of integral bike lane-gutter pan curbs
- Apply blue bike lanes at Highway 62 entrance and exit ramps



*Southbound on Tracy, south of Benton (past Countryside Elementary School).*



*Recommended roadway configuration for Tracy Avenue.*

## VALLEY VIEW ROAD (WEST SEGMENT)

The western segment of Valley View Road provides reasonable cycling conditions along its length, and provides access to Edina High, Valley View Middle School, and the Performing Arts Center.

### RECOMMENDED TREATMENTS

This street is part of the “Bike to School” bike route network discussed in Chapter 2.2.

#### SHORT / IMMEDIATE TERM

- Sign the route using recommended design; include markings designating this street as a “Bike to School” route
- Delineate right edge of driving lane (“fog line”) to limit automobile displacement. Driving lanes should be 10 ft wide
- Stripe two 6 ft wide (minimum) bicycle lanes

#### MEDIUM TERM TO LONG TERM

- Consider application of colored pavement to mark bike lanes as a “Bike to School” route
- Consider installation of integral bike lane-gutter pan curbs

## VERNON AVENUE (SOUTH OF VILLA WAY)

This portion of Vernon Avenue provides important connections to other Primary routes including Gleason Road, Olinger Boulevard and Tracy Avenue. It also provides important access to Bredesen, Garden, and Walnut Ridge Park. Posted automobile speed limits on this portion of Vernon Avenue, between Villa Way and View Lane, are 40 miles per hour.

### RECOMMENDED TREATMENTS

#### SHORT / IMMEDIATE TERM

- Decrease speed limits to 30 mph
- Sign the route using recommended design
- Delineate right edge of driving lane (“fog line”) to limit automobile displacement. Driving lanes should be 10 ft wide
- Stripe two 6 ft wide (minimum) bicycle lanes

#### MEDIUM TERM TO LONG TERM

- Apply blue bike lanes where right-turn lanes are provided



*Southbound on Valley View Road, south of Highway 62 and west of Highway 100.*

*Two views of Vernon Avenue:*



*As it is today ...*



*... And as it could be with minimal investments and using the street's existing configuration.*

## WOODDALE AVENUE

Wooddale Avenue presently provides a comfortable bicycling environment. A pleasant street going through residential neighborhoods, it provides convenient access to 58th, 50th and 44th Street.

### RECOMMENDED TREATMENTS

Given present automobile speeds, traffic volumes and cyclist use of this important route, a pair of 5 ft bicycle lanes is recommended. However, given existing provision of on-street parking and other space constraints, the following are recommended:

#### SHORT / IMMEDIATE TERM

- Sign the route using recommended design
- Consider removing on-street parking

#### MEDIUM TERM

- Stripe two 5 ft wide bicycle lanes



Wooddale Avenue today.

## 44TH STREET

44th Street presents pleasant cycling conditions today. It connects Brookside Avenue to commercial nodes at 44th and France and further east in Minneapolis.

Automobile traffic moves at a reasonable pace, and although the geometry of the road is relatively narrow, sufficient space is available to accommodate cyclists. There is sporadic use of on-street parking. Mature trees grow adjacent to the existing curb. The gutter-pavement joint is in need of repair for some of this street's length.

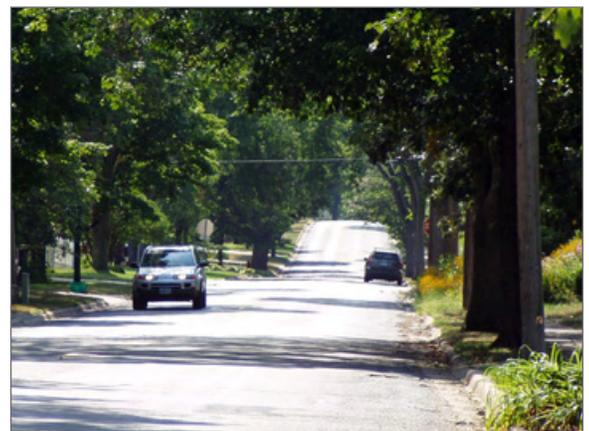
### RECOMMENDED TREATMENTS

#### SHORT / IMMEDIATE TERM

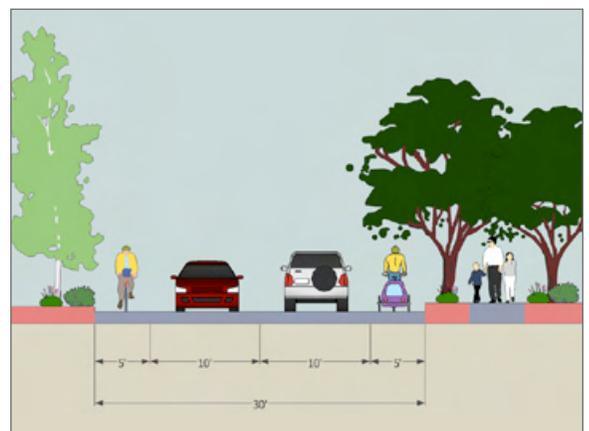
- Sign the route using recommended design
- Repair curb-pavement joints.
- Consider removing on-street parking

#### MEDIUM TERM

- Stripe two 5 ft wide bicycle lanes



Along 44th Street today.



A potential cross-section for 44th Street.

## 58TH STREET

58th Street presents pleasant cycling conditions today. Relatively low automobile traffic volumes and reasonable speeds contribute to comfortable conditions, even within the relatively narrow geometry of the road. On-street parking is not allowed. The portion of 58th Street closer to Concord Avenue has been recently repaved. Much of the eastern portion of this street does not have curb and gutter installed.

### RECOMMENDED TREATMENTS

#### SHORT / IMMEDIATE TERM

- Sign the route using recommended design

#### MEDIUM TERM

- Stripe two 5 ft wide bicycle lanes



*Along a recently repaved portion of 58th Street.*

## 70TH STREET (EAST OF HIGHWAY 100)

70th Street provides important east-west movement through Edina, connecting major destinations including Southdale Mall and the area of 70th and Cahill with other Primary routes. This portion of 70th Street presents relatively pleasant cycling conditions today.

### RECOMMENDED TREATMENTS

This street is part of the “Bike to School” bike route network discussed in Chapter 2.2. It provides access to Cornelia Elementary School, Arneson Acres Park, and connection through Cornelia Drive to the Edina Aquatic Center.

#### SHORT / IMMEDIATE TERM

- Sign the route using recommended design; include markings designating this street as a “Bike to School” route
- Delineate right edge of driving lane (“fog line”) to limit automobile displacement. Driving lanes should be 10 ft wide
- Stripe two 6 ft wide (minimum) bicycle lanes

#### MEDIUM TO LONG TERM

- Consider application of colored pavement to mark bike lanes as a “Bike to School” route
- Provide bicycle signal for crossing France Avenue
- Apply blue bike lanes in vicinity of Highway 100 and where right-turn lanes are provided



*Along 70th Street today.*

## 2.5 Regional routes

A growing network of dedicated bicycle trails is providing increasing access to transportation and recreation options for bicycle commuters, recreational cyclists and walkers in our region.

Usually located on re-dedicated railroad rights-of-way, the trails offer safe and inviting car-free cycling environments that equally allow experienced and novice riders to use cycling as a convenient option for travel between and within communities.

Notable examples in our region include the Midtown Greenway, in Minneapolis; the Cedar Lake LRT Regional Trail in St. Louis Park; the Kenilworth Trail and others.

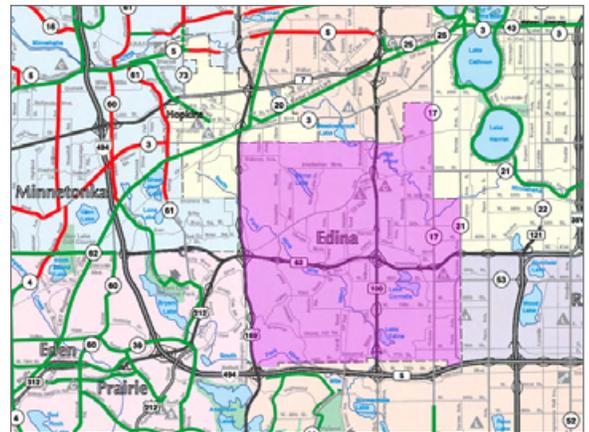
Unfortunately this network of trails currently bypasses Edina, hindering easy access to regional assets and potentially discouraging increased participation of Edina citizens in the enjoyment of a safe, convenient and healthful activity.

This Plan strongly recommends developing dedicated connections to this network. The Regional Canadian Pacific Trail and the Nine Mile Regional Trail, two projects that have recently been the subject of initial study, are here explored in more detail and are strongly recommended for implementation.

This Plan also strongly recommends more fully exploring opportunities for concurrent integration and improvement of both trails with Edina's recommended bicycle transportation network, and involving the participation and guidance of the City of Edina's Bicycle Advisory Committee and Bicycle Coordinator (recommended in Chapter 3.2).



***Our region's trails help provide transportation and recreation opportunities to cyclists, walkers, skaters and wheelchair users.***



***Existing on and off-street bicycle trails in southeastern Hennepin County.***

## 2.5.1 The Regional Canadian Pacific Trail (RCPT)

Development of the Regional Canadian Pacific Trail (RCPT) is a priority for this Plan and for the City of Edina.

The Regional Canadian Pacific Trail is a proposed shared-use, grade-separated bicycle and pedestrian facility running north and south through Edina within the Canadian Pacific Railroad's existing right-of-way. The facility would provide a direct and convenient connection to existing and planned regional bicycle network facilities outside of Edina, including the Cedar Lake LRT Regional Trail. It would also provide a direct link to the adjoining communities of Bloomington and St. Louis Park.

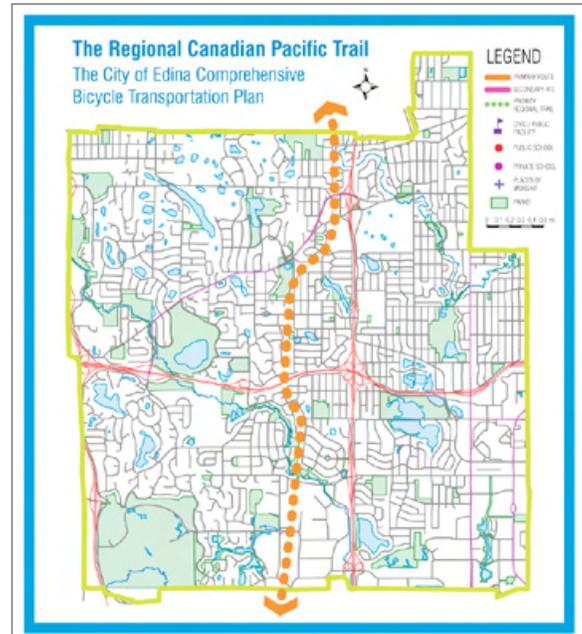
The Regional Canadian Pacific Trail would additionally provide a safe and direct connection to residential, commercial and industrial areas in Edina.

Functioning in combination with the other routes proposed in this Plan, the Regional Canadian Pacific Trail would allow Edina residents easy access to employment and commercial centers in Edina and in surrounding communities, offering faster travel times and safer routes for cyclists and pedestrians.

An additional benefit is that the trail, being a safe and inviting car-free cycling environment, could potentially increase the number of cyclists in Edina and surrounding communities by encouraging recreational and novice cyclists to consider bicycle mobility as a real and potentially convenient transportation choice.

### TRAIL CONCEPT

The Regional Canadian Pacific Trail (RCPT) is intended to function as a north-south connection for bicycle commuters and as a recreational trail. Because the RCPT would be implemented within a limited right-of-way adjacent to an active railroad line, it is important that its configuration provide sufficient space for safe utilization by all users, including cyclists, pedestrians, skaters and wheelchair users. Minimizing conflicts between pedestrians and cyclists will increase utilization by both types of users and serve the long-range goals of maximizing use of bicycle network investments.



**Proposed alignment for the Regional Canadian Pacific Trail (shown in orange).**



**The Regional Canadian Pacific Trail would provide convenient connections to trails and destinations in our region.  
Photo: Looking south to the CP rail line from 70th Street.**

The proposed trail design includes a six-foot pedestrian lane, a seven-foot northbound bicycle lane, a seven-foot southbound bicycle lane and a two-foot green median separating the bicycle and pedestrian lanes. This design enables all trail users to coexist safely within the Canadian Pacific Railroad existing sixty-six foot right-of-way.

## DESIGN CONSIDERATIONS

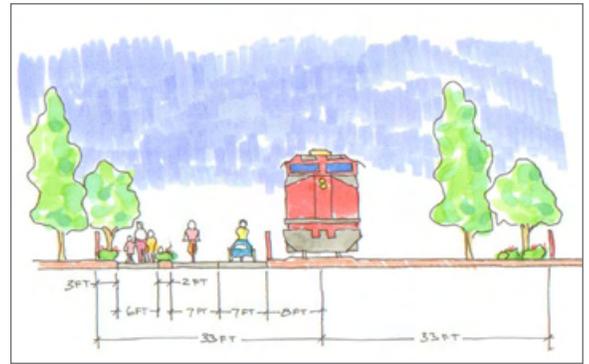
The following issues should be considered in greater detail as options for the RCPT’s configuration are refined:

- Need to potentially accommodate high numbers of cyclists
- Need to accommodate bicycle trailers, adult tricycles (please see Chapter 1.4), and tandem bikes
- Providing separate facilities for pedestrians and cyclists helps reduce potential hazards
- RCPT right-of-way is currently utilized for low-volume freight transport
- Portions of the trail encounter narrow right-of-ways
- Although most of the RCPT’s extent runs through developed portions of Edina, a portion of the trail runs through areas that are designated for more intense development in the City’s 2008 comprehensive Plan (including the Vernon and 50th area and the area near Ohms Lane, Bush Lake Road and Edina Industrial Boulevard). Strong connections to cycling transportation options should be encouraged as new mixed use and employment uses are allocated to these sites.

## OPERATIONS AND MAINTENANCE

In order to maximize utilization of this important transportation investment, the trail is envisioned as a 24 hour, 365 day per year route (much like the Midtown Greenway in Minneapolis, for example). As such, it is recommended that the entire length of the trail be well lit, adequately maintained, and plowed during the winter months.

Partnership agreements or a hybrid approach should be explored between the City of Edina and the Three Rivers Park District in order to ensure effective year-round maintenance, including the prompt pick up of litter and debris, and the removal of snow and ice during winter months. Additionally, it is recommended that the City of Edina Police Department and the Three Rivers Park District Police either jointly or through agreement handle the policing of the trail (the use of bicycle patrols is encouraged).



**A proposed cross-section for the Regional Canadian Pacific Trail.**



**Active rail freight operations and cyclists can easily and safely coexist, even within a limited right of way.**

**Photo: The Midtown Greenway, east of Hiawatha Avenue, in Minneapolis.**

## ENVIRONMENTAL CONSIDERATIONS

Given that the trail will also be an important recreational, natural and aesthetic amenity for the City of Edina, it is recommended that the trail be landscaped (using native varieties where possible) for aesthetic and environmental reasons. It is recommended that the City of Edina be responsible for the management of the trail and the surrounding vegetation.

## COMMUNITY AND AGENCY SUPPORT

As envisioned, the Regional Canadian Pacific Trail will provide connections to residential areas, schools, parks, and other planned city trails and regional trails. Given that Edina has a demonstrated need for more trails, citizens of Edina and Edina cycling organizations have expressed strong support for development of this facility.

Additionally, there is wide support from elected representatives and public agencies for implementation of this trail.

Supporting agencies and bodies include:

- The Edina City Council
- The Three Rivers Park District
- Hennepin County
- The City of St. Louis Park, the City of Bloomington, and other surrounding municipalities

## IMPLEMENTATION PARTNERS

Successful implementation of the RCPT will require coordination and cooperation between multiple communities and stakeholders including the City of Edina, the City of St. Louis Park and the City of Bloomington, as well as the Canadian Pacific railroad, the Three Rivers Park District, citizen advisory groups from Edina and other communities, and advocacy groups including the Rail to Trails Conservancy and Transit for Livable Communities.



***Cyclists riding through the Midtown Greenway in Minneapolis at dusk on a mid-May evening. The Midtown Greenway is lit at night and equipped with security measures (including blue emergency call boxes and cameras linked to the Minneapolis Police Department precinct offices) to increase safety and comfort for users. Similar measures are recommended for the RCPT.***

## 2.5.2 Nine Mile Creek Regional Trail

The Nine Mile Creek Regional Trail is a proposed shared-use bicycle and pedestrian facility running through Edina, generally from the northwest corner to the southeast corner of the city. The trail, currently under consideration by Three Rivers Park District, would include a combination of segments running along both surface roadways and public park land.

Development of this facility is recognized as a priority by this Plan and by the City of Edina, as it would provide safe and convenient connections to existing and proposed regional bicycle routes including the Cedar Lake LRT Regional Trail, and to the adjacent communities of Hopkins, Richfield and Bloomington.

Functioning in concert with other routes proposed in this Plan, the Nine Mile Creek Regional Trail would improve bicycle access to employment and commercial centers in Edina and adjoining communities while offering a safe and pleasant recreational space for bicyclists and pedestrians. The Trail would also directly connect Edina citizens to the Three Rivers Park District's regional system of parks and recreational trails.



***Aerial view showing the Three Rivers Park District's recommended alignment for the Nine Mile Creek Regional Trail.***

### TRAIL CONCEPT

The Nine Mile Creek Regional Trail is intended to expand the current regional trail system and improve bicycle and pedestrian mobility and recreation options to communities in the region.

Among the goals guiding the implementation of this facility are the following (as stated in the Three Rivers Park District Nine Mile Creek Regional Trail Master Plan Draft, December 2006):

- Link local neighborhoods to regional parks and trails.
- Provide non-motorized links to destination schools, neighborhood and regional parks, community institutions, commercial centers and transit nodes.
- Balance recreation opportunities with natural resource impacts and value.
- Provide links to major employment nodes, including commercial redevelopment sites.
- Provide links for underserved neighborhoods.
- Provide connections into neighboring cities.
- Provide safe crossings of high volume roadways and railroads.

## DESIGN CONSIDERATIONS

The most recent draft of the Master Plan for the Nine Mile Creek Regional Trail, prepared by Three Rivers Park District, proposes a 10 ft wide cross-section for the trail to serve two-way bicycle traffic, pedestrians and other users. In locations where width is constrained (due to right-of-way and adjacent landowner issues), the trail is proposed to narrow to an 8 ft wide cross-section.

Opportunities to work collaboratively with Three Rivers Park District to enhance the currently proposed configuration should be explored.

Given that the Nine Mile Creek Regional Trail passes through and connects Edina residential neighborhoods, shopping and entertainment destinations, employment centers and recreational assets, it is foreseeable that the trail will experience high levels of ridership through the city. It is also likely that the currently proposed cross-section will not be sufficient to safely and comfortably accommodate the potential number of cyclists and other users it will attract.

Some issues that might require reconsideration of the trail's currently proposed configuration include the need to accommodate potentially high numbers of bicycle riders, the need to accommodate bicycle trailers, adult tricycles (please see Chapter 1.4) and tandem bikes, and the need to improve safety and reduce hazards to all users by separating cyclists from pedestrians (and skaters and wheelchair users) on the trail. Addressing these potential conflicts before the trail is built will help maximize usability and use of this important transportation and recreation investment.

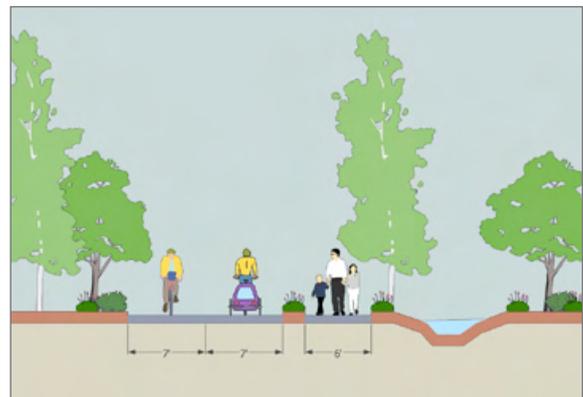
This Plan proposes an alternative cross-section for this important trail. Although obstacles exist in some locations, a preferred trail configuration would provide a minimum of two 7 ft wide lanes for cyclists and one 6 ft wide path for pedestrians wherever possible.

Additionally, it might be beneficial to explore alternatives to the currently proposed alignment over the portion where it travels along Normandale Road to 66th Street, as there is opportunity to jointly locate this portion of the alignment with the Primary Route this Plan proposes along 70th Street and which serves Arneson Acres Park, Cornelia Elementary School, and easily



***Combining pedestrians and cyclists in high-use regional trail facilities results in hazardous conditions for both types of users and decreases the utility of important transportation investments.***

***Photo: Burke-Gilman Trail in Seattle, Washington.***



***A recommended alternative cross-section for the Nine Mile Creek Regional Trail which provides comfortable space for safe utilization by all users.***

connects with the Edina Aquatic Center along Cornelia Drive, and with Southdale Mall along both 66th Street and 70th Street. Making these changes is consistent with the Nine Mile Creek Regional Trail Goals presented in the Trail Concept section above, especially with the stated goal of “[providing] non-motorized links to destination schools, neighborhood and regional parks, community institutions, commercial centers and transit nodes.”

## OPERATIONS AND MAINTENANCE

Maintenance practices and trail conditions significantly influence bicycle riders’ choices for routes and, more broadly, also influence the perception of bicycle commuting as a potential transportation option. They also have a major impact and influence on trail user safety, trail user experience, and environmental and natural resources protection.

In order to maximize use of this important transportation investment, this Plan recommends that the Nine Mile Creek Regional Trail be implemented and maintained as a 24 hour, 365 day per year route. Recommended practices include lighting over the entire length of the trail and prompt plowing of snow and ice during the winter months.

Opportunities for shared maintenance of the trail should be explored with Three Rivers Park District, as current District policy is to not conduct any trail maintenance activities during the winter. Additionally, Three Rivers Park District typically reserves the right to close bicycle trails under its jurisdiction during winter months unless a maintenance and liability agreement is signed with another governmental body.

This Plan recommends that the City of Edina apply for a permit to operate the Nine Mile Creek Regional Trail for periods during which the Three Rivers Park District closes it to winter use.

It is also recommended that the City of Edina Police Department and the Three Rivers Park District Police either jointly or through agreement handle the policing of the trail (the use of bicycle patrols is recommended).

## ENVIRONMENTAL CONSIDERATIONS

Given that the trail will also be an important recreational, natural and aesthetic amenity for the City of Edina, it is recommended that the trail be landscaped (using native varieties where possible) for aesthetic and environmental reasons. It is also recommended that Three Rivers Park District and the City of Edina explore joint responsibility for management of the trail and the surrounding vegetation.

## COMMUNITY AND AGENCY SUPPORT

The Nine Mile Creek Regional Trail will provide connections to residential areas, schools, parks, and other planned city and regional trails. Citizens of Edina and Edina cycling organizations have expressed strong support for development of this facility. Additionally, there is wide support from elected representatives and public agencies for implementation of this trail.

Supporting agencies and bodies include:

- The Edina City Council
- The Three Rivers Park District
- Hennepin County
- The City of Hopkins, the City of Richfield, and other surrounding municipalities

All cities (including Edina) through which the Nine Mile Creek Regional Trail will travel have approved resolutions of support since 2003.

## IMPLEMENTATION PARTNERS

Successful implementation of the Nine Mile Creek Regional Trail will require coordination and cooperation between multiple communities and stakeholders including the City of Edina, the City of Hopkins and the City of Richfield, as well as the Three Rivers Park District, citizen advisory groups from Edina and other communities, and advocacy groups including the Rail to Trails Conservancy and Transit for Livable Communities.

## 2.6 Bike parking and other end of trip facilities

End of trip, or ancillary facilities, are those provisions made for cyclists at the beginning and end of their trip. Bicycle parking, for example, is an end of trip facility that makes it more convenient and inviting for people to arrive by bicycle to a destination.

Provision of adequate end of trip facilities cannot be overlooked: if these are inadequate or if finding them is enough of an inconvenience (e.g. no bike parking is available), cyclists will next time choose a different mode for arriving or may choose another destination altogether, even if the provided bicycle routes are perfectly safe and convenient.

Inclusion of adequate ancillary facilities for bicyclists, though sometimes viewed as optional components of a transportation or land use plan, is as much a logical requirement for making cycling more convenient and inviting as is providing adequate parking for automobiles when designing shopping destinations, transit “Park and Ride” lots, or new residential or commercial development.



Near Eden Avenue, in Edina.

### TYPES OF END OF TRIP FACILITIES

A range of end of trip facilities are in use in cities in the US and elsewhere to increase convenience for cyclists. Besides bicycle parking racks (the most basic and essential type of end of trip facility), these include:

- Long-term, secure bike storage or lockers
- Showers and changing space for commuters
- Bike valet parking
- “Bike Stations,” dedicated bike storage locations, usually located near transit hubs or other major destinations, where cyclists drop off their bikes to be stored and serviced as needed while the cyclist is at their destination

#### DID YOU KNOW?

The importance of end of trip facilities in encouraging people to cycle more has long been confirmed by opinion polls starting in the 1970s.

In one of the largest polls of its kind, a 1991 nationwide Harris Poll found that 42 percent of respondents had ridden a bicycle in the previous year. Almost half of this group said that they would sometimes commute to work by bicycle, or commute more often, if there were showers, lockers, and secure bicycle storage at work.

*Source: Rodale Press, Harris Poll for Bicycling Magazine.*

## BIKE PARKING

Easily accessible, secure and convenient bicycle parking is essential to support people's choice to travel by bicycle. It is especially important that adequate facilities be in place before conducting promotion and encouragement campaigns that invite people to try their bikes for transportation - nothing will be better at preventing people from using their bikes again for travelling to school, shopping or entertainment than getting there the first time and finding it impossible to park.

Given that bicycle parking facilities are seldom provided in Edina (as noted in Chapter 1.5), and that there are few alternative bike parking locations like parking meters or street signs, providing ample, convenient and accessible bike parking is one of the first priorities recommended by this Plan.

### TYPES OF BIKE PARKING

Bicycle parking is commonly grouped into two types:

- **Short-term bicycle parking** is meant to accommodate visitors, customers, messengers and others who arrive at a destination and are expected to depart within two hours. A standard "inverted U" rack (see Appendix A.5), appropriate location and placement, and weather protection is recommended.
- **Long-term bicycle parking** is meant to accommodate employees, students, residents, commuters, and others expected to leave their bikes unattended for more than two hours. This type of parking should be secure, weather-protected and in a visible and convenient location. Standard racks in a visible, supervised or a monitored location, as well as bicycle lockers, or a locked room with standard racks (and access limited to cyclists only) are recommended. A Bike Station (explained elsewhere in this chapter) provides long-term (and short-term) bicycle parking.

### EXISTING CONDITIONS

Very little bicycle parking is presently available in the City of Edina. Where it exists, it is usually of a substandard type and is inconveniently located, sometimes farther away than the automobile parking lot serving a location.

This section presents a brief summary of a bicycle parking survey conducted by members of the Bike Edina Task Force (BETF). A



*A conveniently located bicycle parking area, adjacent to entertainment and shopping, in Iowa City, Iowa.*

### BENEFITS OF PROVIDING BIKE PARKING

Providing functional, visible and secure bicycle parking offers these benefits:

- It inexpensively and efficiently increases a building's parking capacity
- It serves those who use bicycles as a mode of transportation
- It supports and encourages bicycle use



*Good bicycle parking provision near 50th and France, and closeup of the recommended "inverted U" racks provided there. More details on recommended types of bicycle racks and parking provision guidelines can be found in Appendix A.4 (Bicycle parking facility design guidelines) and Appendix A.3 (Recommended provision of bicycle parking spaces).*

more detailed listing of the survey results is given in Chapter 1.5.

### SHOPPING AND ENTERTAINMENT DESTINATIONS

Level of bike parking provision in Edina’s commercial and entertainment areas is generally low. The best facilities are located near 50th and France, where a total 24 bicycle parking spots of a recommended “inverted U” type are provided. No bicycle parking is provided at 50th and Vernon, or at 70th and Cahill. Southdale Mall provides 6 bicycle racks, accommodating a maximum of 64 bicycles. By comparison, Southdale provides 6,725 automobile parking spaces.

### PUBLIC SCHOOLS

In general, provision of bicycle parking in Edina Public Schools is poor. There is a total of 367 bike parking spaces for a total student population of approximately 7,500 students. There are several schools (including the City’s High School) that do not provide any bicycle parking at all. Where bicycle parking is provided, racks are generally of a poor design that does not easily allow bicycles to be securely parked. In many cases, bike racks are located far from building entrances, and are in some cases across the street from the schools or beyond the automobile parking lot.

### PARKS AND RECREATION CENTERS

Parks, ballfields and playgrounds are all prime gathering spots for Edina families and children. However, as shown in Chapter 1.5 (Existing bicycle infrastructure), parks normally provide too few and in many cases no bike parking facilities at all.

### EMPLOYMENT CENTERS

No bicycle parking is provided in the City’s major employment areas, including the areas around Industrial Boulevard, Ohms Lane, Metro Boulevard, 77th Street, Centennial Lakes, and the medical facilities near 66th and France.

### TRANSIT FACILITIES

There is no bicycle parking provided at any of the transit stops located within the City of Edina, with the exception of the Transit Center at Southdale Mall, which provides a total of 14 bicycle parking spaces adjacent to the mall’s smoking area. One hundred automobile parking spaces are provided as part of the “Park and Ride” operations at the transit hub.



**Substandard “toast” type bike rack at Valley View Middle School. The majority of bike racks found at Edina public schools do not easily allow bikes to be secured.**

### OTHER END OF TRIP FACILITIES

Cyclists who are or may potentially be commuters have some additional needs not normally met by bike parking alone. For example, bike commuters who travel long distances, who travel during wet, hot or cold weather, or who may need to dress more formally than what is comfortable for riding usually need adequate shower, locker, and changing rooms at trip destinations.

For some cyclists the existence of these facilities can be as important as bicycle parking in determining their potential use of their bicycles for transportation.

Presently, no long-term bike parking, bike stations, shower or locker facilities, or additional end of trip facilities are found in Edina.

## RECOMMENDATIONS

### IMPROVE BICYCLE PARKING AT EDINA PUBLIC SCHOOLS

- Work with the Edina public school system, the City of Edina, active living and safe routes organizations to improve and provide adequate bicycle parking at all Edina public schools

### IMPROVE BICYCLE PARKING AT EDINA PARKS

- Work with the Edina Parks and Recreation system, the City of Edina, active living and safe routes organizations to improve and provide adequate bicycle parking at all Edina parks and recreation centers

### IMPROVE PROVISION OF BICYCLE PARKING AT COMMERCIAL NODES AND EMPLOYMENT CENTERS

- Adopt the “Recommended Bicycle Parking Provision” guidelines as presented in Appendix A.4
- Identify specific locations where bicycle parking should be installed (can be managed by the Bicycle Coordinator as recommended in Chapter 3.2)
- Work with existing businesses and business associations to obtain funding and make necessary improvements
- Include consideration and provision of appropriate bike parking accommodations as part of the approval reviews for new development in Edina
- Adopt a set of standard bicycle parking designs that ensure that racks provided are functional and meet accepted guidelines (see Appendix A.5)
- Consider subsidizing provision of bicycle parking at key locations. The City of Minneapolis, for example, will pay for half of the cost for adding bicycle parking to a location

### CONSIDER OTHER END OF TRIP FACILITIES AS APPROPRIATE

- Explore provision of other end of trip facilities serving bicycle commuters, including long-term bicycle parking and shower and locker facilities as part of the approval reviews for larger development in Edina

### DEVELOP A “BIKE STATION” AT SOUTHDAL MALL

- Bike Stations are dedicated bike storage facilities, usually located near transit centers or major destinations, where cyclists drop off their bikes to be stored and serviced as needed while they commute. Please see Chapter 2.8 “Transit integration” for additional discussion of this recommendation



*South View Middle School.*

#### DID YOU KNOW?

The City of Minneapolis operates a program to install public bicycle racks throughout the city. Businesses pay only half of the cost of the racks; the city picks up the remainder as a way to encourage improved provision of bicycle parking.



*Bicycle parking serving a recently-built grocery store in Minneapolis.*

## 2.7 Signs, signals and wayfinding

Signs, signals and wayfinding are essential components of any successful bicycle transportation system. They help make a network understandable and usable, and encourage existing and potential cyclists to use bicycle transportation facilities. Due to the nature of Edina's existing street system (which does not follow a necessarily intuitive pattern) effective signing, signaling and wayfinding will be critical components for success of this Plan.

### SIGNS

Signs communicate transportation network information and give instructions for orderly, safe and predictable bicycle and automobile movements. Bicycle-related signs also alert other users to the presence of cyclists in a city's transportation network.

#### BIKE ROUTE SIGNS

Bike route signs direct cyclists to their destination, guide them through neighborhoods efficiently and also alert motorists to the presence of cyclists on the road. Bicycle route signs in Edina should include “the 3 Ds” (distance, direction and destination) which are described below:

##### Distance

- The distance component of an effective bicycle route sign lets cyclists know how long their trip will be, adding a measure of certainty and convenience to the planning of their trips. Distance should be communicated in miles as well as in time. The time should be calculated using a comfortable or “no sweat” pace of cycling (10 mph is recommended).

##### Direction

- The direction component of an effective bicycle route sign guides cyclists throughout their trips to their destinations. Directional signing also helps cyclists avoid obstacles such as freeways, cul-de-sacs and dead end roads. The direction is indicated simply by using an arrow on the sign that directs the cyclist to proceed forward or to prepare to make a turn. Including direction on bicycle route signs also gives motorists warning to expect cyclists on the road and to anticipate cyclists' turning movements.



*Signs help cyclists understand how to get to their destinations and make a bicycle transportation system more inviting and useful.*



*Recommended signing practice, showing distance, direction and destination, in use in Portland, Oregon.*

## Destination

- The destination component of an effective bicycle route sign helps cyclists choose the most effective route to their desired destination and helps decrease confusion and wrong turns especially in areas where the street system does not follow a strict grid pattern.

## BLUE BIKE LANES

Provision of bicycle lanes brings benefits to all transportation system users. They define cycling and automobile space, they increase cyclist visibility, and announce to motorists that they should expect bicycles on the road.

However, if a motorist is entering a road with a bike lane from a location with limited visibility (e.g., from a highway off-ramp) they may not know to expect a cyclist; similarly, a cyclist may not feel confident continuing on the lane knowing that a motorist might not be aware that a bike lane is in their path. Additionally, automobile drivers may not know to yield to cyclists when crossing a bicycle lane.

To remedy this situation, many European cities and some US cities are using colored markings at bicycle-automobile crossings as a way of reducing potential conflicts and increasing user comfort. Best results in US practice have been reported using blue as a bike lane color in these conflict areas. Signs alerting motorists to yield to bikes on the blue lanes should be provided to ensure consistent and safe behavior.

## WAYFINDING

Wayfinding tools simplify bicycle trips and can encourage more people to choose cycling for their daily mobility needs. While route signs do serve an important wayfinding function, inexpensive wayfinding tools provide more continuous reassurance to cyclists as they travel toward their destination.

## ROUTE DOTS

Bicycle “route dots” are small symbols painted on the pavement along bicycle routes passing through residential or low traffic areas, especially where routes do not follow an obvious path (for example, where a route goes through several turns in a residential neighborhood). Bicycle route dots should be employed when a route requires a cyclist to choose between multiple directions



**Motorists making a right turn movement must yield to cyclists on the blue bike lane (the right side parking lane ends just before the blue lane to become a right turn lane).**  
**Photo: Portland, Oregon.**



**Sample sign announcing to motorists exiting a freeway that they must yield to cyclists on the blue bike lane.**

and in the absence of other treatments that would also serve a wayfinding function such as bicycle lanes or lane arrows.

## SIGNALS

Traffic signals that fail to detect the presence of cyclists frustrate cyclists and motorists alike, and can encourage hazardous behavior. Adjusting existing signals in Edina and employing newer devices at some locations is recommended by this Plan.

### TRADITIONAL SIGNAL LOOP DETECTORS

At many signalized intersections existing loop detectors are not tuned to detect the presence of bicycles. In some cases simply adjusting the existing device and providing markings to direct cyclists to the location where they will most easily be detected can solve the problem.

### BIKE-SENSITIVE LOOP DETECTORS

In cases where existing loop detectors cannot be tuned to function well for cyclists or where installations are undergoing repair or improvement, consider installing loops to detect the presence of bikes on the roadway. Detectors should be installed to cover areas of the road where cyclists are likely to ride, including the right edge of travel lanes and the center of bicycle lanes.

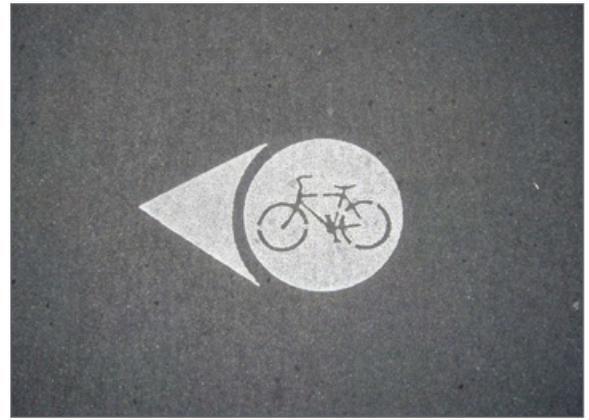
The best standard design for detecting the presence of bikes is a modified quadrupole loop (also known as the “Caltrans Type D”). This loop design is sensitive over its entire width with a quick drop off in sensitivity outside its perimeter, which helps avoid detection of vehicles in adjoining lanes.

### LOOP DETECTOR PAVEMENT MARKINGS

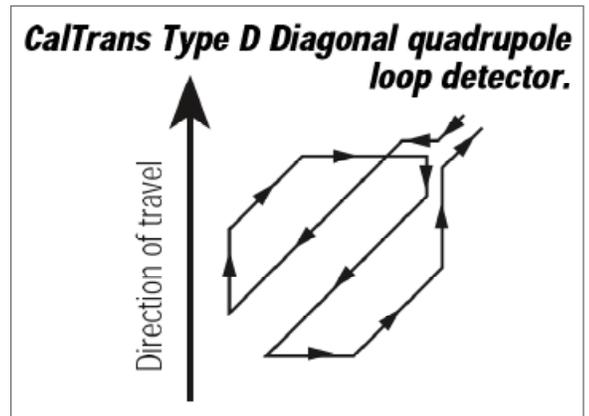
Pavement markings can be used to direct cyclists to the proper spot where the signal device may detect their presence. These markings also alert motorists that bicycles will be present in various locations at signalized intersections.

### BICYCLE SIGNALS

Bicycle signals improve safety for cyclists and motorists by eliminating turning movement conflicts on wide roadways and major intersections. They are recommended for use at busy intersections and multi-lane roadways and help improve crossing comfort and safety by giving cyclists a head start.



*Route dots (typically one ft across) help cyclists navigate through neighborhoods and other locations where routes are not immediately obvious.*



*A recommended bike loop detector design: the Caltrans Type D modified quadrupole loop detector.*



*Bicyclists waiting to cross a busy arterial at a bike signal in Portland, Oregon.*

## RECOMMENDATIONS

### BIKE ROUTE SIGNS

- Provide bike route signs along all designated Primary Routes of Edina's bicycle transportation network.
- Provide distance, direction and destination on all bike route signs in Edina, indicating distance to other routes and to major landmarks and destinations.

### BLUE BIKE LANES

- Provide blue bike lanes and associated signs at all locations where automobile movements into and from freeways cross over designated Primary bicycle routes, and where multi-lane streets provide for right-turn automobile movements crossing over bicycle lanes. Locations recommended for blue bike lane treatments include 70th Street near Highway 100; 66th Street near Valley View Road and France Avenue; 69th Street and 70th Street near France Avenue; Valley View Road near Highway 62; the intersection of 50th Street and Wooddale Avenue; Benton Avenue near Highway 100; and Vernon Avenue near Gleason Road, Olinger Boulevard and Tracy Avenue, among others.

### WAYFINDING

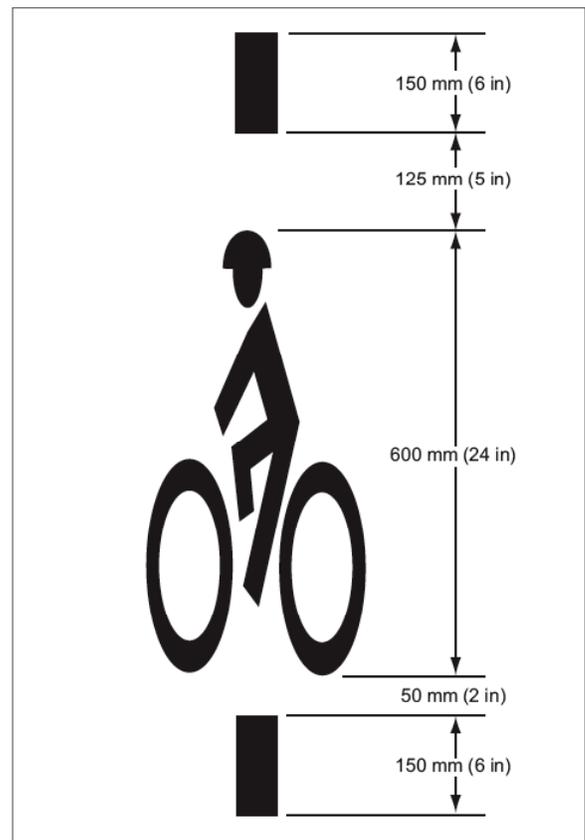
- Provide route dots along designated Primary and Secondary Routes of Edina's bicycle transportation network, especially for routes through residential areas and where routes change direction.

### LOOP DETECTORS

- Provide bike-sensitive loop detectors wherever designated Primary and Secondary bicycle routes cross major streets in Edina, including at France Avenue, 66th Street, Vernon Avenue, and 50th Street, among others.
- Include pavement markings at all loop detector locations to help cyclists position their bikes to activate signals.

### BICYCLE SIGNALS

- Installation of bicycle signals is recommended for designated Primary bicycle routes serving Southdale, including 66th Street, Valley View and 69th Street, and 70th Street.



***Pavement marking recommended by the Minnesota Manual on Uniform Traffic Control Devices (MUTCD) to encourage proper positioning of bikes at loop detectors.***

### FOR ADDITIONAL GUIDANCE

The recommendations listed in this chapter are meant to provide general recommendations for improvement of Edina's bicycle network. For additional guidance and information including sign placement, approved colors and other topics please consult Chapter 7 (Traffic Controls) of the Minnesota Department of Transportation Bikeway Facility Design Manual and Part 9 (Traffic Controls for Bicycle Facilities) of the Minnesota Manual on Uniform Traffic Control Devices.

## 2.8 Transit integration

Improving the bicycle-transit connection can play an important role in making bicycling a part of daily life in Edina. Easy and convenient linkages between bicycles and transit help increase the number of potential bicycle users by increasing the number of destinations available to riders and by alleviating potential concerns about lengthy trips, riding at night, or in poor weather. Effective bike-transit linkages allow cyclists to reach more distant destinations and help increase transit ridership and use.

Good bike-transit connections also help make transit work better. If people on bicycles can easily reach transit stations, some of the need for operating costly and infrequent transit feeder service is decreased. This is specially important in a city like Edina where relatively low population densities work against efficient provision of transit service within walking distance (one quarter mile) of commuters.



***Providing easy connections between bikes and transit will help improve transportation options for Edina citizens.***

### CONNECTING BICYCLES WITH TRANSIT

There are four main components of bicycle-transit integration:

- Allowing bicycles on transit
- Offering bicycle parking at transit locations
- Improving bikeways to transit
- Encouraging usage of bicycle and transit programs

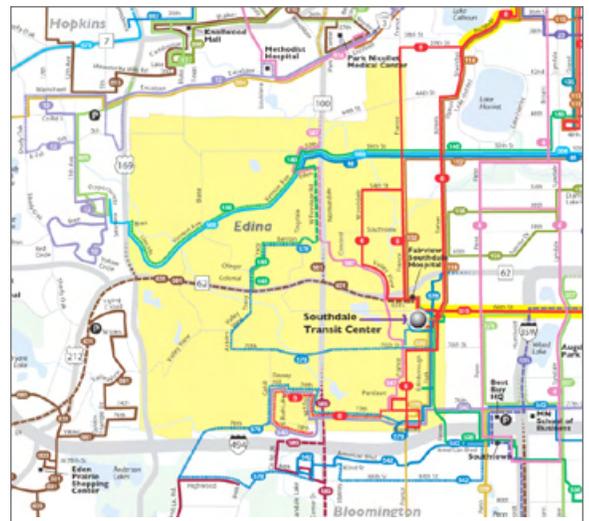
A brief overview of each and some additional practices and programs that may help improve bike-transit connections in Edina are included in this section:

#### **BIKES ON TRANSIT**

Allowing bikes on transit helps extend the distance that a cyclist may comfortably reach. MetroTransit has greatly strengthened the interconnection between cycling and transit in the Twin Cities region by providing space for bikes on all of its buses and trains.

#### **BIKE PARKING AT TRANSIT**

Providing safe long-term bicycle parking at transit stations helps reassure bike commuters that their bikes will still be there when they return from work and will encourage bike commuting to transit. Typically a mix of short and long-term bike parking (see Chapter 2.6 for definitions) is provided at transit centers.



***Existing transit service in Edina. The Southdale Transit Center is a principal component of Edina's transit infrastructure.***

## **BICYCLING TO TRANSIT**

Local and national surveys consistently show that the biggest barrier to more frequent cycling is the lack of safe and comfortable routes to destinations, specifically bikeways. Given that transit centers and stations have not traditionally been viewed as major destinations for cyclists, few safe and convenient bikeways from neighborhoods to transit centers have been developed. Such bikeways, along with the availability of secure long-term bicycle parking and the accommodation of bicycles on transit, are part of the answer for attracting additional commuters to transit, especially in communities where low population densities make frequent transit feeder service impractical.



**The transit center at Southdale Mall.**

## **ENCOURAGING BIKING AND TRANSIT**

Letting people know about existing bike and transit facilities (and showing them how to use them) is one of the best ways of encouraging and increasing their use. Sharing information on the practical benefits of combining bicycling and transit (greater radius of reachable distance, convenient connection to destinations, health benefits from physical activity, and potential time and cost savings over driving an automobile) will help invite potential cyclists to combine their trip with transit.

Programs like MetroTransit’s “Guaranteed Ride Home” for cyclists who ride their bike to work three times a week or more also help reduce reluctance to travelling without an automobile. Offering discounts or other incentives to people who arrive at a destination by bus or bike can also help increase the number of bicycle and transit riders.



**An incentive program to encourage transit use: local businesses offer discounts to customers who arrive by transit. Sponsored by MetroTransit and the Lake Street Council in Minneapolis.**

## **BICYCLE “PARK AND RIDES”**

Many transit agencies in the US have built expansive (and expensive) automobile “Park and Rides” as an alternative to providing costly feeder bus service. Recently, growing concerns about congestion, air quality and facility costs have prompted a reexamination of the “Park and Ride” concept - especially when considering that many of the auto trips to these facilities are less than two miles - an easy cycling distance. Cycling to transit (“Ride to Ride”) instead of driving benefits communities by reducing demand for land and lowering taxpayer costs, energy consumption, traffic congestion and air pollution.

## BIKE STATIONS AT TRANSIT CENTERS

“Bike Stations” are common in many cities in the US and Europe. They are staffed, dedicated bike storage locations, usually located near transit hubs or other major destinations. Cyclists who ride to transit can drop off their bikes to be stored and serviced as needed while they continue their journey on transit. These facilities provide long-term bicycle parking and sometimes also include shower and locker facilities.

## PRESENT CONDITIONS

### EXISTING TRANSIT SERVICE

The city of Edina is served by MetroTransit and SouthWest Transit. Regularly-scheduled transit service includes the following routes:

Route	Service description
6	High frequency route serving University of Minnesota, Downtown Minneapolis, Uptown to Southdale Mall, Centennial Lakes and Edina Industrial Park
46	Local route between Eden & Vernon and the Highland Park neighborhood in St. Paul
114	Express route from Southdale to the University of Minnesota via Excelsior Boulevard and Hennepin Avenue
146	Limited stop route between 50th/Vernon and downtown Minneapolis via 35W during rush hours
152	Express route from Southdale and 50th and France to the University of Minnesota
515	High frequency route (15 minutes or less) connecting Southdale Mall to Richfield and Minneapolis along 66th Street, then to Fort Snelling and the Veterans Administration Medical Center to Bloomington and the Mall of America
538	BE Line (Bloomington Edina Transit): Southdale Mall to Best Buy Headquarters in Richfield to Normaldale College, HealthPartners and the Mall of America in Bloomington
539	BE Line (Bloomington Edina Transit): Southdale Mall to York and France along Old Shakopee Road to the Mall of America
540	Local route operated by Transit Team, Inc. along I-494 between the Edina Industrial Area and the Mall of America
578	Express route connecting York Avenue, Benton Avenue, 70th Street, Cahill Road and Southdale Mall with Downtown Minneapolis
587	Express route between 76th and France and Downtown Minneapolis via Highways 100 and 394
631	Southwest Transit route connecting Fairview Southdale Hospital and Southdale Mall to Eden Prairie, the SouthWest Transit Station and Chanhassen



*The bike station at Millennium Park in Chicago, Illinois has space for 300 bikes, provides shower and locker facilities, and also includes a repair shop and snack bar.*



*Interior view of secure parking in a bike station in Seattle, Washington.*

Additionally, Edina Dial-A-Ride provides door to door shared transit service, on a first come first served basis, within city boundaries.

### **BIKE PARKING AT TRANSIT STOPS**

No bicycle parking racks or other facilities are presently provided at transit stops within Edina, except for the Southdale Transit Center.

### **SOUTHDALE TRANSIT CENTER**

The region’s fourth-busiest transit hub operates at Southdale Mall. Most transit routes providing service in and out of Edina include a stop at this Transit Center. This Center also functions as a MetroTransit “Park and Ride” lot, where motorists are able to drop off their automobiles and finish their journey on transit. About one hundred automobile parking spots are provided.

The Southdale Transit Center provides two bicycle parking racks, located adjacent to the mall’s smoking area and accommodating a total of 14 bicycles. The racks are of a “wave” type that is not recommended, as the design requires cyclists to lift their bikes to position them correctly. Secure long-term parking (including bicycle lockers) is not provided.



*Bicycle parking provided at the Southdale Transit Center.*

## **RECOMMENDATIONS**

### **CONNECTING TO THE SOUTHDALE TRANSIT CENTER**

Southdale Mall is an important destination for Edina cyclists. Safe and comfortable routes to the Mall are recommended elsewhere in this Plan. It also will be important to include designated bicycling space for cyclists within the Mall’s existing circulation network. Work with Southdale Mall management and with MetroTransit to set up this internal cycling network.

### **IMPROVING PARKING FACILITIES**

Improving the provision of bike parking facilities at transit stations will make it more convenient for transit users to bike to transit and will, in subtle but effective ways, encourage transit users who don’t ride to begin to do so.

#### **For transit stops**

- All transit stops within Edina should include at least one “inverted U” or “post and loop” bike rack.



*A potential route for internal bicycle circulation at Southdale Mall.*

### **At the Southdale Transit Center**

- Bike parking at the Southdale Transit Center should include a mix of short-term and long-term parking (See Chapter 2.6 for more information). This Plan recommends that 80% of the total bicycle parking provided at the Southdale Transit Center be configured as long-term parking (See Appendix A.4 and A.5 for additional guidance).

### **ENCOURAGING CYCLING TO THE TRANSIT CENTER**

Work with Metro Transit and with Southdale Mall management to set up an incentive program to encourage people to begin arriving by bike to the Southdale Transit Center.

### **SOUTHDALE BIKE STATION**

Work with Southdale Mall management, with Metro Transit, with bike and transit advocacy organizations, and with local independent bike shops to reconfigure the existing Southdale Transit Center and Park and Ride facilities as a bike station offering secure short and long-term bike parking, shower and locker facilities, and bicycle repair services.

### **VERNON AND EDEN AVENUE PARK AND RIDE**

Work with Metro Transit and the City of Edina to explore including bicycle “Ride to Ride” or bike station facilities as part of the potential development of a proposed Park and Ride facility between Vernon Avenue and Eden Avenue (currently at an early stage of concept development). This facility is also expected to help relieve automobile parking demand at 50th and France; including potential bike rental or checkout services and safe and comfortable routes to this and other nodes in Edina (recommended elsewhere in this Plan) would help transit riders connect to other points in the city.

## 2.9 Education and encouragement

Even the best-planned bicycle network will fail to live up to its full promise if potential riders are unaware of its existence, or if it's difficult to figure out how to get from one destination to another. Routes to school will not be used if children cannot transport their backpacks on their bikes or if parents feel their children lack the skills to safely navigate their routes. Cyclists and automobile drivers will each do better if they learn how to consistently and courteously share road space with each other and to coexist within Edina's transportation and mobility infrastructure.

This chapter is about how the City of Edina can go about inviting people to more safely and effectively use the route network that develops from this Plan by making it easier, more convenient and more fun to do so. It is titled "education and encouragement" to acknowledge that both of these activities build on each other, and that learning about safe riding and disseminating information about the City's bikeway networks will lead more people to use their bicycles as a means for making at least some of the several trips that they make within the course of the day.



***Riding to school is a valuable way for children to explore using their bicycles for transportation.***

### LEARNING TO RIDE SAFELY

Cycling is a safe activity that can become even safer with improved education. Motorists, cyclists, and pedestrians each have much to contribute to making cycling (and other modes of travel) safer and more effective: one of the leading causes of crashes is the unexpected behavior of at least one of the parties involved. Cyclist, motorist, and pedestrian safety programs can help reduce the risk of crashes and injuries while giving new cyclists the confidence needed to ride more regularly. In fact, safety training has been shown to be one of the most effective and cost-efficient ways of reducing collisions and encouraging cycling.

Three main components of safety training are addressed under this section. They center on:

- Developing safe cycling skills in children,
- Teaching adult cyclists their rights and responsibilities, and
- Increasing motorists' awareness of bicyclists' rights on the road, and teaching them how to safely share the road with bicycles

## FOR CHILDREN AND YOUNG PEOPLE

It is important to share information on safe bicycling with young people from early on. Not only will this help them become safer cyclists, but it will also reinforce the message that cycling is a useful and acceptable means of transport. While it is not uncommon for schools in the US to provide automobile driver education for children 16 or older, it is rare to find similar provision of cycling education, even though most children seven and older are able to ride a bicycle and (because of generally poor provision of separated trails) routinely ride in streets that are also used by automobiles.

In European countries where cycling serves a much larger portion of all trips it is a given that schools provide formal training in safe cycling for children starting in elementary school. In the Netherlands, for example, children undergo a three week training on cycling rules and maneuvers each year. It is easy to imagine that Edina schools could easily offer something similar, perhaps as a component within physical education classes (and one which could help promote a lifetime of safe and enjoyable physical activity). It is also a given that schools, parks and other places where young people congregate need to provide a physical infrastructure that supports children's cycling by making sure that adequate bike parking, and well-marked trails or lanes, are available (covered elsewhere in this Plan).

## SOME APPROACHES

School children are most effectively reached when an action-oriented teaching approach and a repetitive practice process are coupled with awards and incentives. Awards and incentives can consist of certificates of completion or bicycle/pedestrian licenses, free or reduced-cost bicycle helmets and other accessories, or discount coupons for area bicycle shops.

To reach the most children, it is important to work closely with schools to ensure that school-age children are receiving an age-appropriate bicycle safety message and are learning skills that will help them function safely on the public right-of-way.

## MESSAGES

The following messages should be consistently taught:

- Wear a helmet. In the event of a bicycle crash, wearing a helmet reduces the risk of serious head injury by up to 85%.
- Obey all traffic laws. Bicyclists have the same rights, and



***At the 2007 Edina Bicycle Rodeo, organized by Catherine Elliot and supported by the Bike Edina Task Force (BETF). Children and young riders had the opportunity to learn the rules of the road for safe cycling and to practice their new skills in a safe, supervised setting.***

consequently the same responsibilities as motorists.

- Look both ways before crossing streets.
- Always ride with the flow of traffic.
- Be predictable and always signal your intentions.
- Be visible; wear light-colored clothing and bright or reflective clothing and always use a front light and rear reflectors at night.
- In addition, very young children (seven or less) should ride with supervision.

### FOR ADULT CYCLISTS

Adult cyclists range in skills and confidence. Some adults are comfortable riding on busy streets and mixing with traffic while others prefer quieter streets or off-street paths. There are adults who ride a bicycle only a few times a year and those who ride often but primarily for recreation. Each type of cyclist has his or her own concerns and philosophy about how bicycles fit into the transportation system - education efforts must recognize this and tailor messages to each group.

It is also important to reach as wide a range of bicyclists as possible. Since adults do not often group together as a captive audience as school children do, it is important to offer a wide range of opportunities to improve their knowledge and skills related to bicycling.

### MESSAGES

The following messages should be consistently taught:

- Be alert. Watch for other users and sudden behavior changes. Pay careful attention to potential road hazards, such as potholes and gravel. Adjust speed to maintain control of the bicycle.
- Obey all traffic laws; bicyclists have the same rights, and consequently the same responsibilities as motorists. Disobeying traffic laws makes it more difficult for motorists to know what to expect from cyclists and is potentially dangerous.
- Always ride with the flow of traffic. Ride where motorists and others expect cyclists, and never against traffic.
- Avoid riding on sidewalks. It is illegal in commercial districts in Minnesota, and puts pedestrians at risk. It also makes it more difficult for motorists to see cyclists - research demonstrates that it is in fact 5 times more dangerous than riding on the street, even in places where no bicycle facilities



Along 70th Street.

### DID YOU KNOW?

Bike riding on sidewalks is 5 times more dangerous than riding on the street, even if the street includes no provision for bicycles.

*Source: William Moritz, University of Washington: "Survey of North American Bicycle Commuters: Design and Aggregate Results," Transportation Research Board, Vol 1578, 1997.*

### RULES OF THE ROAD

Please see Appendix A.10 for Minnesota Statutes covering "Rules of the Road" for cyclists and motorists.

Prepared by the Bike Edina Task Force (BETF), this Appendix also includes some additional safety and education resources.

are provided.

- Be predictable. Signal your turns and do not weave in and out of traffic.
- Be visible. Wear light-colored, bright or reflective clothing and use front lights and rear reflectors or lights at night.
- Wear a helmet.

### FOR MOTORISTS

The goal in educating motorists is to foster a broad and general public awareness and respect for bicycling. Many motorists are already occasional or regular cyclists, and may begin riding more often if they see and feel the emphasis on providing safe conditions for all road users. Bicycle route signs and markings are also helpful for motorists because they remind them of the presence of cyclists and of the need to share space with other users of the road. Information on the rights of cyclists should be included as part of training for all automobile drivers.

### MESSAGES

- Be alert. Watch for cyclists and other users and for sudden behavior changes. Pay attention especially at intersections.
- Obey all traffic laws. What would amount to a minor fender bender between two motor vehicles could be a serious injury for a cyclist in a bicycle-motor vehicle crash. Driving the speed limit and coming to a full stop at red lights creates a safer environment for all.
- Be predictable. Signal turns well before an intersection.
- Share the road. Cyclists have the right to travel on all roads and streets except limited access freeways.
- Give room. Follow and pass at a safe distance. Never get closer than three feet to a cyclist under any circumstance. It is dangerous and illegal under Minnesota law.
- Cyclists have the right to take full possession of a travel lane in several situations, including when avoiding fixed or moving objects on the road (like vehicles, pedestrians or road surface hazards) and when provided road space is too narrow to allow a motor vehicle to safely pass with three feet of clearance of the cyclist.
- Be patient and courteous with cyclists and other users. Passing bicyclists just before a stop light or sign creates an atmosphere of unnecessary hostility.
- Do not honk unless absolutely necessary. Cyclists can hear and see motor vehicles; honking simply jars their nerves.



*Members of the Three Rivers Park District Police helped distribute rider safety information to young people participating in the 2007 Edina Bike Rodeo.*

### EDUCATION AND ENCOURAGEMENT: FOR THE EDINA POLICE DEPARTMENT

The Edina Police Department can play an important role in improving safety for cyclists, for encouraging people to ride, and for helping educate members of the public about the rights and responsibilities of cyclists on the road.

Members of the police are visible and respected members of the Edina community. Encouraging bicycle patrols will allow a visible and immediately available presence on commercial nodes or other important Edina destinations while demonstrating that cycling is a useful and valid transportation choice.

Additionally, members of the police can help encourage young people's cycling activities by attending and participating in rider safety trainings and other programs recommended in elsewhere in this chapter.

## ENCOURAGING PEOPLE TO RIDE

How do we invite a recreational cyclist to try commuting to work on her bike rather than her car? Is there an incentive program that can help persuade a shopper to ride their bike to the grocery store? What are some of the tools we can use to get more people to choose to bike (or at least try biking) instead of driving to go shopping or to school, or for any other of their daily trips?

This section includes some tools that may be helpful in preparing the ground for the kind of changes in travel behavior the Plan seeks to make possible.

### STUDENT PROGRAMS

Encouraging student cycling will help instill life-long habits of health and activity, and provide proof to students that cycling is a serious and valid transportation option. Some strategies and programs that could be implemented in Edina to encourage student cycling include:

- Working with the Edina public school system to encourage students and staff to ride to school
- Working to integrate cycling education into physical education classes
- Establishing awards and incentives programs for completion of bicycle classes, or for riding to school so many times per week, etc.
- Discounts to area bicycle shops as prizes for outstanding students

### DID YOU KNOW?

In 1969, about half of all students walked or bicycled to school. Today, fewer than 15 percent of all school trips are made by walking or bicycling, while one quarter are made on a school bus, and over half of all children arrive to school in private automobiles.

*Source: Federal Highway Administration: Transportation Characteristics of School Children, 1972; and National Household Travel Survey, 2001.*

### RIDER INCENTIVE AND TDM PROGRAMS

Increased use of bicycle transportation can help achieve Transportation Demand Management (TDM) objectives while providing additional benefits, including improving community health and supporting local economic development. Several types of incentive programs are already in use in communities in the US:

- Business associations can provide discounts to shoppers who arrive by bike
- Employers can offer parking cash out benefits, which give commuters who don't drive the cash equivalent of the parking subsidies provided to drivers

These programs are typically recommended to help address issues of lack of parking and increasing congestion that often begin

to hinder successful commercial areas. In the case of Edina, potential connections should be explored with the proposal to develop a municipal “Park and Ride” facility near Vernon and Eden Avenue that also means to address parking and congestion issues at 50th and France.

### SPECIAL COMMUNITY EVENTS

Special events offer an opportunity to bring attention to practical, fun, and healthy aspects of cycling as a tool for mobility and transportation. Because they are community-wide and of limited duration, people are more open to participating without feeling like they have to commit to making a long-term change in their travel habits - they are just trying commuting to work once, not everyday. But sometimes that’s all that’s needed to open the door to adopting new travel behaviors over the long term.

Some events and programs that can encourage participation include:

- Monthly group rides with the Mayor or other important city personalities can help promote cycling in Edina. Similar events in other cities even close a road or two to auto traffic once a month and make it a bike and pedestrian-only event.
- Parks and recreation programs, working with non-profit or cycling advocacy groups, can sponsor cycling events and activities, particularly on trails and regional cycling routes.
- Special bicycle commuter events can help raise the profile and potential for bicycle commuting. Bike to Work Week events, which typically include special publicity, route guidance to first-time bicycle commuters, and group breakfasts, offer an opportunity to try cycling in a safe, relaxed and fun environment. Bike to Work Week events have been held in many Twin Cities communities over the last several years.

### VISITOR PROGRAMS

Tourist promotion materials can highlight bicycling as a way to circulate within and experience Edina. For example, guests staying at the Sheraton Hotel could use the network proposed in this Plan to ride to Southdale for shopping and entertainment. Several communities in the US and Europe boast of their cycling orientation as part of their identity and as a draw for potential visitors.



***Pedal-powered participants returning from Edina's 4th of July Parade.***



***The Minneapolis Bike Tour, held for the first time in September 2007, brought more than 4,500 cyclists to that city's Grand Round Scenic Byway System, which was closed to all automobile traffic. The Tour included shorter rides for novice cyclists.***

## BIKE NETWORK MAPS

One of the greatest barriers to effective use of a bike network is not knowing how to get on it and use it to get to destinations. Printing and distributing bikeway maps is a high-benefit, low cost project that can help cyclists locate bikeways, identify better route choices for their trip, and help them avoid uncomfortable cycling conditions. In addition, maps can provide information covering such topics as Rules of the Road, bicycle safety and maintenance, and connecting with mass transit. Another very potentially helpful tool is the implementation of a “Mapquest for bikes” that allows a cyclist to type in their origin and their destination and prints out one (or several) recommended routes along preferred streets (something very similar to Metro Transit’s trip planner).

## USEFUL CYCLES

An important impediment to more widespread use of bicycles for transportation is that the majority of bicycles sold today are not very convenient for taking care of errands and the small shopping trips that make up a significant portion of the auto trips in our region.

If you ride over a puddle, your wheel throws water up the back of your shirt; if you wear pants, they get caught in the bicycle’s chain; if you have anything besides your wallet to carry there is no place for it, and you must balance it as best as possible on your handlebars as you pedal and steer, bumping it with your knee with every push. And if you’re a student, there is certainly no place for your eighty pound backpack on your bike.

Fortunately, the remedy is fairly simple (and relatively inexpensive): fenders, baskets, trays, chainguards and lights can be easily purchased and installed by visiting any of Edina’s local independent bike shops, which all carry accessories that can help a cycle be a more useful tool for its rider. Working alongside these businesses, health advocacy and transportation organizations may be able to provide discounts or other special offers or events to help encourage students and potential commuters to improve their bikes so they may serve a wider variety of trips.

### Turning a nice bike into a useful bike:



**Step 1: A comfortable bike, but not very useful for shopping or going to school.**



**Step 2: Ten minutes and \$20 later, puddles matter a little less.**



**Step 3: Add \$15, and a front basket makes a run to the store possible.**

## 2.10 Operations and maintenance

A cyclist rides on two very narrow, high-pressure tires. What may appear to be an adequate roadway surface for automobiles (with their four wide, low-pressure tires) can be treacherous for cyclists: small rocks can deflect a bicycle wheel, a minor ridge in the pavement can cause a spill, a pot hole can cause a wheel rim to bend. Wet leaves are slippery and can cause a cyclist to fall; gravel that gets blown off the travel lane accumulates against the curb, in the area where bicyclists ride.

Although bikeways will always be subject to debris accumulation and surface deterioration, a proactive and cyclist-conscious approach to roadway maintenance and operations will go a long way towards ensuring safe and efficient utilization of Edina bicycle network assets.

This chapter contains several recommendations that will help maintain and improve Edina's bicycle infrastructure.



***Uneven pavements, rough joints and poorly located facilities work against the intended provision of safe and inviting bicycle facilities.***

***Photo: Plymouth Avenue in Minneapolis.***

### GENERAL CONSIDERATIONS

#### MAINTENANCE BUDGET

Preventive maintenance reduces hazards and future repair costs. Maintenance costs and responsibility for maintenance should be assigned when projects are planned and budgets developed; typical annual maintenance costs range from 3 to 5 percent of infrastructure replacement costs - for example, a \$100,000 facility should include a \$5000 annual maintenance budget. Life-cycle cost analysis is recommended to determine the net value of using longer-lasting higher quality materials during construction if they reduce yearly maintenance expenditures.

#### MANAGEMENT PLANS

A management plan is a tool to identify maintenance needs and responsible parties. A management plan that includes the maintenance component for a proposed facility should be in place before construction. Additionally, a management plan should include a means for users of the system to report maintenance and related issues and to promptly address them.

A facility's management plans answers basic operational and staffing questions such as: How frequently are preventive

maintenance tasks performed? Who fills potholes? Who removes downed or dangerous trees? Responds to vandalism and trespassing? Removes litter? Replaces stolen or damaged signs? Waters and weeds landscaping? Acts as the main contact? Does the work? Pays the bills?

### **USER-INITIATED MAINTENANCE REQUESTS**

The users of Edina's bicycle network will likely be the first parties to notice hazards, maintenance issues, or opportunities to bring improvement to the system. Establishing a formal mechanism for receiving requests for maintenance can help avert deterioration of the city's infrastructure investments while reinforcing citizen-ownership of and providing effective management for Edina's bicycle assets.

### **BICYCLE FACILITY MAINTENANCE REQUEST PROGRAM**

A Bicycle Facility Maintenance Request Program could help extend the reach of the city in protecting its infrastructure and providing cyclists with an inviting and safe bicycling environment. This program would respond to requests for small-scale, low-cost improvements, such as sweeping, repairing surface problems, and replacing unsafe gratings.

Edina cyclists could make a request using existing and recommended bicycle and civic networks:

- The Edina Bicycle Advisory Committee (recommended in Chapter 3.2) could be an official channel to forward information to the City and monitor network quality
- Maintenance request cards, which could be made available at Edina bike shops, libraries, schools, and City Hall
- By directly contacting the City's Bicycle Coordinator (a position recommended in Chapter 3.2). The Bicycle Coordinator would catalogue all requests and route them to the appropriate Edina Public Works personnel. Requests for work outside Edina's jurisdiction (for example for Three Rivers Trails) would be sent to the appropriate jurisdiction, and requests that are outside the scope of the program are considered for the City's Capital Improvement Program or other funding sources. The person making the request is contacted either by letter or telephone once action is taken.



**Hazardous shoulder on Interlachen Boulevard.**

## ROUTINE MAINTENANCE

### SNOW AND ICE REMOVAL

This Plan proposes the creation of a bicycle transportation network that will allow and invite people to substitute many of their automobile trips by cycling instead. Given Minnesota's weather, and the fact that many bicyclists already bike year-round (and that many more would also if adequate maintenance were given to bicycle facilities), snow and ice removal must be planned with the expectation that bicycle facilities will continue to be used during winter months.

Care should be taken to place snow and ice well out of the portion of the travel lane that bicyclists use. Bike trails and paths should also be swept with regularity.

Bikeways, gutters and curb ramps should not be used as snow storage areas for snow removed from streets; policies should treat the clearance of snow from bicycle ways and road shoulders as being of equal importance as clearance of snow from the automobile travel lanes in streets.

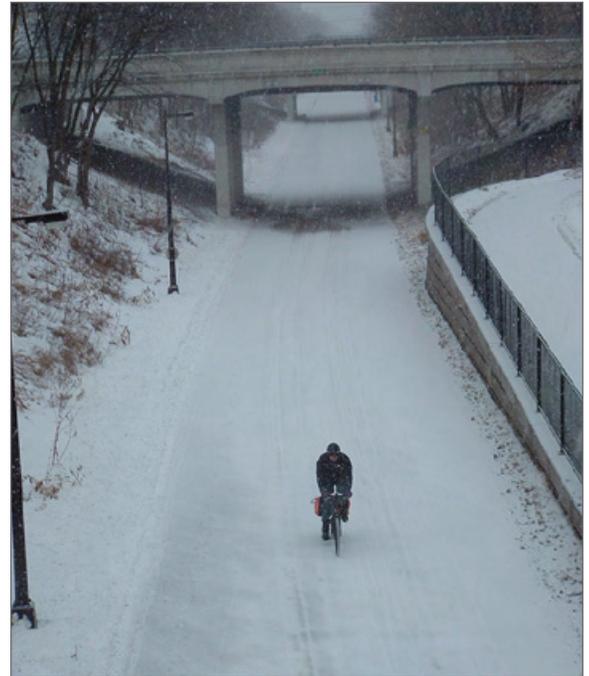
### SWEEPING

Loose sand and debris on the surface of bicycle lanes, paved shoulders, and paved sections of shared use paths should be removed at least once a year, normally in the spring. Sand and debris will tend to accumulate on bicycle lanes because automobile traffic will sweep these materials from the automobile portions of the roadway. This is especially true for bicycle lanes that are located directly adjacent to a curb, where debris collects already.

With experience, the City's Bicycle Coordinator will be able to provide a list of high priority streets to the City's Public Works Department which will aid in planning resource allocations for routine street cleaning as well as for removing sanding materials used during winter snows.

### SURFACE REPAIRS

Bicyclists and pedestrians are more sensitive to problems in the roadway surface than motor vehicles. Small bumps and cracks that are barely noticeable to motor vehicles can cause a bicycle to crash or swerve into traffic.



***Adequate winter maintenance will help keep bicycle transportation routes open. The Midtown Greenway is maintained by the City of Minneapolis and is open to cyclists and pedestrians 24 hours a day year-round.***

A smooth surface, free of potholes and other major surface irregularities, should be provided and maintained. Care should be taken to eliminate other physical problems. Requests for surface improvements should be made through the Bicycle Facility Maintenance Request Program or through the City's inspection and maintenance schedule.

### **RESURFACING / PAVEMENT OVERLAYS**

Street resurfacing projects provide ideal opportunities to greatly improve conditions for cyclists. However, if not done correctly (by, for example, leaving a ridge or a joint in a shoulder or bicycle lane), some conditions may worsen.

Items to consider on resurfacing projects that will help improve conditions for bicyclists include:

- Utility covers and drainage grates should be raised to within 1/4 inch of the resurfaced pavement surface, and grates should be bicycle-safe grates
- Gravel driveways and alleys should be paved back 5 to 10 feet from the edge of pavement or right-of-way to prevent gravel from spilling onto the shoulders or bike lanes
- Using chip seals to surface or resurface shoulders should be avoided, as they will render the shoulder area unusable to most bicyclists
- The level of adjacent unpaved compacted shoulders should be raised so they are flush with the new roadway surface, as a vertical drop onto a low shoulder can cause a cyclist to fall into the automobile travel lane
- Avoid leaving a ridge in the area where cyclists ride, which occurs where an overlay extends only part-way into a shoulder or bike lane. If possible, the overlay should be extended over the entire surface of the roadway to avoid leaving an abrupt edge. If this is not possible, and there is adequate shoulder or bike lane width, it may be appropriate to stop at the shoulder or bike lane stripe, provided no abrupt ridge remains
- Constructing a new pavement over a narrower existing roadbed may sometimes create hazardous conditions. The old roadbed is in most cases narrower than the new paved roadway and because of differential settling longitudinal surface cracking will occur on the paved surface. These longitudinal cracks typically appear from 1 to 2 feet from the edge of the road, in the area where bicyclists normally ride, forcing cyclists to use a shoulder (if one is available), or to ride in the travel lane



***Two and three quarter inch drop to drainage grate on 50th Street near France Avenue - one of the top destinations for Edina cyclists.***



***A three inch drop along a narrow shoulder on Interlachen Boulevard.***

Many overlay projects offer a chance to widen the roadway for greater bicycle space, or to restripe the roadway with bike lanes. The Bicycle Coordinator, working with the Bicycle Advisory Committee, should review each paving list and work with the City's Public Works Department to assign space for bicyclists before these projects are finalized.

### **SIGNS AND PAVEMENT MARKINGS**

Signs and pavement markings are important features of bikeways and roadways, and help ensure continued safe and convenient use of these facilities. It is critical that bikeway signs, striping, and legends be kept in a readable condition.

Some recommendations to address these infrastructure elements include:

- Regular inspection of bikeway signs and legends, including an inventory of signs to account for missing or damaged signs
- Replacement of defective or obsolete signs as soon as possible
- Regular inspection of striping, and prompt reapplication as needed. In some cases, striping may be visible, but has lost its slip resistance, which can be a hazard to bicyclists.
- Depending on wear, bike lanes may need to be repainted on an annual basis. Bike lane stripes may wear out less often on lower traffic volume streets than on higher volume streets
- Cold plastic should be used for skip-striping bike lanes across right turn lanes
- Promptly respond to maintenance requests for lane striping and markings as directed through the Bicycle Facility Maintenance Request Program

### **VEGETATION**

Vegetation encroaching into and under the bikeway creates a nuisance and a hazard for riders. Current practice requires property owners in Edina to ensure their trees and shrubs do not cause safety problems. Violations can be reported through the Bicycle Facility Maintenance Request Program. Tree roots causing premature break-up of surfaces should be similarly reported.

### **DRAINAGE ISSUES**

Drainage facilities may change grades and deteriorate over time. Ensuring that bicycle-safe drainage grates are located at the proper height greatly improves cyclist safety; it may sometimes be necessary to adjust or replace catch basins to ensure continued



**Well-maintained signs and pavement markings help improve safety and usability of bicycle infrastructure investments.**  
**Photo: Midtown Greenway, in Minneapolis.**



**Unsafe grate on Gleason Road near Creek Valley Elementary School. This type of grate can trap a bicycle's tires, abruptly stopping the bike and throwing a cyclist over the handlebars.**

safe operations and improve drainage. The small asphalt dams that are sometimes constructed on roadway shoulders to divert storm water into catch basins are a hazard to cyclists.

Event-related drainage issues (e.g. backed-up grates) and long-term drainage hazards (unsafe grates) can be reported and addressed through the Bicycle Facility Maintenance Request Program, and should be proactively addressed whenever street improvements are made.

## OTHER MAINTENANCE ACTIVITIES

### CHIP SEALING

Chip seals should not be used to resurface shoulders, as they leave a rough surface and render this area unusable by most cyclists. Sometimes chip seals are applied over the automobile travel lanes and part of the shoulder area, which leaves a ragged edge or ridge in the shoulder, with material of different height and texture, and creates a hazard for cyclists.

### PATCHING ACTIVITIES

Loose asphalt materials from patching operations often end up on the shoulder, where the larger particles adhere to the existing surfacing, creating a very rough surface. Fresh loose materials should be swept off the road before they have a chance to adhere to the pavement.

### UTILITY CUTS

Utility cuts can leave a rough surface for cyclists if not back-filled with care. Cuts should be backfilled and compacted so that the cut will be flush with the existing surface when completed. Extra care should be used when cuts are made parallel to bicycle traffic to avoid a ridge or groove in the bicycle wheel track.



***Three and a half inch drop to catchbasin along a comfortable riding shoulder on Blake Road. A cyclist inadvertently riding into the grate will likely lose control of their bicycle and suffer a crash.***



***Drainage grate along the path of cyclists on the York Avenue bike and pedestrian tunnel. The grate frequently clogs and accumulates dirt and debris. During winter, it fills with melt and ice. This tunnel is recommended for replacement.***

### FOR ADDITIONAL GUIDANCE

The recommendations listed in this chapter are meant to provide general guidance for maintenance and operation of Edina's bicycle network. For additional guidance and information please consult Chapter 9 (Maintenance) of the Minnesota Department of Transportation Bikeway Facility Design Manual.

# Section III

## Implementation

*This section includes recommendations on implementation priorities, tools to measure success, and mechanisms to ensure ongoing improvement of Edina bicycle facilities.*

### IN THIS SECTION:

- 3.1 - BENCHMARKS**
- 3.2 - BICYCLE COORDINATOR**
- 3.3 - TASKS AND TIMELINE**

## 3.1 Benchmarks: What does success look like?

Establishing benchmarks for implementation will help measure whether progress in developing Edina’s bicycle infrastructure is being made and help direct efforts to areas that need increased attention.

Two types of benchmarks are recommended for consideration: implementation benchmarks (which focus on how much of the recommended bicycle network is actually developed from year to year) and ridership benchmarks (how many riders does Edina’s bicycle network attract). It is important that the goals indicating satisfactory progress not be set so high that success is unattainable nor so low that no meaningful change is required to declare improvement.

A number of benchmark measurements are provided for consideration below; these are meant to be used in concert with the timelines for implementation provided in Chapter 3.3.



*An Edina cyclist riding along Wooddale Avenue today.*

### IMPLEMENTATION BENCHMARKS

Given that Edina’s bicycle network does not at present contain many elements, realistic goals should be established to determine progress towards improving the physical condition and provision of Edina’s bicycle infrastructure. An important component of addressing improvement will be the implementation and functioning of the City’s Bicycle Facility Maintenance Request Program, which will be especially helpful in decreasing current hazards in Edina’s system.

#### REMOVING HAZARDS

##### Within one year

- All unsafe drainage grates are removed from Edina’s streets
- All unsafe shoulder, curb and grate conditions (grates more than a quarter inch below adjacent pavement, deteriorated shoulders, or degraded curb-pavement joints) on designated Primary routes are repaired

##### Within two years

- All unsafe shoulder and gutter conditions on designated Secondary routes are repaired

#### HOW MUCH WILL IMPROVEMENTS COST?

A tool to help estimate costs for implementation is provided in Appendix A.8 of this Plan.

## **INCREASING SAFETY AND CONVENIENCE**

### **Within one year**

- Existing loop detectors along designated Primary routes where they cross multi-lane roads are tuned to better detect cyclists

### **Within three years**

- New bike loop detectors are installed along designated Primary routes where they cross multi-lane roads and where existing detectors could not be modified to detect cyclists
- Blue bike lanes are installed at all recommended locations along designated Primary routes

## **DESIGNATING AUTOMOBILE SPACE**

- On streets that are designated Primary routes, stripe the “fog line” (right edge of automobile travel lane) at 10 or 10.5 ft width depending on conditions. Goal is to stripe a minimum of 10% of total road miles per year.

## **DEVELOPING BIKE FACILITIES**

### **Within one year**

- Install bike route signs including distance, direction and destination information on all Primary bike routes (except for those streets, like 77th Street, that currently present other issues that must be addressed first before they are comfortable for cycling)

### **Within two years**

- Install bike route dots along designated Primary and Secondary routes in Edina
- Complete striping bike lanes on designated Primary streets

## **IMPROVING BICYCLE PARKING**

### **Within one year**

- Bicycle parking facilities are provided in all Edina public schools and parks

### **Within two years**

- Adequate number and type of bicycle parking facilities are provided at all major Edina commercial and retail destinations, including 70th and Cahill, 50th and Vernon, and others

### **Within three years**

- All Edina public schools and parks have bicycle parking facilities of a recommended type (“inverted U” or “post and loop”)
- The number of bicycle parking facilities provided at Edina public schools and parks meet the recommended guidelines specified in Appendix A.4
- All transit stops in Edina include parking space for at least two bicycles

## RIDERSHIP BENCHMARKS

Baseline ridership levels help determine changes or improvements in the use of bicycle facilities. Although not much information on existing bicycle ridership levels in Edina is currently available, a preliminary benchmark base level can be established using the recently completed Edina bike counts taken in September 2007.

These counts, part of a larger, coordinated base level bike count effort led by Transit for Livable Communities, were the first time that bicycle counts were conducted in Edina simultaneously with counts throughout our region. Counts were conducted by BETF volunteers at two locations, from 4:00 to 6:00 p.m., over two days. In that time period an average of 21 bikers and 35 pedestrians were counted at 44th Street and Brookside Avenue while 17 bikers and 14 pedestrians were counted at 70th Street and Cahill Road. These numbers can be carried forward as cycling baselines at those locations, and can be used to ascertain progress in subsequent years. It is recommended that bike counts be conducted annually at additional locations; it is also recommended that the City’s Bicycle Coordinator (recommended in Chapter 3.2) manage the program and coordinate it with wider regional efforts.

A yearly growth of 10% in the number of riders at each location (and at new ones as this data collection effort expands) will indicate satisfactory progress for this Plan.

## MOVING FORWARD

New benchmarks should be set up as this Plan is adopted and implemented, as experience guides new directions and issues relevant for implementing the vision behind this Plan. It is recommended that this Plan and its benchmarks and recommendations be revisited within three years of adoption.

## 3.2 Bicycle Coordinator

This Plan recommends the creation and funding of a new “Bicycle Coordinator” position within the City of Edina to coordinate implementation of the Plan, to attend to and coordinate response to bicycle network maintenance and operations issues, and to advocate for the needs of cyclists as other transportation and land use projects are designed and implemented.

The position need not be full time, but should be permanently funded and allow a new or existing staff person to dedicate a minimum of 10 hours per week to bicycle-related issues within and around the geographic area of Edina.

Tasks and responsibilities would at minimum include:

### PLANNING

- Coordinate and integrate bicycle planning and network implementation with other city, county, regional parks district and state programs, agencies and bodies
- Review all roadway and land use plans for impact on bicycle travel and conditions; make and pursue recommendations for improvement as needed before projects are constructed
- Review traffic-calming and other roadway measures for impact on conditions for cyclists
- Coordinate implementation of route recommendations as part of other projects (for example recommending that bicycle-friendly curb-and-gutter is specified in street reconstruction projects)
- Represent the interests of Edina cyclists by serving as liaison with adjoining jurisdictions and regional entities during design and implementation of their respective local and regional bicycle and other transportation infrastructure
- Provide advice to policymakers, including members of the Edina City Council and the Edina Transportation Commission, on transportation and land use issues with the aim of improving conditions for cyclists in Edina
- Coordinate bicycle-related transit infrastructure improvements, including provision of bike parking at key transit locations and coordinating improvements to bike parking and potential development of a bike station at Southdale Mall as part of its operation as a Transit Center

### CITIZEN STEWARDSHIP

Ultimately, the purpose of improvements to Edina’s bicycle infrastructure is to bring benefits to its citizens. It is therefore critical that a structure for citizen stewardship of this Plan be devised and implemented.

This Plan recommends the following two components of a citizen guidance and stewardship mechanism for improving Edina’s bicycle infrastructure:

1. *Establish a Bicycle Advisory Committee*  
Many cities that are successfully implementing improvements to their bicycle infrastructure owe a great deal of their success to the role that citizen-activists have played in guiding implementation of their bicycle plans and ensuring the ongoing improvement of existing facilities. A Bicycle Advisory Committee typically includes representation from interested members of the public and participation from city engineering, public works and/or planning staff so that relevant issues can be promptly discussed and addressed. Edina’s Bicycle Advisory Committee would provide citizen direction for implementation of Plan recommendations and provide additional guidance for improving Edina’s bicycle transportation network as needed.
2. *Formally include cyclist representation in transportation decision-making*  
The Edina Transportation Commission advises the City of Edina on issues relating to transportation and transportation improvements over its surface street network. Formally including at least one representative from the Edina Bicycle Advisory Committee as a full member of the Edina Transportation Commission would help ensure that the voice of cyclists is included during deliberations on improvements to Edina’s transportation network.

### **MAINTENANCE AND OPERATIONS**

- Create and administer a spot improvement / Bicycle Facility Maintenance Request program to reduce roadway hazards and to quickly respond to cyclists' requests for maintenance or repair of bicycle infrastructure

### **PUBLIC ENGAGEMENT**

- Serve as City of Edina liaison to the Bicycle Advisory Committee and other Edina citizens' groups working on improving conditions for cycling in the City

### **EDUCATION AND ENCOURAGEMENT**

- Provide information and conduct workshops to improve cycling safety, including coordinating with Edina schools to include bicycle education as part of their physical education programs, and coordinating community requests for training for adults
- Coordinate preparation and publication of Edina bike network maps

### **MEASUREMENT**

- Collect and maintain bicycle use data, including regularly monitored bicycle counts, studies of origins and destinations, accident information and infraction data
- Develop yearly reports detailing use of bicycle facility network, identifying focus areas for improvement

### **FUNDRAISING**

- Pursue local, state, federal and private funds for improving bicycle infrastructure, for encouraging greater use of Edina bicycle network assets, and for conducting education and encouragement campaigns

## 3.3 Tasks and timeline

This Plan articulates a vision for improving bicycle conditions and infrastructure within the City of Edina. This chapter presents a simplified timeline prioritizing recommended improvements over the short, medium and long-term.

In general, low-cost improvements are recommended for the short term, while more expensive and involved initiatives are recommended for the future. Where relatively expensive improvements are recommended over the short-term it is in recognition that quickly addressing some issues may lead to lasting and important gains in others - for example, quickly addressing the lack of adequate bicycle parking in Edina schools and parks will make it easier for children and families to bike to those locations and maybe begin biking to others too.

A listing of organizations, public officials and government agencies whose involvement would be needed for implementing each of the recommended steps is also included in the timeline.

Many important conversations between citizen organizations, public officials, funders and other partners will have to take place before all the resources are in place to make the changes listed in this Plan. Convening a Bicycle Advisory Committee, or a Plan Implementation Working Group or Task Force, will be a helpful first step in coordinating the various conversations and commitments that implementing this Plan will require.

Phasing of improvements for individual recommended routes or segments is included in Chapter 2.4, where description of potential short, medium, and long-term improvements are given for each.



*Edina citizens are interested in seeing improvements to the City's bicycle infrastructure.*

*Photo: At the 2008 Comprehensive Plan public meetings held in August 2007.*

### How much will improvements cost?

A tool to help estimate costs for implementation is provided in Appendix A.8 of this Plan.

### What is the timeframe recommended?

The timelines in this chapter describe improvements in the following timeframes:

- Short-term is between now and two years from now
- Medium-term is between two and four years into the future
- Long-term is between four and seven years from now

## FOR THE SHORT TERM

The following steps are recommended for implementation between now and the next two years:

Short term: what to do	Why	Who
Appoint a Bicycle Advisory Committee	To ensure continued citizen guidance and involvement in the improvement of Edina's bicycle infrastructure	<ul style="list-style-type: none"> <li>• Edina City Council</li> <li>• Bike Edina Task Force</li> </ul>
Cycling community representative on the Edina Transportation Commission	To include the voice of Edina's cycling community in the discussions shaping transportation in the city	<ul style="list-style-type: none"> <li>• Edina Transportation Commission</li> <li>• Edina City Council</li> <li>• Bicycle Advisory Committee</li> </ul>
Create position and hire bicycle coordinator	Dedicated staff time for attending to cycling and Plan-related issues in the city	<ul style="list-style-type: none"> <li>• Edina City Council</li> <li>• Bicycle Advisory Committee</li> <li>• City of Edina Planning Department</li> <li>• City of Edina Engineer</li> </ul>
Adopt a "Complete Streets" policy for street design and improvements within Edina	To ensure that all Edina streets meet the needs of cyclists, pedestrians and motorists	<ul style="list-style-type: none"> <li>• Edina City Council</li> <li>• Edina Transportation Commission</li> <li>• City of Edina Planning Department</li> <li>• City of Edina Engineering and Public Works Department</li> </ul>
Improve bicycle parking facilities at Edina public schools	To support and encourage active transportation for Edina's student population	<ul style="list-style-type: none"> <li>• Edina Public Schools</li> <li>• City of Edina Bicycle Coordinator</li> <li>• Edina Transportation Commission</li> <li>• Edina Community Health Committee</li> <li>• Blue Cross and Blue Shield of Minnesota</li> <li>• Transit for Livable Communities Non-Motorized Transportation Pilot Program</li> </ul>
Improve bicycle parking facilities at City of Edina parks and recreation facilities	<ul style="list-style-type: none"> <li>• To increase convenience for Edina children and families</li> <li>• To support and encourage active transportation for Edina's population</li> </ul>	<ul style="list-style-type: none"> <li>• Edina Parks and Recreation System</li> <li>• City of Edina Bicycle Coordinator</li> <li>• Edina Transportation Commission</li> <li>• Edina Community Health Committee</li> <li>• Blue Cross and Blue Shield of Minnesota</li> <li>• Transit for Livable Communities Non-Motorized Transportation Pilot Program</li> </ul>

Short term: what to do	Why	Who
Adopt the recommended bicycle parking provision guidelines (Appendix A.3) into Edina's Code of Zoning Ordinances	To ensure that all future development includes adequate bicycle parking provision	<ul style="list-style-type: none"> <li>• Edina City Council</li> <li>• Edina Transportation Commission</li> <li>• Edina Planning Commission</li> </ul>
Set up Bicycle Facility Maintenance Request Program (as described in Chapter 2.10)	To protect and improve Edina's cycling infrastructure investments	<ul style="list-style-type: none"> <li>• City of Edina Bicycle Coordinator</li> <li>• Bicycle Advisory Committee</li> </ul>
Create plan and set up implementation steps for annual bicycle counts	To measure changes in bicycle ridership in Edina resulting from investments in the city's network	<ul style="list-style-type: none"> <li>• City of Edina Bicycle Coordinator</li> <li>• Bicycle Advisory Committee</li> </ul>
Set up an ongoing assessment and implementation strategy for evaluating progress and prioritization of specific route treatments recommended by this Plan	<ul style="list-style-type: none"> <li>• To focus energy and resources</li> <li>• To ensure implementation moves forward</li> </ul>	
Improve bike parking at commercial nodes and employment centers	To encourage more commuting and shopping trips to be made by bicycle	<ul style="list-style-type: none"> <li>• Edina City Council</li> <li>• Edina Transportation Commission</li> <li>• Bicycle Advisory Committee</li> <li>• Edina Bicycle Coordinator</li> <li>• Individual businesses and employers</li> </ul>
Install Bike Route signs over all designated Primary routes	To mark routes and guide cyclists through Edina's bicycle transportation network	<ul style="list-style-type: none"> <li>• City of Edina Engineering and Public Works Department</li> <li>• Bicycle Advisory Committee</li> <li>• Edina Transportation Commission</li> <li>• Edina Bicycle Coordinator</li> </ul>
Install route dots at recommended locations over Edina's Primary and Secondary route network	To mark routes and guide cyclists through Edina's bicycle transportation network	<ul style="list-style-type: none"> <li>• City of Edina Engineering and Public Works Department</li> <li>• Bicycle Advisory Committee</li> <li>• Edina Transportation Commission</li> <li>• Edina Bicycle Coordinator</li> </ul>
Prepare and distribute bicycle network maps	<ul style="list-style-type: none"> <li>• To encourage use of the network by existing and potential cyclists</li> <li>• To help riders find their way around town</li> </ul>	<ul style="list-style-type: none"> <li>• Bicycle Advisory Committee</li> <li>• Edina Bicycle Coordinator</li> <li>• Edina bicycle shops</li> </ul>
Set up bike-related maintenance programs, including winter-time provision for snow and ice removal, and year-round sweeping, surface repairs and resurfacing for Edina's bicycle network	<ul style="list-style-type: none"> <li>• To protect Edina's bicycle transportation network investments</li> <li>• To encourage cycling by providing a well-maintained cycling infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• City of Edina Engineering and Public Works Department</li> <li>• Edina City Council</li> <li>• Edina Bicycle Coordinator</li> <li>• Bicycle Advisory Committee</li> </ul>
Implement incentive programs to encourage cycling to Southdale Mall and the Southdale Transit Center	<ul style="list-style-type: none"> <li>• To encourage and increase cycling in Edina</li> <li>• To decrease demand on the Edina's automobile transportation network</li> <li>• To increase the proportion of trips made by transit in Edina</li> </ul>	<ul style="list-style-type: none"> <li>• MetroTransit</li> <li>• Southdale Mall management</li> <li>• Edina Bicycle Coordinator</li> <li>• Bicycle Advisory Committee</li> </ul>

Short term: what to do	Why	Who
Improve bicycle parking at transit stops	To increase use and convenience of riding a bicycle to transit	<ul style="list-style-type: none"> <li>• MetroTransit</li> <li>• Bicycle Advisory Committee</li> <li>• Edina Transportation Commission</li> <li>• Edina Bicycle Coordinator</li> <li>• Transit for Livable Communities Non-Motorized Transportation Pilot Program</li> </ul>
Adjust existing loop detectors to detect bicycles, especially in areas where designated Primary routes cross multi-lane roads	<ul style="list-style-type: none"> <li>• To increase cyclist safety and reduce hazardous conditions</li> <li>• To make traffic signals more effective for non-motorized vehicles</li> </ul>	<ul style="list-style-type: none"> <li>• City of Edina Engineering and Public Works Department</li> <li>• Bicycle Advisory Committee</li> <li>• Edina Bicycle Coordinator</li> </ul>
Add bicycle pavement markings to existing loop detectors	<ul style="list-style-type: none"> <li>• To increase cyclist safety and reduce hazardous conditions</li> <li>• To make traffic signals more effective for non-motorized vehicles</li> </ul>	<ul style="list-style-type: none"> <li>• City of Edina Engineering and Public Works Department</li> <li>• Bicycle Advisory Committee</li> <li>• Edina Bicycle Coordinator</li> </ul>
Install bike lanes over designated Primary routes of Edina's bicycle transportation network	<ul style="list-style-type: none"> <li>• To increase cyclist safety and comfort</li> <li>• To alert motorists to the presence of bicycles</li> <li>• To encourage use of bicycling as an important transportation option</li> </ul>	<ul style="list-style-type: none"> <li>• City of Edina Engineering and Public Works Department</li> <li>• Bicycle Advisory Committee</li> <li>• Edina City Council</li> <li>• Edina Transportation Commission</li> <li>• Edina Bicycle Coordinator</li> <li>• Blue Cross and Blue Shield of Minnesota</li> <li>• Transit for Livable Communities Non-Motorized Transportation Pilot Program</li> </ul>
Install blue bike lanes at recommended locations over Edina's Primary route network	<ul style="list-style-type: none"> <li>• To alert motorists to the presence of bicycles on designated lanes and to direct them to yield to bikes</li> <li>• To increase cyclist safety and reduce hazardous conditions</li> </ul>	<ul style="list-style-type: none"> <li>• City of Edina Engineering and Public Works Department</li> <li>• Bicycle Advisory Committee</li> <li>• Edina City Council</li> <li>• Edina Transportation Commission</li> <li>• Edina Bicycle Coordinator</li> </ul>

## FOR THE MEDIUM TERM

The following steps are recommended for implementation over the next two to four years:

Medium term: what to do	Why	Who
Set up bicycle safety training, education and encouragement programs in Edina schools	To encourage safe cycling for Edina students	<ul style="list-style-type: none"> <li>• Edina public schools</li> <li>• Individual private schools</li> <li>• Edina Bicycle Coordinator</li> <li>• Bicycle Advisory Committee</li> <li>• Transit for Livable Communities Non-Motorized Transportation Pilot Program</li> </ul>
Set up recurring bike-related community events	To highlight and encourage cycling	<ul style="list-style-type: none"> <li>• Bicycle Advisory Committee</li> <li>• Edina Bicycle Coordinator</li> <li>• Civic organizations</li> <li>• Edina Parks and Recreation Department</li> </ul>
Work to establish visitor bicycling programs	To encourage cycling by visitors to Edina	<ul style="list-style-type: none"> <li>• Bicycle Advisory Committee</li> <li>• Edina Bicycle Coordinator</li> <li>• Edina Parks and Recreation Department</li> <li>• Edina and nearby hotels</li> <li>• Edina Business Associations</li> </ul>
Set up rider incentives and TDM (Transportation Demand Management) programs for visitors and shoppers who arrive by bike	<ul style="list-style-type: none"> <li>• To encourage and increase cycling in Edina</li> <li>• To decrease demand on the City's automobile transportation network</li> </ul>	<ul style="list-style-type: none"> <li>• Edina Business Associations</li> <li>• Edina employers</li> <li>• Bicycle Advisory Committee</li> <li>• Edina Bicycle Coordinator</li> </ul>
Work with Southdale Mall management to implement improvements to Southdale's internal cycling network	To help cyclists to more comfortably access and use an important regional destination	<ul style="list-style-type: none"> <li>• Southdale Mall management</li> <li>• Bicycle Advisory Committee</li> <li>• Edina Transportation Commission</li> <li>• Edina Bicycle Coordinator</li> <li>• MetroTransit</li> </ul>
Install bicycle loop detectors at locations where designated Primary routes cross multi-lane roads and where tuning of existing loop detectors does not yield satisfactory results for cyclists	<ul style="list-style-type: none"> <li>• To increase cyclist safety and reduce hazardous conditions</li> <li>• To make traffic signals more effective for non-motorized vehicles</li> </ul>	<ul style="list-style-type: none"> <li>• City of Edina Engineering and Public Works Department</li> <li>• Bicycle Advisory Committee</li> <li>• Edina City Council</li> <li>• Edina Transportation Commission</li> <li>• Edina Bicycle Coordinator</li> <li>• Transit for Livable Communities Non-Motorized Transportation Pilot Program</li> </ul>
Develop the Regional Canadian Pacific Trail	To provide regional connections, encourage cycling and provide convenient transportation and recreation options for Edina's citizens	<ul style="list-style-type: none"> <li>• Bicycle Advisory Committee</li> <li>• Edina City Council</li> <li>• Edina Bicycle Coordinator</li> <li>• Three Rivers Park District</li> <li>• Transit for Livable Communities Non-Motorized Transportation Pilot Program</li> <li>• City of Edina Engineering and Public Works Department</li> </ul>

Medium term: what to do	Why	Who
Develop the Nine Mile Creek Regional Trail	To provide regional connections, encourage cycling and provide convenient transportation and recreation options for Edina's citizens	<ul style="list-style-type: none"> <li>• Three Rivers Park District</li> <li>• Bicycle Advisory Committee</li> <li>• Edina City Council</li> <li>• Edina Bicycle Coordinator</li> <li>• Transit for Livable Communities Non-Motorized Transportation Pilot Program</li> <li>• City of Edina Engineering and Public Works Department</li> </ul>
Advocate for the integration and inclusion of bicycle transportation as part of potential development of the Vernon and Eden Avenue Park and Ride	<ul style="list-style-type: none"> <li>• To encourage and increase cycling in Edina</li> <li>• To decrease demand on the City's automobile transportation network and meet TDM objectives</li> </ul>	<ul style="list-style-type: none"> <li>• City of Edina Engineering and Public Works Department</li> <li>• Metro Transit</li> <li>• Bicycle Advisory Committee</li> <li>• Edina City Council</li> <li>• Edina Transportation Commission</li> <li>• Edina Bicycle Coordinator</li> </ul>

## FOR THE LONG TERM

The following steps are recommended for implementation over the next four to seven years:

Long term: what to do	Why	Who
Install bicycle signal heads at recommended locations over Edina's designated Primary route network	<ul style="list-style-type: none"> <li>• To decrease potential conflicts between cyclists and motorists</li> <li>• To alert motorists to the presence of bicycles on designated lanes and to direct them to yield to bikes</li> <li>• To increase cyclist safety and reduce hazardous conditions</li> </ul>	<ul style="list-style-type: none"> <li>• City of Edina Engineering and Public Works Department</li> <li>• Bicycle Advisory Committee</li> <li>• Edina City Council</li> <li>• Edina Transportation Commission</li> <li>• Edina Bicycle Coordinator</li> <li>• Transit for Livable Communities Non-Motorized Transportation Pilot Program</li> </ul>
Develop Bike Station at Southdale Mall	<ul style="list-style-type: none"> <li>• To encourage and increase cycling in Edina</li> <li>• To decrease demand on the Edina's automobile transportation network</li> <li>• To increase the proportion of trips made by transit in Edina</li> </ul>	<ul style="list-style-type: none"> <li>• Southdale Mall management</li> <li>• MetroTransit</li> <li>• Edina City Council</li> <li>• Edina Transportation Commission</li> <li>• Bicycle Advisory Committee</li> <li>• Edina Bicycle Coordinator</li> <li>• City of Edina Engineering and Public Works Department</li> <li>• Individual businesses and employers</li> <li>• Transit for Livable Communities Non-Motorized Transportation Pilot Program</li> </ul>

# Section IV

## Appendix

*This section includes some additional resources that may be helpful for the work of this Plan.*

### IN THIS SECTION:

- A.1 - CITY OF EDINA 2008 COMPREHENSIVE PLAN OBJECTIVES**
- A.2 - THE METCOUNCIL'S 2030 TRANSPORTATION POLICY PLAN**
- A.3 - TYPES OF BICYCLE FACILITIES**
- A.4 - RECOMMENDED PROVISION OF BICYCLE PARKING SPACES**
- A.5 - BICYCLE PARKING FACILITY DESIGN GUIDELINES**
- A.6 - BIKEWAY FACILITY DESIGN SELECTION TOOL**
- A.7 - CHICAGO SAMPLE BICYCLE LANE DESIGN**
- A.8 - ESTIMATING IMPLEMENTATION COSTS**
- A.9 - TRAFFIC VOLUMES ON EDINA STREETS**
- A.10 - RULES OF THE ROAD FOR MINNESOTA CYCLISTS**

# A.1 City of Edina 2008 Comprehensive Plan Objectives

1. Maintain strong residential neighborhoods
2. Provide a level of City services that sets Edina apart from other communities
3. Provide capital investments that balance need and affordability
4. Develop and maintain a coordinated and balanced transportation system that provides a variety of choices among transportation modes
5. Take an active role in redevelopment strategies to create places of enduring quality and character
6. Support Edina Public Schools in maintaining an exemplary public education system for the community
7. Evaluate and efficiently employ technological advancements to provide City services
8. Continually update and refine Vision 20/20
9. Improve community health and fitness
10. Maintain a quality, sustainable environment

## A.2 The MetCouncil's 2030 Transportation Policy Plan

The following policies are part of the Metropolitan Council's 2030 Transportation Policy Plan. The section excerpted below deals directly with bicycle mobility.

### **POLICY 15: DEVELOP AND MAINTAIN EFFICIENT PEDESTRIAN AND BICYCLE TRAVEL SYSTEMS**

Safe, high-quality, continuous, barrier-free pedestrian and bicycle facilities must be developed, maintained and improved to function as an integral part of the region's transportation system. Compact, mixed-use development with facilities for pedestrians and bicyclists helps reduce short automobile trips. Over the last 10 to 15 years, the region has made an effort to direct a higher level of transportation investments to special facilities for pedestrians and bicyclists, either as freestanding projects or as part of larger transportation projects. As the region promotes the development of mixed-use centers, providing facilities for these non-motorized modes becomes an increasingly important component of planning at the city, county and regional level. As recognized in the federal surface transportation law, well-developed pedestrian and bicycle systems help promote energy conservation, reduce the pressure on the highway system, and preserve the environment. In addition, recent research indicates that residents of places designed with accommodations for bicyclists and pedestrians are more active and therefore healthier than residents of other areas.

#### **Strategy 15a: Funding Priorities for Pedestrian and Bicycle Projects**

Funding priority will be given to bicycle and pedestrian projects that:

- Serve the greatest number of likely users, especially commuters;
- Support compact and mixed-use development;
- Serve a valid transportation need or purpose;
- Provide safety and security for users, or help educate residents regarding bicycle and pedestrian safety;
- Are cost-effective;
- Are integrated with other transportation modes;
- Provide a direct connection to a multi-modal transfer facility;
- Link schools, office, commercial, industrial, recreational and residential destinations; and
- Fill gaps in or add continuous segments to the regional bicycle and pedestrian systems.

Projects must be included in or consistent with the policies of a comprehensive plan or an official agency capital improvement program in order to receive federal funding (see Strategy 20c).

#### **Strategy 15b: Pedestrian and Bicyclist Linkages to Transit**

Linking pedestrian and bicycle facilities to transit is important to developing a multi-modal transportation system for the region. The Council installs bike racks on all buses. This allows travelers to use their bicycle at either end of a transit trip in order to reach their destination. Good sidewalk access and on-street bike lanes in the vicinity of bus stops and transitway stations can encourage travelers to use transit. Heated bus shelters, marked crosswalks, bike racks and lockers, and other facilities for pedestrians and bicyclists will be provided at park-and-ride lots, transit hubs and at major destination centers throughout the region, including the downtowns. To encourage a strong intermodal link, the operating policy for all transit modes, including LRT and commuter rail, will be to allow bicycles on board, and bicycle racks and lockers will be located at transitway stations. Bicycle and walking paths to the stations and on-site bike storage are important components to consider in station design in order to achieve strong connections with the community and create a quality bicycle/pedestrian environment around the stations.

### **Strategy 15c: Pedestrian and Bicycle Elements of Local Comprehensive Plans**

No pedestrian or bicycle project will be funded through regional transportation project selection processes unless included in or consistent with the policies of a state or regional plan, a city or county comprehensive plan found to be consistent with Council plans, or an adopted capital improvement program.

Pedestrian and bicycle elements of local comprehensive plans shall:

- Promote safety of pedestrians and bicyclists;
- Provide connections to adjacent (local and county) jurisdictions and their walkway and bikeway systems;
- Fill gaps and remove barriers in the existing local, county or regional walkway/bikeway systems;
- Design and locate walkways and bikeways to serve both travel and leisure purposes;
- Provide pedestrian and bicycle facilities to and within high activity nodes, especially commercial and transit centers; and
- Include programs for educating motorists, pedestrians and bicyclists to increase awareness of and respect for the rights and responsibilities of all three types of travelers.

### **Strategy 15d: Coordinated Planning Among Local Jurisdictions**

Local, county, regional and state agencies will coordinate planning efforts to develop efficient and continuous pedestrian and bikeway systems, eliminate critical gaps and ensure adequate interjurisdictional connections and signage. The Council publishes a Regional Parks Map that shows the state and regional off-road trails in the metropolitan area, and state, regional and local agencies are nearing completion of a metropolitan bikeway map. Cities and counties can use these maps as starting points to develop integrated metro wide walkway and bikeway systems.

### **Strategy 15e: Pedestrian and Bikeway Improvements to Roadways**

When a principal or minor arterial road is constructed or reconstructed, off-road walkway designs and both on- and off-road bikeway designs should be considered, with special emphasis placed on safety and barrier removal. Bikeways and combined bicycle/pedestrian facilities shall meet MnDOT State Aid standards and AASHTO guidelines, and also consider Mn/DOT Bicycle Transportation Planning and Design Guidelines. Pedestrian facilities will be provided along roads when feasible, as many roads in the region currently do not have adjacent sidewalks or separated pedestrian paths. Bicycle facilities shall be provided within existing rights-of-way when feasible instead of acquiring exclusive new rights-of-way for these facilities. Every bridge that is newly constructed or reconstructed that removes or crosses a barrier for pedestrians and bicyclists must include a walkway and bikeway to allow these travelers safe access to the same regional resources as motorized vehicles unless a reasonable alternative exists within one quarter mile for pedestrians or one mile for bicyclists. When feasible, bicycle facilities should be separate from pedestrian facilities.

### **Strategy 15f: Pedestrian and Bicyclist Education**

To maximize safe and pleasant pedestrian travel, the Council encourages educational promotions to increase awareness of and respect for the rights and responsibilities of pedestrians and bicyclists. Local, state and regional agencies should be encouraged to establish safety programs oriented toward educating the public in the proper use of sidewalks and crosswalks by pedestrians and of bicycle lanes and paths by bicyclists. Programs will also provide training in proper bicycling procedures such as making turns, stopping at stop signs and signals. In addition, programs will educate motorists regarding pedestrian roadway crossing laws, how to safely interact with bicyclists riding legally in the roadway, and generally to be aware of pedestrians and bicyclists. The Council also supports the implementation of Safe Routes to Schools programs at the local level and programs aimed at teaching children to walk and bike safely, including the use of proper equipment and helmets while bicycling.

## A.3 Types of bicycle facilities

This section provides a brief summary of facilities, treatments and technologies that may be helpful in increasing Edina's bicycle orientation. Some of the treatments listed here were provided by Transit for Livable Communities ([www.tlcmnnesota.org](http://www.tlcmnnesota.org)) as potentially eligible for funding under Non-Motorized Transportation Pilot Program funds.

### ADVANCE BOXES

Advance boxes allow cyclists to wait in front of motorists at red lights and enter the intersection first after the signal changes. Generally, they are well-marked by paint. Advance boxes are extensively used in Europe and have been piloted in several US cities including Davis, California. They are often accompanied by an exclusive bicycle signal (see Bicycle Signal Heads) that turns green a few seconds before the signal for motorists. Advance boxes work best in locations where well-used bike lanes or Bicycle Boulevards exist; where the street to be crossed is busier than the street with the advance boxes; and where a large number of the cyclists using the advance boxes will be turning left.



*Advance box in Vancouver, British Columbia.*

### BICYCLE BOULEVARDS / BICYCLE STREETS

Although bike boulevards or bicycle streets can be located anywhere, they are generally located on streets that parallel nearby arterial street where bike lanes are not feasible. To attract bicyclists who want to travel at a steady pace, bicycle boulevards must be properly designed and engineered. Typically, many stop signs are removed to give priority to bicycle movement. Other features of bicycle boulevards or bicycle streets include:

- Minimal delays at stoplights
- Restricted automobile access (aside from local traffic)
- Traffic calming measures to reduce motor vehicle speeds and through trips
- Special pavement markings denoting a bicycle boulevard
- Reduction of automobile speed limits to 25 miles per hour or lower



*A bicycle boulevard.*

### BICYCLE SIGNAL HEADS

Bicycle signal heads are traffic lights that give cyclists a few seconds of a head start in passing through an intersection. They

are especially useful when used in conjunction with Advance Boxes, and are also recommended in places where a right turn lane for motorists crosses a bicycle side path. Right-turning vehicles receive a red arrow signal during the green phase for bicyclists.

## BICYCLE PARKING FACILITIES

Lack of bicycle parking facilities is a significant barrier to bicycle use. Providing bike racks at locations like schools, shopping centers, workplaces, libraries, post offices, recreational areas, and other centers of activity will, at relatively low cost, help improve Edina's bicycle orientation.



***Bike parking should be provided adjacent to principal building entrances.***

Racks should be located in highly visible locations near the front entrance of an establishment and closer to the building than motor vehicle parking. Even if located on private property, they should remain available to the general public. A number of cities (including Palo Alto, California and Madison, Wisconsin) require that all new developments provide adequate bicycle parking and specify that the spaces “cannot be farther away than the closest car parking space.”

## BIKE LANES

Bike lanes are on-street facilities at least 5 feet wide for each-way travel consistent with the flow of traffic and generally on the right side of the travel lane(s). As much width as possible should be provided for bike lanes; treatments, including the use of colors, can make lanes more easily noticed.

On streets that are one-way for cars, consideration should be given to providing a contra-flow bike lane in addition to a bike lane going with traffic. Two-way bike lanes (not separated), although in current use in Minneapolis and other US cities, are inconsistent with AASHTO standards.



***On-street bike lanes in Minneapolis.***

Bike lanes are generally marked with a painted line, although some bicycle lanes have physical barriers between motorized traffic and bicyclists.

## BIKE PATHS, SHARED-USE OR MULTI-USE TRAILS

Most bike paths are shared-use facilities that accommodate bicyclists, pedestrians, and skaters. These off-street facilities are often located along rivers, railroad corridors, utility easements,

and canals, or through parks and other open space. Bike paths and multi-use trails should safely allow for two-way travel with a minimum total width of 10 feet (12 feet when shared with pedestrians). Whenever possible, pedestrians should be separated from the bicyclists on bike paths and multiuse trails.

Two-way trails adjacent to urban streets (side paths) are not recommended due to the high number of intersections and driveway crossings. One-way on-street bike lanes for bicyclists and sidewalks for pedestrians should be used instead. If side paths are deemed the only suitable solution, one-way trails should be placed on both sides of the roadway for bike travel in the same direction as motorized traffic. Such trails should be a minimum of seven feet wide and well marked with one-way directional arrows. Two-way side paths are not recommended because of safety concerns.



*View of the Midtown Greenway, a shared-use facility in Minneapolis.*

## BIKE ROUTES

The term “bike route” may denote any corridor recommended for bicycle travel. For planning purposes, the term is limited to roads marked with bike route signs. There is no uniform or consistent methodology to determine which roads are suitable for such a designation. Bike route signs can help cyclists navigate gaps that exist in the bikeway network. In such situations, the signs should also include information directing cyclists to the nearest Bike Path or Bike Lane.

## BIKE STATIONS

Bike stations are facilities where people can park or rent bikes, get bikes fixed, obtain maps, and use shower and locker facilities. Most bike stations, especially in Europe, are connected to a train station or other major transit hub, allowing for convenient multi-modal travel. Full-service bike stations with sheltered parking for 3,000 or more bicycles can be found in Germany, Japan, Denmark, and the Netherlands.

The possibility of providing a bike station at Southdale Mall is recommended elsewhere in this Plan. The City of Edina, Mall management, and the City’s Bicycle Advisory Committee may wish to partner with nonprofit organizations and other civic groups to create a bike station there to serve the needs of shoppers, workers and transit riders who may use it as a bicycle “Park and Ride.”



*Bike station in San Francisco adjacent to a BART (Bay Area Rapid Transit) station.*

## BRIDGES AND OVERPASSES

This Plan does not recommend construction of overpass or similar structures where a suitable at-grade (ground level) crossing is possible. Studies show that most pedestrians and bicyclists will avoid an overpass if an at-grade crossing is available. Overpasses and bridges cost far more to build, and take more time to use and demand more exertion from users. Techniques to reduce delays and increase the safety of non-motorists at major intersections should be fully explored before an overpass or underpass is considered.



*The bridge carrying the Midtown Greenway over Hiawatha Avenue in Minneapolis.*

## CONTRA-FLOW BIKE LANES

Special lanes allowing bicyclists to travel in the opposite direction of motorists on one-way streets have been successfully piloted in Minneapolis and other cities. Since this is an innovative strategy in the US, lanes need to be well marked with warning signs at all side streets. Contra-flow lanes should be located on the side of the street that is consistent with normal two-way movement. To prevent wrong way riding within the contra-flow lane, a regular bike lane (on the opposite side of the street) should also be provided.



*Contra-flow bike lanes in Madison, Wisconsin.*

## DIVERTERS

Diverters are structures (including bollards, landscaped medians, or public art) that compel motor vehicles to turn right or left on a street where bicyclists and pedestrians are free to continue in the same direction. Street markings (preferably colored asphalt) should be used to help non-motorists safely cross a street and move through the diverters. This Traffic Calming approach is quite useful in creating Bicycle Boulevards.

## INCENTIVE PROGRAMS

Incentive programs seek to encourage more people to walk and bike. City employees in Olympia, Washington, for example, receive \$2 per day if they walk, bike, or use public transportation to get to work. In Arlington, Virginia, city employees who ride or walk to work at least three times a week receive an extra \$35 per month. The City of Westerville, Ohio, provides employees with an extra 15 minutes of vacation time for each day they bike or walk to work (one day of vacation roughly every six weeks for full-time bikers and walkers). These cities say that the incentives pay for themselves through savings in parking costs, health

benefits, and increased productivity at work.

## MEDIAN ISLANDS

Medians can become a refuge for pedestrians and bicyclists trying to cross a busy roadway. With a safe haven in the middle of the street, bicyclists and pedestrians only need to negotiate half of the motor traffic at a time. A 10 foot wide median is the minimum recommended to accommodate cyclists pulling trailers.

## MID-BLOCK CROSSINGS

Mid-block crossings are often safer than intersection crossings because they are free of vehicle turning movements. These crossings are especially useful in areas with high levels of jaywalking, since they provide clear places to cross the street at often-jaywalked locations. Marked mid-block crosswalks should be accompanied by signs and/or special signals to ensure motorist compliance and pedestrian safety. Mid-block crossings (and trail crossings) on roads with more than two lanes should always be signalized or provided with medians or refuge islands.

## MULTIPLE LANE CONVERSION/REDUCTION PROJECTS

Typical four-lane streets can be converted to three lanes with negligible impact on the level of service for motorists. Four to three lane conversions provide a single lane for each direction of travel, but allow for left turns from the center lane. These conversions typically free up enough space for Bike Lanes to be added on both sides of the street and to improve conditions for pedestrians. There is also considerable potential for six to five lane conversions and, on many one-way streets, three to two lane conversions. Four to three lane conversions have been successfully used on major arterial roads with annual average daily traffic (AADT) greater than 25,000.

## RAISED BIKE LANES / CYCLE TRACKS

Also known as “cycle tracks,” these on-street facilities are typically separated from motorized traffic by a parking lane. A rise roughly equal to half the usual curb height prevents cars in the parking lane from occupying any part of the bike lane. Raised bike lanes should be a minimum of eight feet to allow for riding two abreast and be built in one-way configurations on both sides of the street. In many ways, raised bicycle lanes provide the security of off-street bike lanes without the high costs for a separate right of way



*Cycle track in Esslingen, Germany.*

and without the inherent safety problems at crossings.

## ROAD NARROWING OR LANE NARROWING

It's commonly assumed that Bike Lanes, wider sidewalks and other improvements for bicyclists and pedestrians will require wider roads and more right-of-way. Experience in Minnesota and elsewhere, however, shows that significant improvements can be made without widening the current roadway. By re-striping travel lanes or reducing the number of travel lanes (often called a "road diet"), pedestrian and bicyclist needs can be accommodated without widening the street.

Where traffic volumes allow, consideration should be given to reducing travel lanes from four to three lanes, using a center turn lane to allow space for bike lanes on both sides of the street. Reducing travel lane widths to 11 feet or lower (which in some cases require a variance from local, county or state officials), especially on streets with four or more lanes, can make room for bike lanes. Even if enough space for a regulation bike lane can't be made available, simply having a wider curb lane can significantly improve the cycling environment. Many U.S. cities (including Boulder, Portland, and Chicago) have reduced lane widths on urban arterials to 10 feet in order to add space for bicyclists.



*Bike route sign in Portland, Oregon.*

## SIGNS

Distance/Destination signs, which provide information about distance to particular destinations, are an effective way to promote walking and biking and should be considered as part of any bikeway or walkway project.

## UNDERPASSES

Although this Plan elsewhere recommends replacement of the underpass under York Avenue, in general underpasses are not recommended where suitable at-grade crossings are feasible.

When underpasses are necessary, they should be designed and constructed in a way that allows maximum light to shine in, and the entrances should be clearly visible from the street level. These measures will reduce personal safety concerns. (See Bridges/Overpasses). Minimizing the slope will increase safety and convenience.



*Underpasses should be designed to be well-lit, open and comfortable.*

## A.4 Recommended provision of bicycle parking spaces

The following table presents the minimum number of parking spaces recommended for land uses in Edina. Long-term spaces are defined as those used for a period longer than two hours. Please see Chapter 2.5 “Bicycle parking and other end of trip facilities” for additional information. Please note that installation of a single recommended “inverted U” bicycle rack provides 2 bicycle parking spaces.

Land use	Type	Total number of spaces required	Long-term parking	Short-term parking
Residential	Single and two family	None	-	-
	Multi-family apartments, townhomes, condominiums	1 long-term per unit, plus 4 minimum or 1 per every 10 units short-term	1 per unit	4 minimum or 1 per every 10 units
	Senior apartments / Retired adult centers	1 per every four units, plus 1 per every 10 units short-term	1 per every 4 units	4 minimum or 1 per every 10 units
Commercial	Hotel / motel	6 minimum or 1 per 15 rooms	60%	40%
	Office Restaurant Retail sales and service	1 per every 750 ft <sup>2</sup> of floor area for first 15,000 ft <sup>2</sup> , plus 1 per every 1,500 ft <sup>2</sup> of additional floor area	50	50
	Malls and shopping centers	1 per every 750 ft <sup>2</sup> of leasable area for first 15,000 ft <sup>2</sup> , plus 1 per every 1,500 ft <sup>2</sup> of additional leasable area	30	70
	Automobile parking facilities	10 minimum or 1 per every 20 automobile parking spaces	100	-
Industrial	Manufacturing	4 minimum or 1 per every 7,500 ft <sup>2</sup> of floor area	100	-
	Warehousing	4 minimum or 1 per every 20,000 ft <sup>2</sup> of floor area	100	-
Institutional	Transit hubs Park and Ride facilities	15 minimum or 1 per every 15 automobile parking spaces	80	20
	School staff (for all levels)	1 per every 10 employees (add this total to student bike parking provision for each school)	10	90
	Elementary schools	1 per every 10 students	-	100
	Middle schools	1 per every 8 students	-	100
	High schools	1 per every 8 students	-	100
	Libraries Museums Art Galleries	1 per every 300 ft <sup>2</sup> floor area	20	80
	Churches and religious institutions	1 per 50 members	-	100
	Medical centers and hospitals	1 per every 1,500 ft <sup>2</sup>	75	25
Recreational	Community center	1 per every 240 ft <sup>2</sup> of floor area	20	80
	Pools	1 per every 300 ft <sup>2</sup> of surface area	20	80
	Gymnasium and spa	1 per every 240 ft <sup>2</sup> of floor area	20	80

# A.5 Bicycle parking facility design guidelines

Easily accessible, secure and convenient bicycle parking is a critical component of inviting people to make the choice to travel by bicycle.

Providing functional, visible and secure bicycle parking inexpensively and efficiently increases a building’s parking capacity, serves those who use bicycles as a mode of transportation, and supports and encourages bicycle use.

Choosing appropriate components and layout for a bicycle parking facility will improve the conditions for bicycling to a location.



*“Hanger” bike racks in Iowa City, Iowa.*

## BIKE PARKING COMPONENTS

Functional and convenient bike parking results from the proper design and combination of the following three elements:

- The design of the bike rack itself, which supports the bicycle
- The rack area, which may include several individual bike racks
- The location of the rack area, and its relationship to the building entrance it serves and the cyclists’ approach to that entrance

### THE BIKE RACK

The rack should support the bicycle upright by its frame in two places, enabling the frame and one or both wheels to be secured while preventing the bicycle from tipping over. Additionally, it should not require a cyclist to lift their bike to be able to lock it securely - a useful rack design should allow a cyclist to roll-in or back-in their bicycle to lock it.

Comb, toast, schoolyard, and other racks that provide no support for the bicycle frame are not recommended.

### THE RACK AREA

The rack area is the “bike parking lot” that the racks and the circulation needed to move in and out of the racks define.

To be functional and useful, certain minimum clearances and access rules should be observed:



*Angled “post and loop” installation in Minneapolis minimizes space requirement for racks and maximizes usable pedestrian space.*



*Two types of rack recommended by this Plan: the “inverted U” (left) and the “post and loop” (right).*

- Individual racks should be located no closer than 30 inches to each other in order to allow sufficient space for easy entry and removal of bicycles on either side of the rack
- No rack element should be closer than 24 inches to a wall or other obstruction in order to allow full usability and easy access to perimeter racks
- Large rack areas, or rack areas with high turnover, should provide more than one entrance to ease circulation of cyclists and pedestrians
- Rack areas should preferably offer protection from rain and snow in order to ease loading and unloading of bikes and to keep bike saddles dry
- When multiple rows of bike racks are provided, the circulation space provided from the wheel of a bike on one row to the closest wheel of a bike on the next row should be a minimum of 48 inches

### LOCATION OF THE RACK AREA

One of the most important considerations in providing useful and functional bicycle parking is the location of the rack area in relation to the building it serves. Some guidelines for locating the rack area include:

- The recommended location for a bicycle parking area is immediately adjacent to the entrance it serves, preferably within 50 feet. It should be located as close as possible without blocking the entrance or inhibiting pedestrian movement to or from the building
- The rack area should be clearly visible from the entrance it serves and from the building's approach line
- Bike rack areas should be as close or closer than the nearest car parking space
- Buildings with multiple active entrances should include bike rack areas at each entrance
- Racks that are hard to find, are far from principal entrances or perceived to be unsafe will not be used by cyclists



**The “comb” bike racks found in many schools (including in Edina) are not recommended as they only secure a bike’s wheel, from which the frame is easily detached.**

### DID YOU KNOW?

A number of cities (including Palo Alto, California and Madison, Wisconsin) require that all new developments provide adequate bicycle parking and specify that the spaces “cannot be farther away than the closest car parking space.”



**“Wave” racks are not recommended because, as a result of their design, cyclists tend to use them as if they were a single “inverted U.” This limits their actual capacity to two bikes regardless of the potential or stated capacity.**

## A.6 Bikeway facility design selection tool

Prepared by the Minnesota Department of Transportation and included in the March 2007 Mn/DOT Bikeway Facility Design Manual.

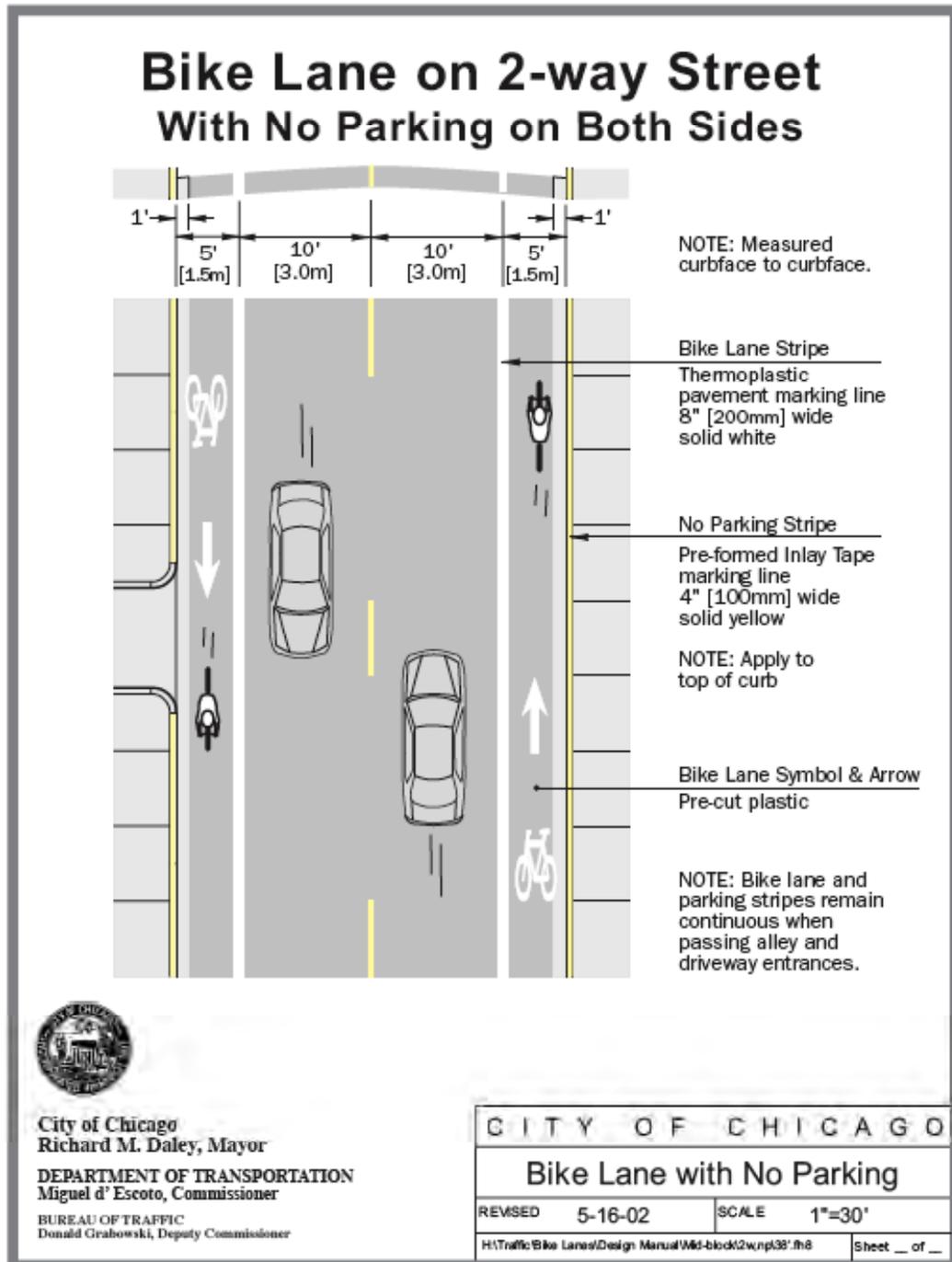
The Mn/DOT Bikeway Facility Design Manual is available at:  
<http://www.dot.state.mn.us/bike/bikewaysdesignmanual.html>

<b>Table 4-1: Bikeway Design Selection for Urban (Curb and Gutter) Cross Section – English Units</b>							
<b>Motor Vehicle ADT (2 Lane)</b>		<500	500-1,000	1,000-2,000	2,000-5,000	5,000-10,000	>10,000
<b>Motor Vehicle ADT (4 Lane)</b>		N/A	N/A	2,000-4,000	4,000-10,000	10,000-20,000	>20,000
<b>Motor Vehicle Speed</b>	25 mph	SL	WOL	WOL	WOL	BL = 5 ft	Not Applicable
	30 mph	SL with sign	WOL	BL = 5 ft	BL = 5 ft	BL = 6 ft	BL = 6 ft
	35 - 40 mph	WOL	BL = 5 ft	BL = 5 ft	BL = 6 ft	BL = 6 ft	BL = 6 ft or PS = 8 ft
	45 mph and greater	BL = 5 ft	BL = 5 ft	BL = 6 ft	BL = 6 ft	BL = 6 ft or PS = 8 ft	SUP or PS = 10 ft
BL = Bicycle Lane, SL = Shared Lane, WOL = Wide Outside Lane, SUP = Shared-Use Path, PS = Paved Shoulder							

## A.7 City of Chicago sample bicycle lane design

The City of Chicago has several years of experience providing on-street bike lanes on relatively narrow streets. A sample design for a 30 ft wide street, incorporating 10 ft wide automobile travel lanes and 5 ft wide bike lanes is included here.

A set of Chicago's standard bike lane designs can be downloaded from the City of Chicago's website at: [http://egov.cityofchicago.org/webportal/COCWebPortal/COC\\_EDITORIAL/bike\\_lane.pdf](http://egov.cityofchicago.org/webportal/COCWebPortal/COC_EDITORIAL/bike_lane.pdf)



## A.8 Estimating implementation costs

Following is a brief and simple list of estimated costs for implementing some of the items recommended in this Plan. Estimated costs are based on a database of national figures collected in 2002 and are inflation-adjusted for 2008 construction and localized to the Twin Cities region.

An online, interactive version of this estimating tool can be found at <http://www.bicyclinginfo.org/bikecost/>

### STRIPING BICYCLE LANES

As recommended in Chapter 2.4:

Treatment description	Units	Cost (\$ per unit)
Bicycle lane arrow	each	72
Bicycle symbol	each	96
Shared lane arrow (“sharrow”)	each	96
Pavement striping	mile	4,400
Colored pavement	square foot	12

### SIGNS, SIGNALS AND WAYFINDING

As recommended in Chapter 2.7:

Treatment description	Units	Cost (\$ per unit)
Sign (with post)	each	270
Loop detector	each	2,025
Bicycle signal	each	13,500

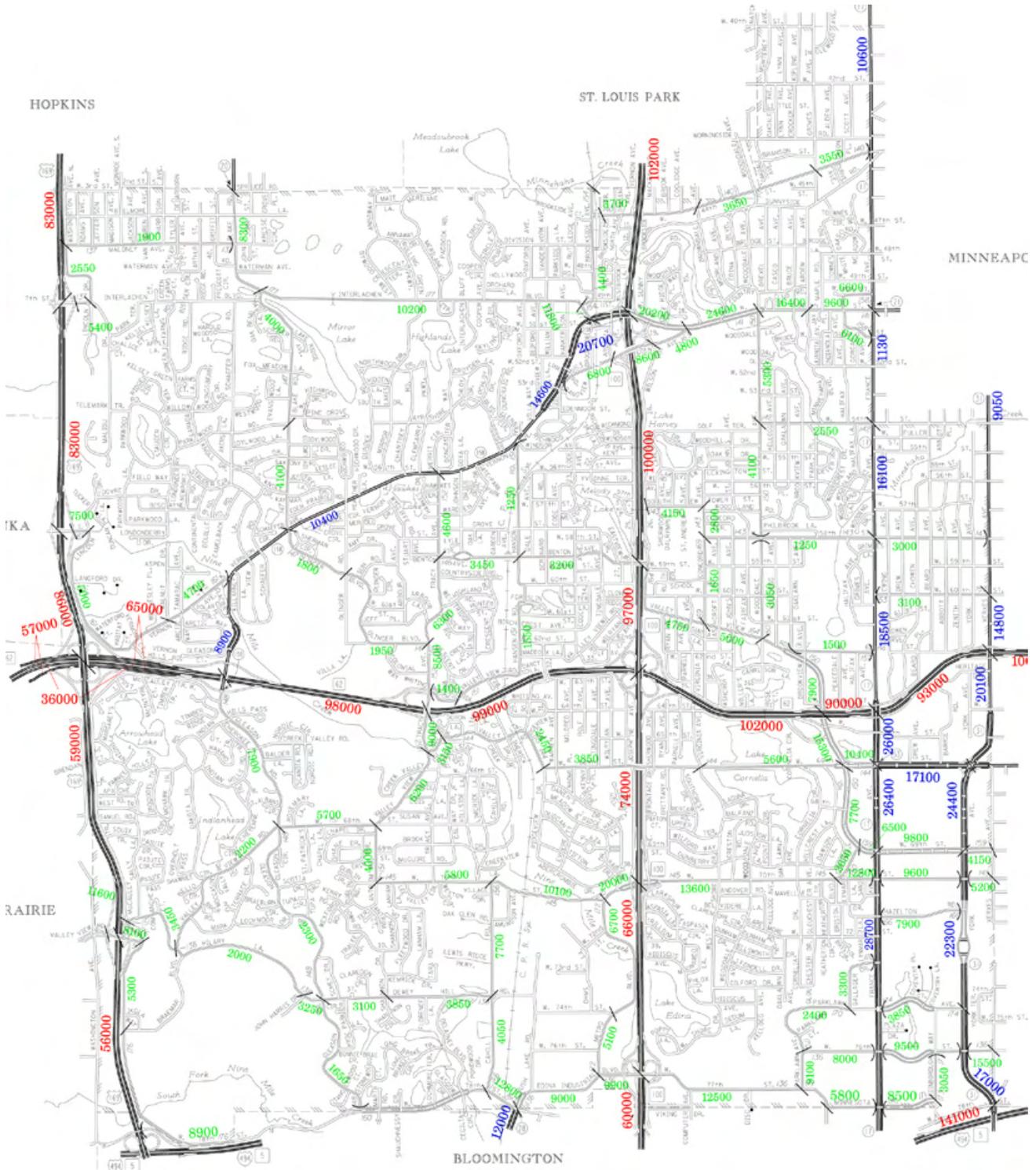
### BICYCLE PARKING FACILITIES

As recommended in Chapter 2.6:

Treatment description	Units	Cost (\$ per unit)
Parking rack (recommended “inverted U,” provides 2 bike parking spaces, installed)	each	250
Bicycle locker (long-term bicycle parking, fits 2 bikes)	each	1,350
Bike station (does not include operational expenses)	each	250,000

# A.9 Traffic volumes on Edina streets

A map showing 2005 Average Daily Traffic (ADT) volumes for Edina streets is provided below.



# A.10 Rules of the Road for Minnesota cyclists

The following summary of Minnesota Bicycle Traffic Laws (M.S. 169.222) was provided by the Bike Edina Task Force (BETF). Sharing this information as part of education campaigns for children, seniors and other adults will help improve safety on Edina's streets.

1. Ride on the right with traffic; obey all traffic signs & signals; bicyclists have all rights/duties of any other vehicle driver. (subd. 1)
2. Legal lights and reflectors are required at night. (subd. 6a)
3. Arm signals required during last 100' prior to turning (unless arm is needed for control) and while stopped waiting to turn. (subd. 8)
4. Cyclists may ride two abreast on roadways as long as it does not impede normal & reasonable movement of traffic. (subd. 4c)
5. When passing a bicycle or pedestrian, motor vehicles shall leave at least 3 feet clearance until safely past the bicycle or pedestrian (169.18 subd. 3)
6. Ride as close as practicable to the right hand curb or edge of roadway except;
  - a) When overtaking a vehicle
  - b) When preparing for a left turn
  - c) When necessary to avoid conditions that make it unsafe, e.g. fixed or moving objects, such as hazards, or narrow-width lanes. (subd. 4a)
7. Yield to pedestrians on sidewalks and in crosswalks; give audible signal when necessary before overtaking. (subd. 4d)
8. Riding on sidewalks within business districts is prohibited unless locally permitted. (subd. 4d)
9. It is illegal to hitch rides on other vehicles. (subd. 3)
10. Only one person on a bike unless it's equipped for more, or a

## **BIKEEDINA GUIDE TO MINNESOTA BIKING**

*Before every bike ride perform a Quick ABC*

A - Check the Air pressure in the tires

B - Make sure the Brakes work

C - Check the Chain and gears are working

Quick - Make sure the Quick release levers are closed

Always wear your Helmet

legal baby seat is used. (subd. 2)

11. It is illegal to carry anything that prevents keeping one hand on handlebars or proper operation of brakes. (subd. 5)
12. Bicycle size must allow safe operation. Also, handlebars must not be above shoulder level. (subd. 6c & 6d)
13. Unless locally restricted, parking on the sidewalk is legal as long as it does not impede normal movement of pedestrian or other traffic. (subd. 9a)
14. Legal parking on a roadway, that does not obstruct legally parked motor vehicles, is allowed. (subd. 9b)

#### **EDINA BICYCLE RESOURCES**

- Bike Edina  
[www.bikeedina.org](http://www.bikeedina.org)
- Minnesota DOT Bicycle & Pedestrian  
[www.dot.state.mn.us/bike.html](http://www.dot.state.mn.us/bike.html)
- State Bicycle Advisory Committee  
[www.mnsbac.org](http://www.mnsbac.org)
- Share the Road:  
[www.sharetheroadmn.org](http://www.sharetheroadmn.org)

## **Appendix T-3**

### **Travel Forecasting Model and Methods**

## **TRAVEL FORECASTING MODEL AND METHODS**

Travel forecasting is based upon computer modeling which uses land use/socioeconomic data in conjunction with transportation network information to determine future roadway traffic levels. The projections for the Edina transportation chapter of the 2030 Comprehensive Plan Update were performed by WSB & Associates, Inc. (WSB) using the Metropolitan Council regional travel model. The regional model has been set up to focus primarily on regional flows on important arterials, so some local adjustments are required when using it to evaluate individual areas like cities and lower level roadways within those cities.

### **Traffic Analysis Zone System and Information**

As with any transportation forecasting model, the core of the regional transportation model is the use of Transportation Analysis Zones (TAZs). The Metropolitan Council has divided the entire metro region into a series of TAZs. The TAZs which have been established for Edina are depicted on *Figure 7.11* of the main document. Demographic and employment data is loaded into the model for each zone. The Metropolitan Council has projections for each TAZ for 2030 based on their assessment of information in previous Comprehensive Plans for all of the Metro cities. The City of Edina has made some adjustments to those forecasts based on local conditions and information. These adjustments have been discussed and coordinated with Metropolitan Council staff.

The allocation of trips from each TAZ to adjacent roadways is set within the regional model. In some instances, these allocations were revised based on a more detailed assessment of local land use and trip distribution patterns than what the Met Council uses. City staff and consultants took the Metropolitan Council's generalized 2030 TAZ forecasts and fine-tuned them based on the most current assumptions regarding future land use redevelopment, and on the knowledge of local conditions and issues.

### **Transportation Network**

As part of the forecasting process, a roadway network needs to be assumed so that capacities and linkages can be calculated. The modeling for the 2030 Edina transportation chapter assumed no substantial roadway improvements in the Edina area.

### **Preliminary Results**

Once the population, household, and employment (broken down to retail versus non-retail) information is loaded into the model, by TAZ as discussed above, the model calculates trip generations and attractions based on this data. It then routes those trips throughout the network of TAZs based on a complex series of algorithms using assumptions from travel behavior surveys and other factors. It also assigns mode choice (e.g. private vehicle, transit, bike, pedestrian) for each TAZ based on historical data, local context, and future assumptions. The vehicular trips area assigned by the model to

individual roadway links based on distance, speed, and congestion factors associated with the links.

### **Trendline/Quality Check - Results**

The 2030 traffic volume results were evaluated based on historic traffic trends for the study area, and consistency with other studies. As is generally the case, local adjustments were required based on this trend analysis, knowledge of local conditions, and common traffic engineering assumptions and judgment. The resulting volumes appear on *Figure 7.3* of the main document.

**Appendix T-4**

**Mn/DOT and Hennepin County Access Management  
Guidelines**

Figure 2.1: Access Categories

Category	Land-Use or Facility Type	Typical Functional Classification	Typical Posted Speed
<b>1 - High-Priority Interregional Corridors (IRCs)</b>			
1F	Interstate Freeway	Interstate Highways	55 – 75 mph
1AF	Non-Interstate Freeway	Principal Arterials	55 – 65 mph
1A	Rural	Principal Arterials	55 – 65 mph
1B	Urban / Urbanizing	Principal Arterials	40 – 55 mph
1C	Urban Core	Principal Arterials	30 – 40 mph
<b>2 - Medium-Priority Interregional Corridors</b>			
2AF	Non-Interstate Freeway	Principal Arterials	55 – 65 mph
2A	Rural	Principal Arterials	55 – 65 mph
2B	Urban / Urbanizing	Principal Arterials	40 – 55 mph
2C	Urban Core	Principal Arterials	30 – 40 mph
<b>3 - Regional Corridors</b>			
3AF	Non-Interstate Freeway	Principal Arterials	55 – 65 mph
3A	Rural	Principal/Minor Arterials	45 – 65 mph
3B	Urban / Urbanizing	Principal /Minor Arterials	40 – 45 mph
3C	Urban Core	Principal/Minor Arterials	30 – 40 mph
<b>4 - Principal Arterials in the Twin Cities Metropolitan Area and Primary Regional Trade Centers (Non-IRCs)</b>			
4AF	Non-Interstate Freeway	Principal Arterials	55 – 65 mph
4A	Rural	Principal Arterials	45 – 55 mph
4B	Urban / Urbanizing	Principal Arterials	40 – 45 mph
4C	Urban Core	Principal Arterials	30 – 40 mph
<b>5 - Minor Arterials</b>			
5A	Rural	Minor Arterials	45 – 55 mph
5B	Urban / Urbanizing	Minor Arterials	40 – 45 mph
5C	Urban Core	Minor Arterials	30 – 40 mph
<b>6 - Collectors</b>			
6A	Rural	Collectors	45 – 55 mph
6B	Urban / Urbanizing	Collectors	40 – 45 mph
6C	Urban Core	Collectors	30 – 40 mph
<b>7 - Specific Area Access Management Plans</b>			
7	All	All	All

Figure 3.1 – Summary of Recommended Street Spacing for IRCs

Category	Area or Facility Type	Typical Functional Class	Public Street Spacing		Signal Spacing
			Primary Full-Movement Intersection	Secondary Intersection	
<b>1 High-Priority Interregional Corridors &amp; Interstate System (IRCs)</b>					
1F	Interstate Freeway	Principal Arterials	Interchange Access Only		⊘
1AF	Non-Interstate Freeway		Interchange Access Only (see Section 3.2.7 for interim spacing)		See Section 3.2.5 for Signalization on Interregional Corridors
1A	Rural		1 mile	1/2 mile	
1B	Urban/Urbanizing		1/2 mile	1/4 mile	
1C	Urban Core		300-660 feet dependent upon block length		
<b>2 Medium-Priority Interregional Corridors</b>					
2AF	Non-Interstate Freeway	Principal Arterials	Interchange Access Only (see Section 3.2.7 for interim spacing)		See Section 3.2.5 for Signalization on Interregional Corridors
2A	Rural		1 mile	1/2 mile	
2B	Urban/Urbanizing		1/2 mile	1/4 mile	
2C	Urban Core		300-660 feet, dependent upon block length		
<b>3 Regional Corridors</b>					
3AF	Non-Interstate Freeway	Principal and Minor Arterials	Interchange Access Only (see Section 3.2.7 for interim spacing)		Interim
3A	Rural		1 mile	1/2 mile	See Section 3.2.5
3B	Urban/Urbanizing		1/2 mile	1/4 mile	1/2 mile
3C	Urban Core		300-660 feet, dependent upon block length		1/4 mile

Figure 3.2 – Summary of Recommended Street Spacing for Non-IRCs

Category	Area or Facility Type	Typical Functional Class	Public Street Spacing		Signal Spacing
			Primary Full-Movement Intersection	Secondary Intersection	
<b>4 Principal Arterials in the Twin Cities Metropolitan Area and Primary Regional Trade Centers (Non-IRCs)</b>					
<b>4AF</b>	Non-Interstate Freeway	Principal Arterials	Interchange Access Only (see Section 3.2.7 for interim spacing)		Interim
<b>4A</b>	Rural		1 mile	1/2 mile	See Section 3.2.5
<b>4B</b>	Urban/ Urbanizing		1/2 mile	1/4 mile	1/2 mile
<b>4C</b>	Urban Core		300-660 feet, dependent upon block length		1/4 mile
<b>5 Minor Arterials</b>					
<b>5A</b>	Rural	Minor Arterials	1/2 mile	1/4 mile	See Section 3.2.5
<b>5B</b>	Urban/ Urbanizing		1/4 mile	1/8 mile	1/4 mile
<b>5C</b>	Urban Core		300-660 feet, dependent upon block length		1/4 mile
<b>6 Collectors</b>					
<b>6A</b>	Rural	Collectors	1/2 mile	1/4 mile	See Section 3.2.5
<b>6B</b>	Urban/ Urbanizing		1/8 mile	Not Applicable	1/4 mile
<b>6C</b>	Urban Core		300-660 feet, dependent upon block length		1/8 mile
<b>7 Specific Area Access Management Plans</b>					
<b>7</b>	All	All	By adopted plan		

## Permit Process

After the application is submitted to the county, the county staff will often perform a field review and then complete the permit. The permit will be sent to the property owner noting any specific requirements or special provisions. If the county guidelines for design, access spacing or sight distance can not be met, further justification may be required, or additional evaluation and analysis may need to be completed by the property owner.

It should be noted if the entrance is associated with a development undergoing platting, then the preliminary plat reviews and city approvals are necessary prior to issuance of an entrance permit. However, the county encourages early informal submittals of site plans and access proposals prior to the submittal of an entrance permit application to allow County staff to identify any possible issues and give time for discussion and the investigation of mitigation options.

*If a permit is issued for an entrance that is later found to be part of a platting or zoning action (that was not previously approved by the City) the entrance permit may be declared null and void. This may result in significant delays to the development project, a possible order to stop work, and requirements for significant changes or removal of the entrance.*

## Permit Fees

Current fees are:

- Residential Driveway - \$ 50
- Temporary Entrance - \$ 100
- Commercial Driveway or Street - \$ 200

- Multiple driveway entrances or street accesses can be combined for the same development within a single permit application and fee payment
- Temporary permits are for short-term construction access, or conditions that are expected to have duration of less than one year. The temporary permit may be issued with specific termination dates.
- No fees are charged for removals of driveways.
- No fees are charged for an extension of a current access permit if the applicant applies prior to the permit expiration date (see below).

The permit process normally takes approximately 2 weeks from the application to issuance of the permit to allow construction. However, larger more involved developments can take up to 30 days or longer if complex design issues need to be resolved.

An entrance permit is valid for 1-year from the date of issuance. If construction can not begin within this time period, an extension is available for an additional 6 months upon the written request of the applicant (made prior to the expiration of the permit). An extension can be granted one time without any additional fee. Once the permit expires or if additional extensions are needed, the renewal may require resubmittal of a permit application and payment of the appropriate application fee.

## Contacts for More Information

Further information and permit forms are available on the Hennepin County website at: [co.hennepin.mn.us](http://co.hennepin.mn.us) (search on the term "entrance permit"). Additional questions or requests can be referred to:

Robert H. Byers, Senior Transportation Engineer  
Phone: (612) 596-0354 FAX: (763) 478-4000

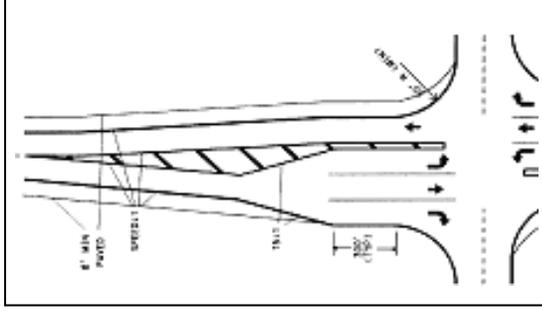
E-mail: [robert.byers@co.hennepin.mn.us](mailto:robert.byers@co.hennepin.mn.us)

**Or:**

Dave Zetterstrom, Entrance Permit Coordinator  
Phone: (612) 596-0355

## Access Management Guidelines

### Entrance & Driveway Permits



**September 2007**

Hennepin County Public Works – Transportation Dept.  
1600 Prairie Drive, Medina, MN 55340-5421  
(612) 596-0300

## What is Access Management ?

Access Management has become an important subject as transportation professionals grapple with the issues of increasing congestion and deteriorating roadway operations. The goal of managing access, whether it be street entrances or individual driveways, is to achieve an optimal balance between what is needed for safe, efficient roadway operations, and the need to provide access to adjacent properties and businesses.

The term access management is applied to a number of *measures that can be used to enhance a roadway's safety and its ability to move vehicular traffic through management and control of access points to the roadway*. These measures include:

- Limiting the driveway access points to decrease turning conflicts
- Locating entrance or access points further from adjacent intersections
- Providing sufficient spacing between intersecting streets
- Spacing traffic signals to optimize traffic flow
- Implementing sight distance guidelines to improve safety
- Use of channelization to preclude selected turning conflicts

This brochure has been prepared to explain the entrance / driveway permitting process in Hennepin County, and the basis behind the evaluation and regulation of access to county roadways.

## Access Spacing Guidelines

Hennepin County has adopted access spacing guidelines that are based on local and national research that shows that crash rates decrease markedly as the spacing between driveways and streets increases. The guidelines address five types of access and they differentiate for Urban and Rural situations (see next column):

## Access Spacing Guidelines – Urban

Facilities Requesting Access to County Roadways	Access Spacing Criteria on County Roadway	
	Minor Arterial Roadways	Collector Streets
<b>Non-Public - Low Volume (&lt; 1,000 ADT)</b> • Residential Driveways • Low Trip-Generating Commercial	Undivided 	Divided 
	Full Movement Access	1/8 Mile (660 ft)
<b>Local Public Streets</b> • Local Residential Streets • Local Minor Collector Streets	Partial Access	1/16 Mile (630 ft)
	Full Movement Access	1/8 Mile (660 ft)
<b>Non-Public - High Volume (&gt; 1,000 ADT)</b> • Shopping Center Entrances • Large Apts. Complexes • Large Industries, Industrial Park Entrances	Partial Access	1/8 Mile (660 ft)
	Full Movement Access	1/4 Mile (1,320 ft)
<b>Arterial and Major Collector Roadways</b> • Principal Arterials (state highways) • Minor Arterials and Major Collector Roads	Partial Access	1/8 Mile (660 ft)
	Full Movement Access	1/4 Mile (1,320 ft)

Notes: 1) Urban definition is based on being within the Year 2000 Metropolitan Urban Service Area boundary.  
 2) Average Daily Traffic (ADT) volumes are based on 20-year forecasts.  
 3) Measurements for spacing are taken to next access (driveway or street) on the same roadway side.  
 4) Measurements for spacing are taken on either side of road for undivided minor arterials.  
 5) Existing medians will not be broken (even if the above guidelines would suggest full access is allowed).  
 6) Other criteria are also reviewed such as sight distance, speeds, traffic volumes and other elements (vehicle types, land use).

## Access Spacing Guidelines – Rural

Facilities Requesting Access to County Roadways	Access Spacing Criteria on County Roadway	
	Minor Arterial Roadways Undivided	Collector Streets
<b>Non-Public - Low Volume (&lt; 1,000 ADT)</b> • Residential Driveways • Low Trip-Generating Commercial	Greater Than 7,500 ADT*	Less Than 7,500 ADT*
	Full Movement Access	1/8 Mile (660 ft)
<b>Local Public Streets</b> • Local Residential Streets • Local Minor Collector Streets	Full Movement Access	1/8 Mile (660 ft)
	Full Movement Access	1/4 Mile (1,320 ft)
<b>Non-Public - High Volume (&gt; 1,000 ADT)</b> • Shopping Center Entrances • Large Apts. Complexes • Large Industries, Industrial Park Entrances	Full Movement Access	1/8 Mile (660 ft)
	Full Movement Access	1/4 Mile (1,320 ft)
<b>Arterial and Major Collector Roadways</b> • Principal Arterials (state highways) • Minor Arterials and Major Collector Roads	Full Movement Access	1/4 Mile (1,320 ft)
	Full Movement Access	1/4 Mile (1,320 ft)

Notes: 1) Measurements for spacing are taken to next access (driveway or street) on the same roadway side for divided minor arterials.  
 2) Measurements for spacing are taken to next access on either side of road for undivided minor arterials.  
 3) Other assumptions for rural County roadways are undivided.  
 4) Other criteria are also reviewed such as sight distance, speeds, traffic volumes, and other elements (vehicle types, land use activity, etc.)  
 5) Rural area is defined as being outside the Year 2000 Metropolitan Service Area (MUSA), as defined by the Metropolitan Council.

Changes to the above spacing guidelines may be granted where sufficient justification is provided.

## When is a Permit Required ?

An entrance permit is required:

- Whenever a new driveway or street connection is proposed on a county road.
- Whenever an existing driveway is proposed to be modified (widened, channelized, relocated, etc.)
- Whenever a driveway is removed (required for work in the County roadway right-of-way)
- Changes in site land uses (even if no modifications to existing driveways are proposed)
- If temporary access is needed to facilitate construction activities
- If development-driven traffic impacts predicate needed changes on the county roadway (such as the need for turn or auxiliary lanes)

A permit is *not* required if:

- The request is for an entrance located within the project limits of an active county roadway project (requires coordination with Construction project manager).
- Tenant changes on the property that do not change the land use activity.
- Changes due to county maintenance operations or utility permit actions
- The entrance is within Minneapolis (permitting is delegated to City)

The entrance permit process includes:

- 1) An application submitted by the property owner, developer or City
- 2) A permit issued by Hennepin County to the applicant
- 3) A request from the applicant for County final inspection and permit sign-off

**Appendix T-5**

**Transit Circulator Service – Preliminary Evaluation**

## CIRCULATOR TRANSIT SERVICE PRELIMINARY EVALUATION

There currently is a lack of transit service in the western portion of Edina. Metro Transit has cited relatively high incomes and rates of auto ownership in this area as factors contributing to making it not a viable location for additional Metro Transit service. Reflecting community sentiment and input during the 2008 comprehensive planning process, the City of Edina evaluated the option of providing circulator service which would cover the western portion of the City and would also access key destinations east of TH 100.

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To provide a preliminary evaluation of circulator transit service in Edina, two operational scenarios have been identified. The first scenario is termed "Baseline Service," and the second is termed "Full Service." Both include the following parameters:

- The use of cutaway vans with a seating capacity of 12-14 occupants, and ADA compliant features.
- The circulator route identified on *Figure 1*. This route was defined so as to cover residential areas, neighborhood and larger scale commercial areas, parks, the public library, and other features. It may be emphasized that this route is identified only for preliminary analytical purposes. If this general concept is advanced, the precise route could be refined based on further evaluation.
- Each loop would begin and end at the Southdale Transit Center. Each loop would operate on an hourly basis.

The operating parameters for each alternative area summarized below:

Operating Parameter	Baseline Service	Full Service
Hours of Operation	M-F: Between 6 a.m. and 6 p.m. Weekends: Between 8 a.m. and 4 p.m.	M-F: Between 6 a.m. and 10 p.m. Weekends: Between 8 a.m. and 4 p.m.
Number of Vehicles	Three (two operating, one in reserve)	Five (four operating, one in reserve)
Service Operations	One vehicle circulates one direction, the other circulates the other; each van is on a one-hour cycle for the whole route, so the system has one hour directional headways	Two vehicles one direction, the other two circulate the other; each van is on a one-hour cycle for the whole route, so the system has 30 minute directional headways

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Thus, the primary differences between the two scenarios are: a) the Full Service alternative has evening service during the week while the Baseline Service alternative does not, and b) the Full Service alternative has half hour directional headways as opposed to hourly directional headways. This means that any given point on the route will have a van pass by every 30 minutes going in one direction, and every 30 minutes going in the other direction for the Full Service alternative.

To make a preliminary estimate of costs for these alternatives, the following assumptions were used:

**Capital costs**

- Vans @ \$50,000 per unit

**Operating Costs**

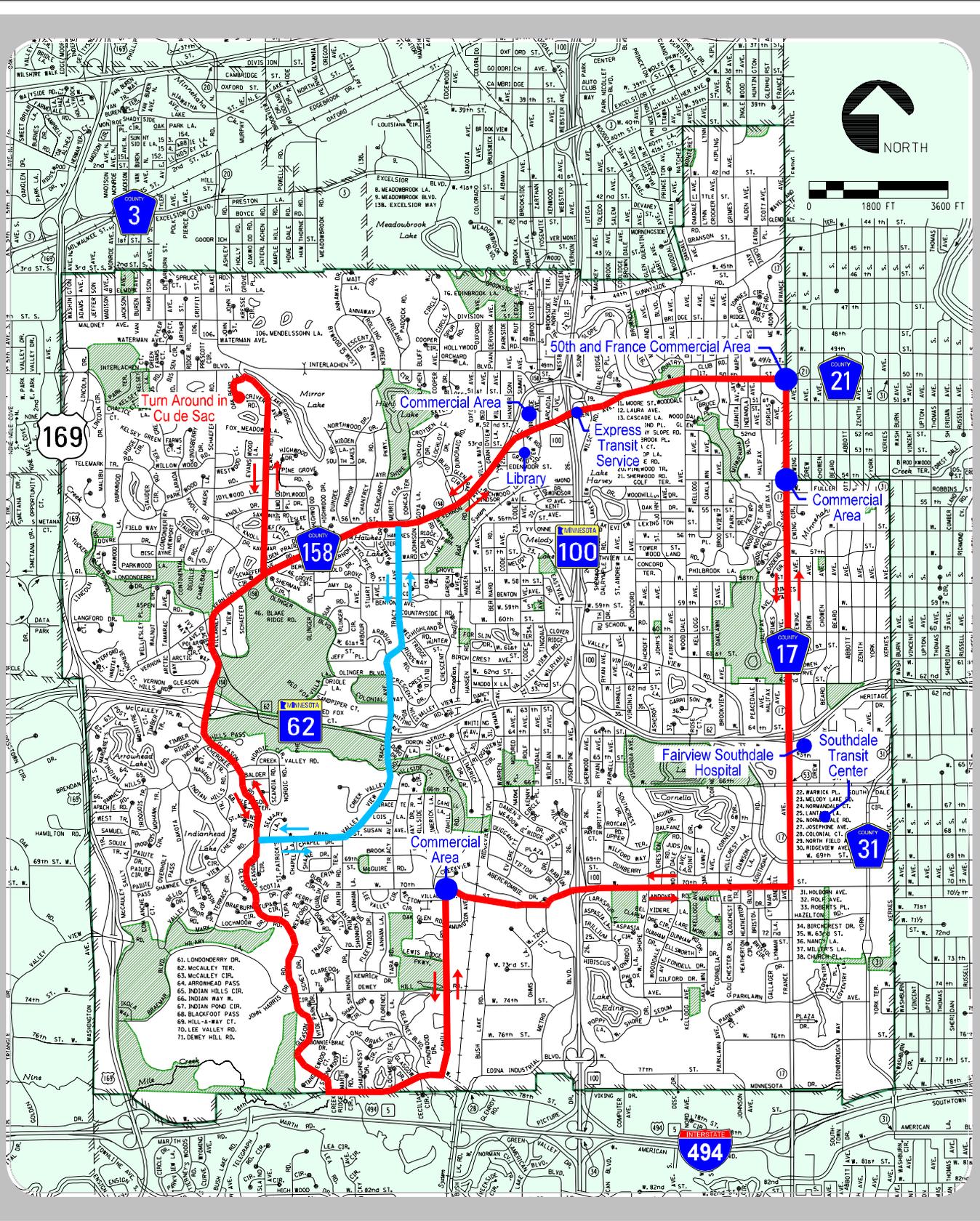
- Labor @ \$25 per hour (includes benefits)
- Administrative costs (management, clerical support) @ 15% of labor costs.
- Vehicle maintenance plus insurance @ 10 percent of capital costs
- Fuel @ \$3.00 per gallon
- Fuel consumption @ 7.5 miles per gallon
- Distance of each loop @ 13 miles

These assumptions were used to derive the costs in the table below:

<b>Cost Category</b>	<b>Baseline</b>	<b>Full Service</b>
Capital Cost (vehicles)	<b>\$150,000</b>	<b>\$250,000</b>
Annual Operating Costs		
- vehicle maintenance, ins.	\$15,000	\$25,000
- fuel	\$36,800	\$95,200
- drivers	\$176,800	\$457,600
- administrative	\$26,500	\$68,600
<b>Total Annual Operating Costs</b>	<b>\$255,100</b>	<b>\$646,400</b>

Another option would be to provide a combination fixed route/flex route service. There would be scheduled stops for a given route, but also the ability to deviate from the fixed route to provide doorstep service. This would require sufficient “give” or extra time for each route. It would also require a management system which would allow residents to call ahead of time to indicate when they would like to be picked up. Some flex systems require each request a day in advance, while others allow same-day requests.

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LEGEND:

— Potential Route

— Potential Alternate Route

▨ Parks



# City of Edina, Minnesota 2030 Comprehensive Plan

# Potential Circulator Transit Services

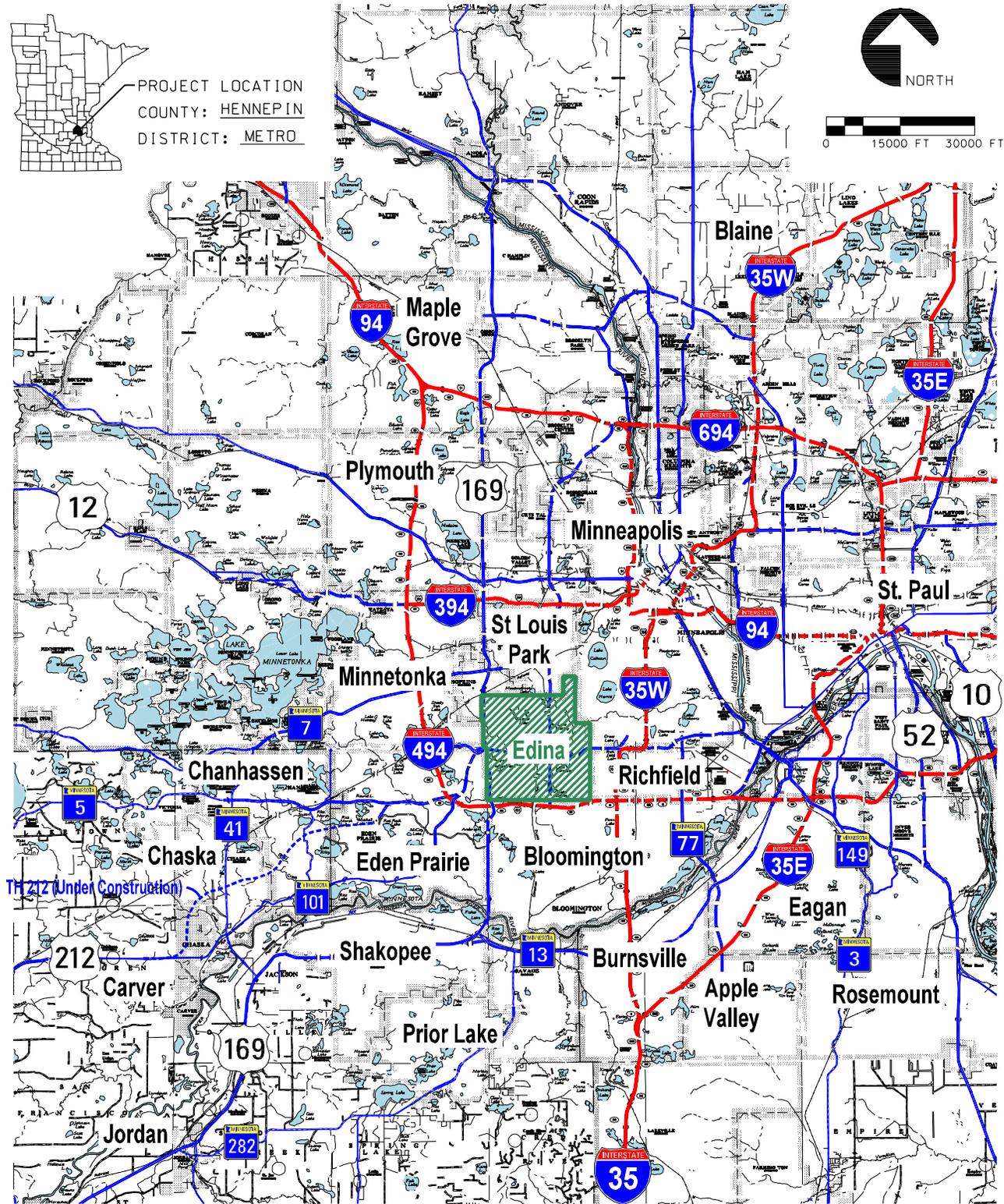
Figure 1



PROJECT LOCATION  
COUNTY: HENNEPIN  
DISTRICT: METRO



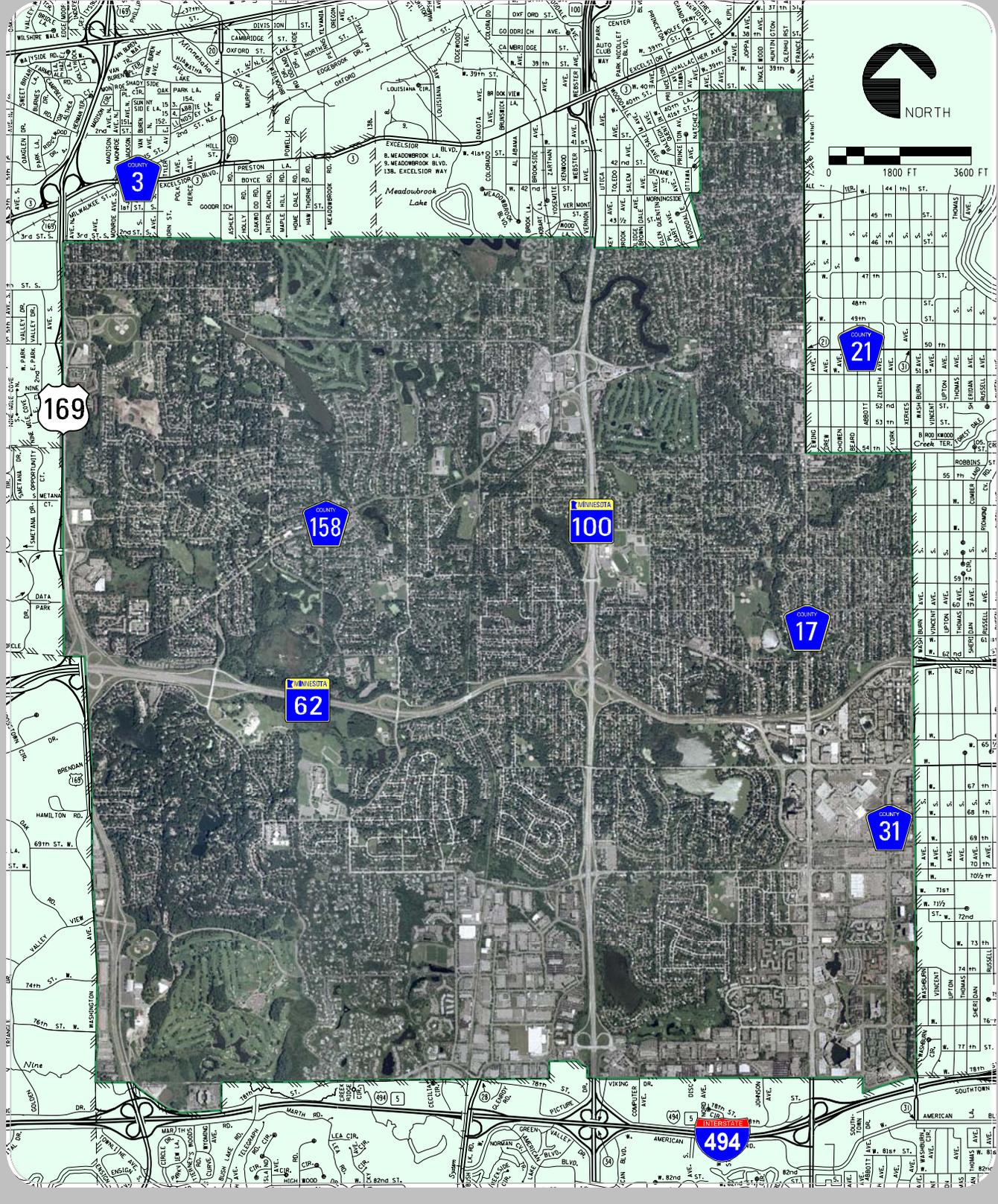
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# City of Edina 2008 Comprehensive Plan Update

# Regional Roadway Network

Figure 7.1

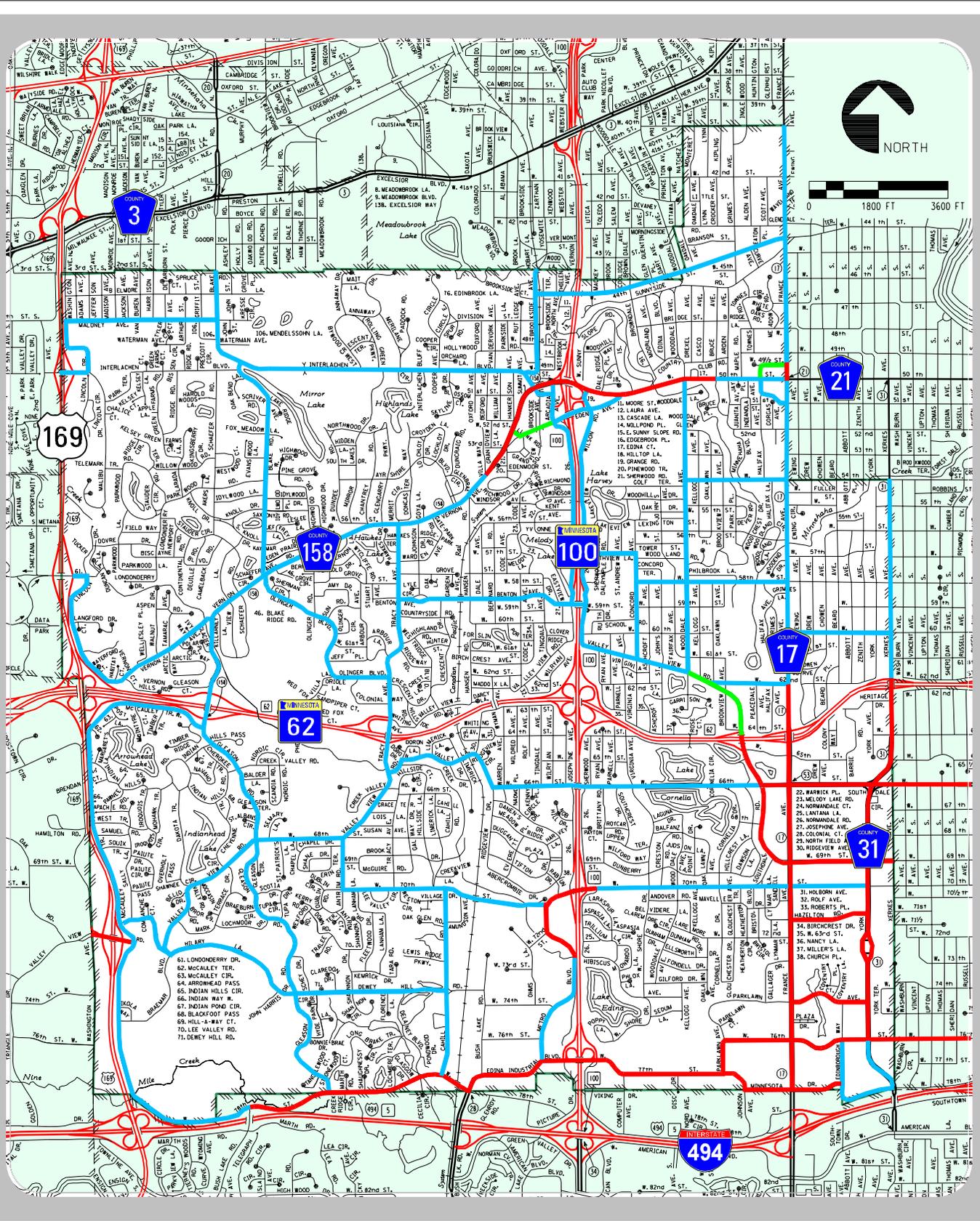


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**City of Edina**  
**2008 Comprehensive Plan Update**

**Aerial Photograph**  
**Figure 7.2**



LEGEND:

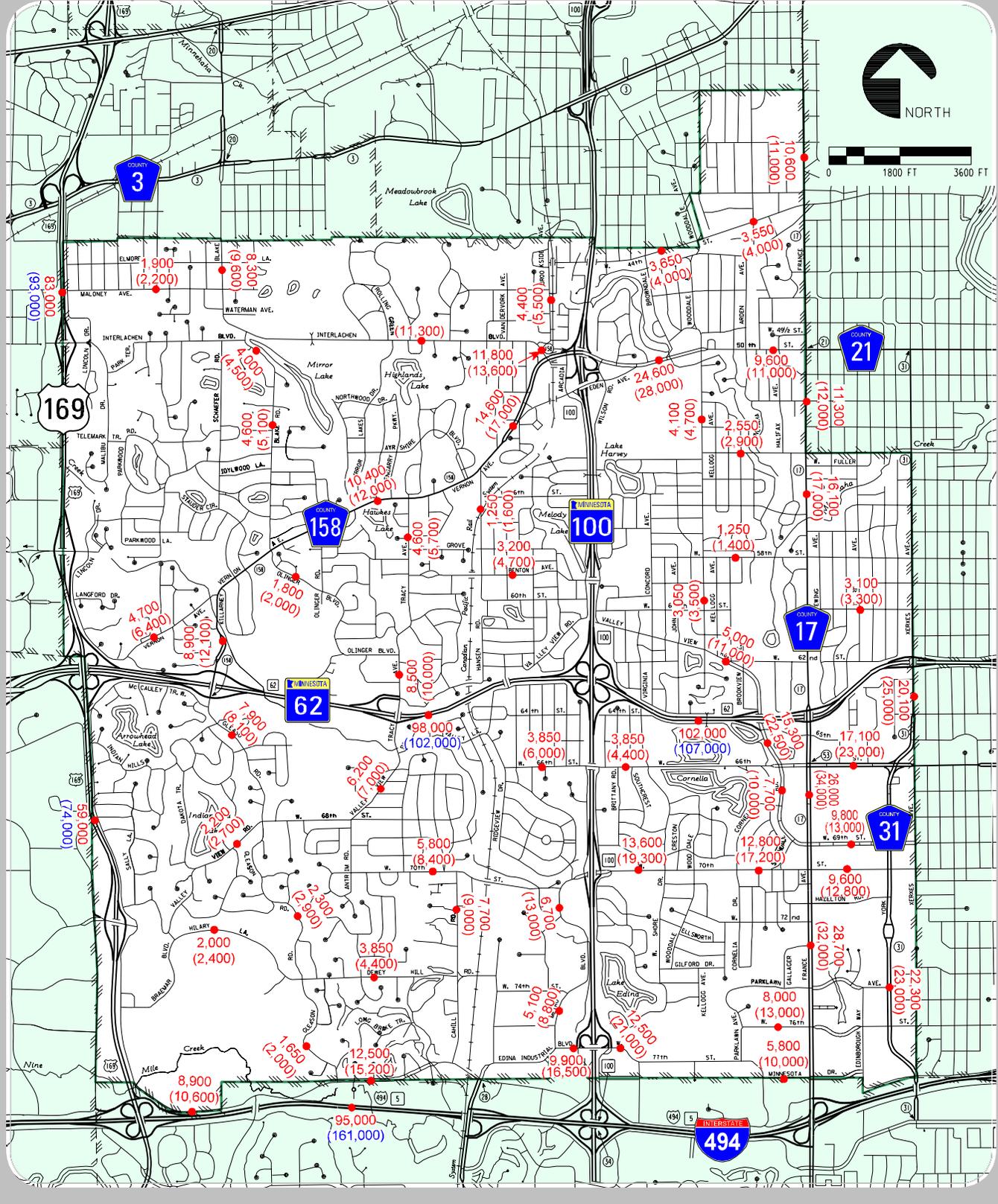
Number of Traffic Lanes: — 4 Lanes — 3 Lanes — 2 Lanes

**City of Edina  
2008 Comprehensive Plan Update**

**Number of Traffic Lanes  
Collectors and Arterials**

Figure 7.3





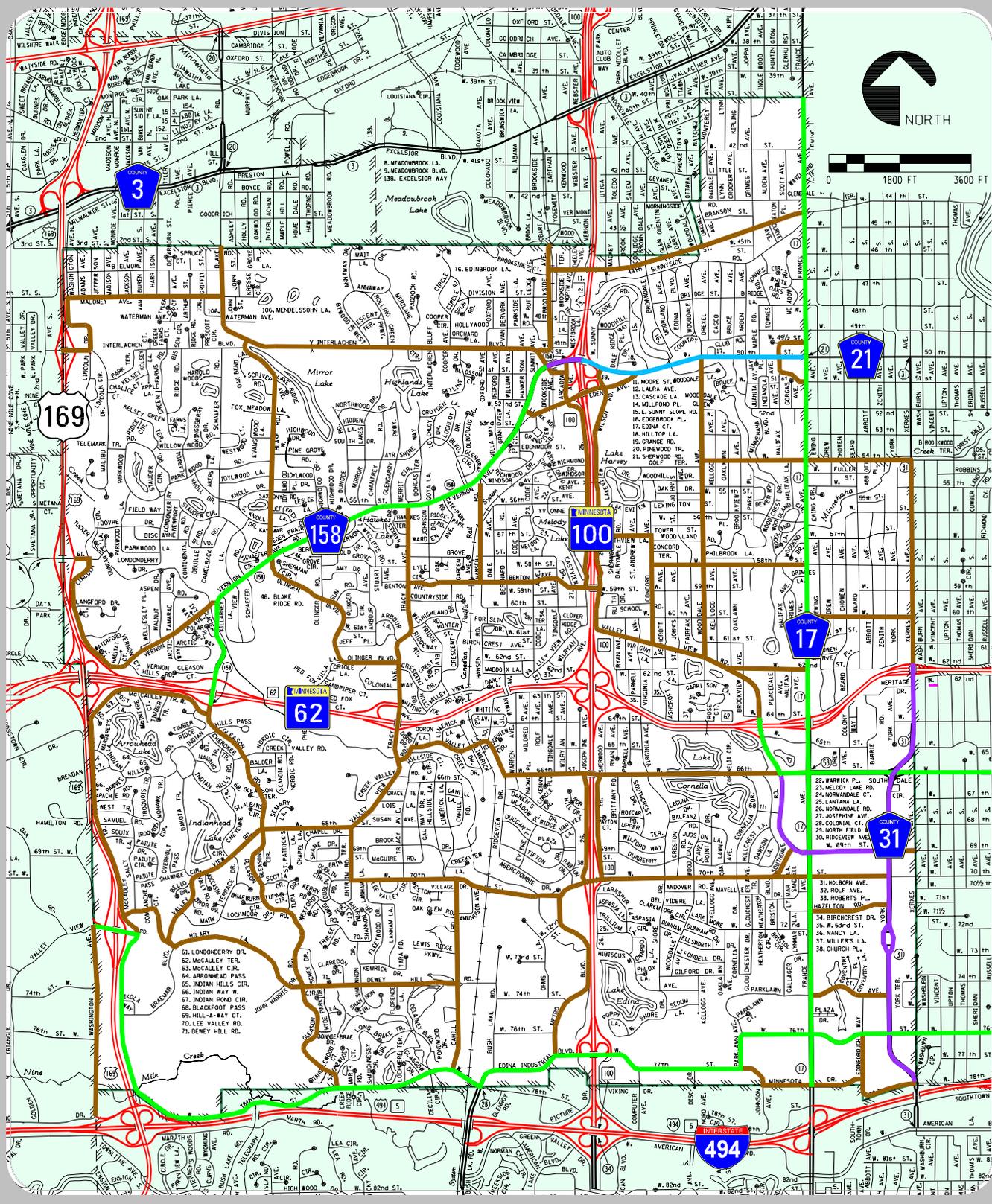
**LEGEND:**  
X,XXX - Existing Daily Traffic Volumes (2005 Mn/DOT Data)  
(X,XXX) - Projected 2030 Daily Traffic Volumes  
(X,XXX) - Projected 2030 Daily Traffic Volumes - Met Council



**City of Edina  
 2008 Comprehensive Plan Update**

**Current and Projected Traffic Volumes**

Figure 7.4



**LEGEND:**

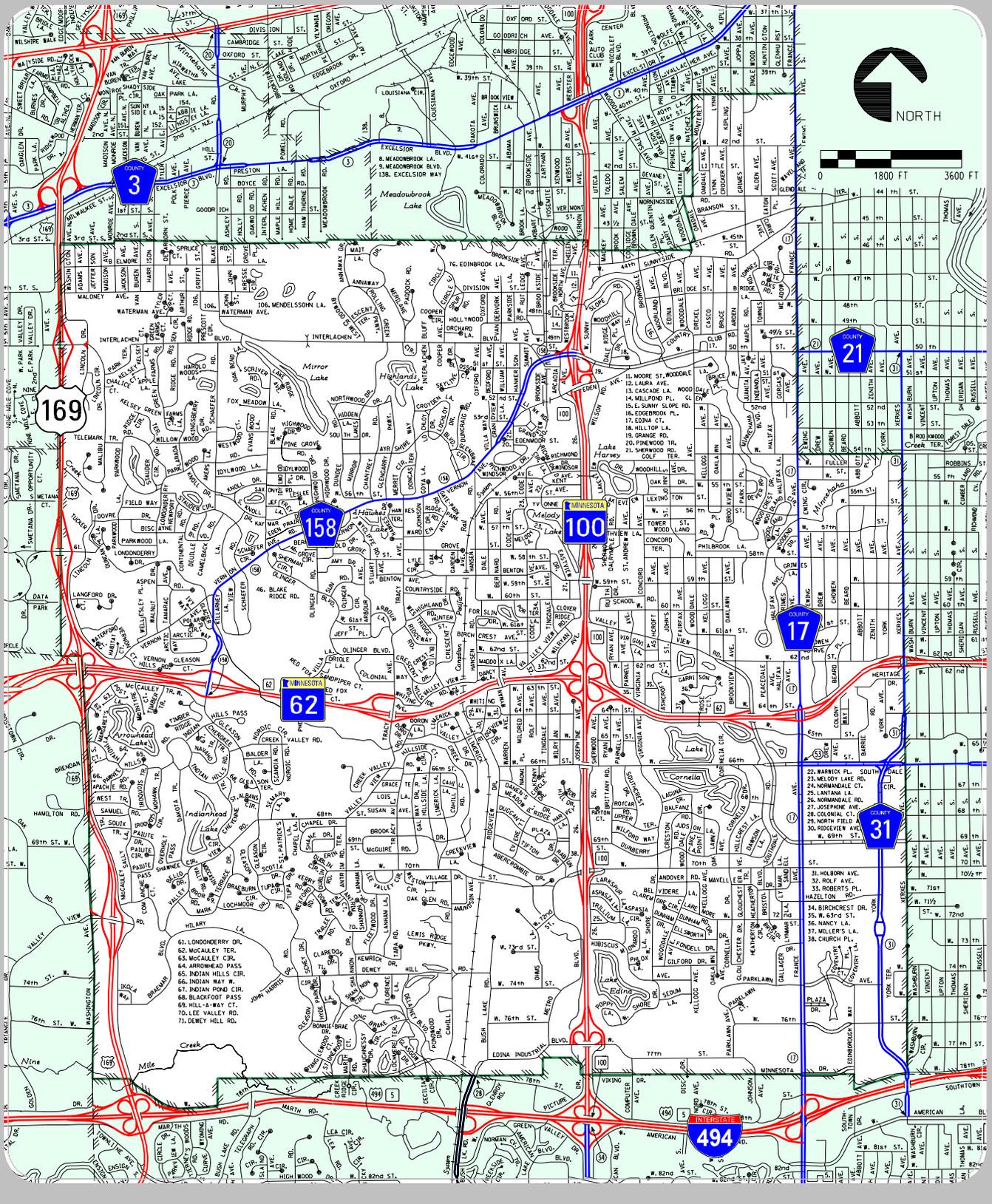
- Principal Arterial
- "A" Minor Arterial (Reliever)
- "A" Minor Arterial (Augmenter)
- "B" Minor Arterial
- Collector



**City of Edina  
2008 Comprehensive Plan Update**

**Roadway Functional Classification**

Figure 7.5



LEGEND:

— MnDOT

— Hennepin County

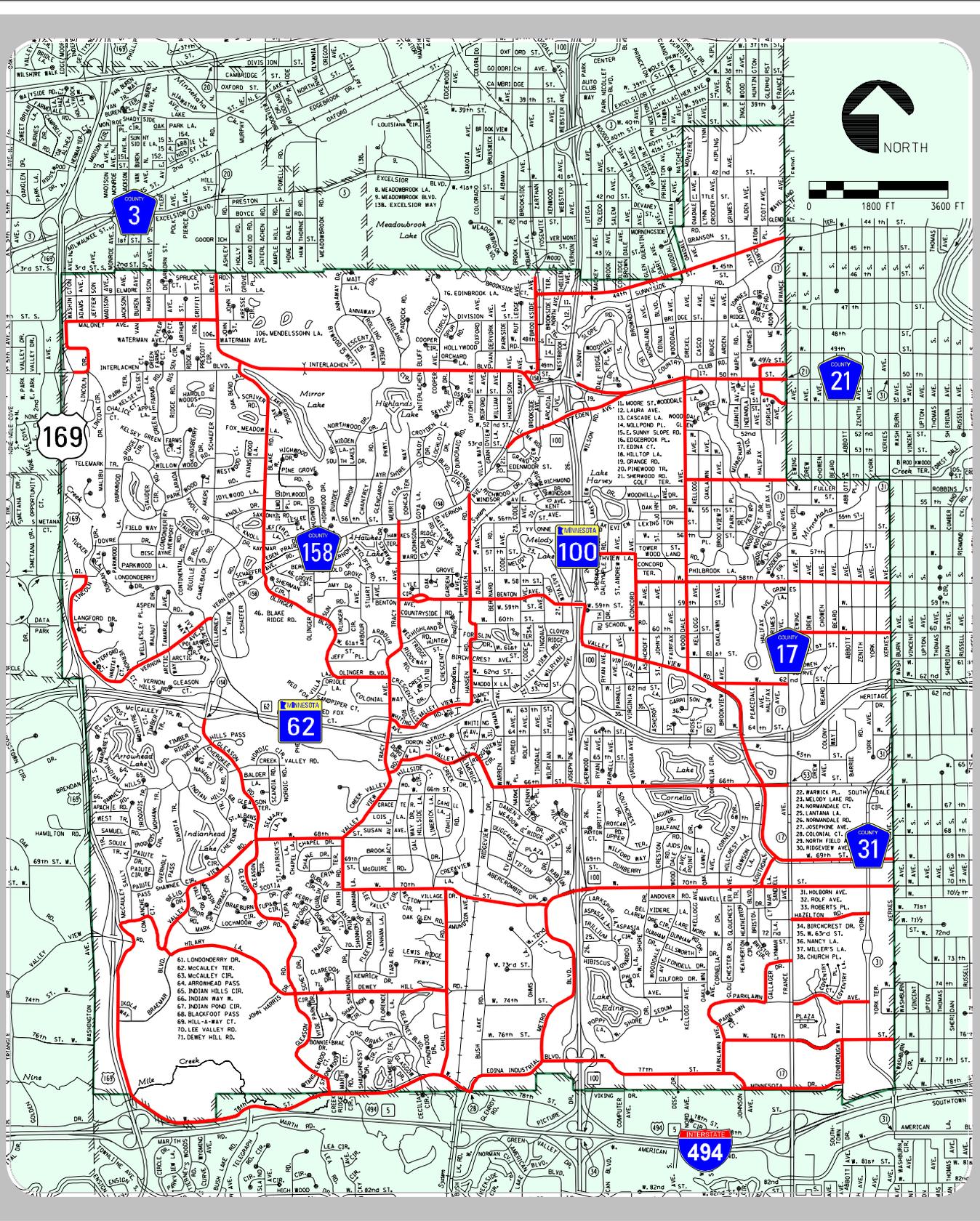
— City of Edina



# City of Edina 2008 Comprehensive Plan Update

## Existing Jurisdictional Classification

Figure 7.6



LEGEND:

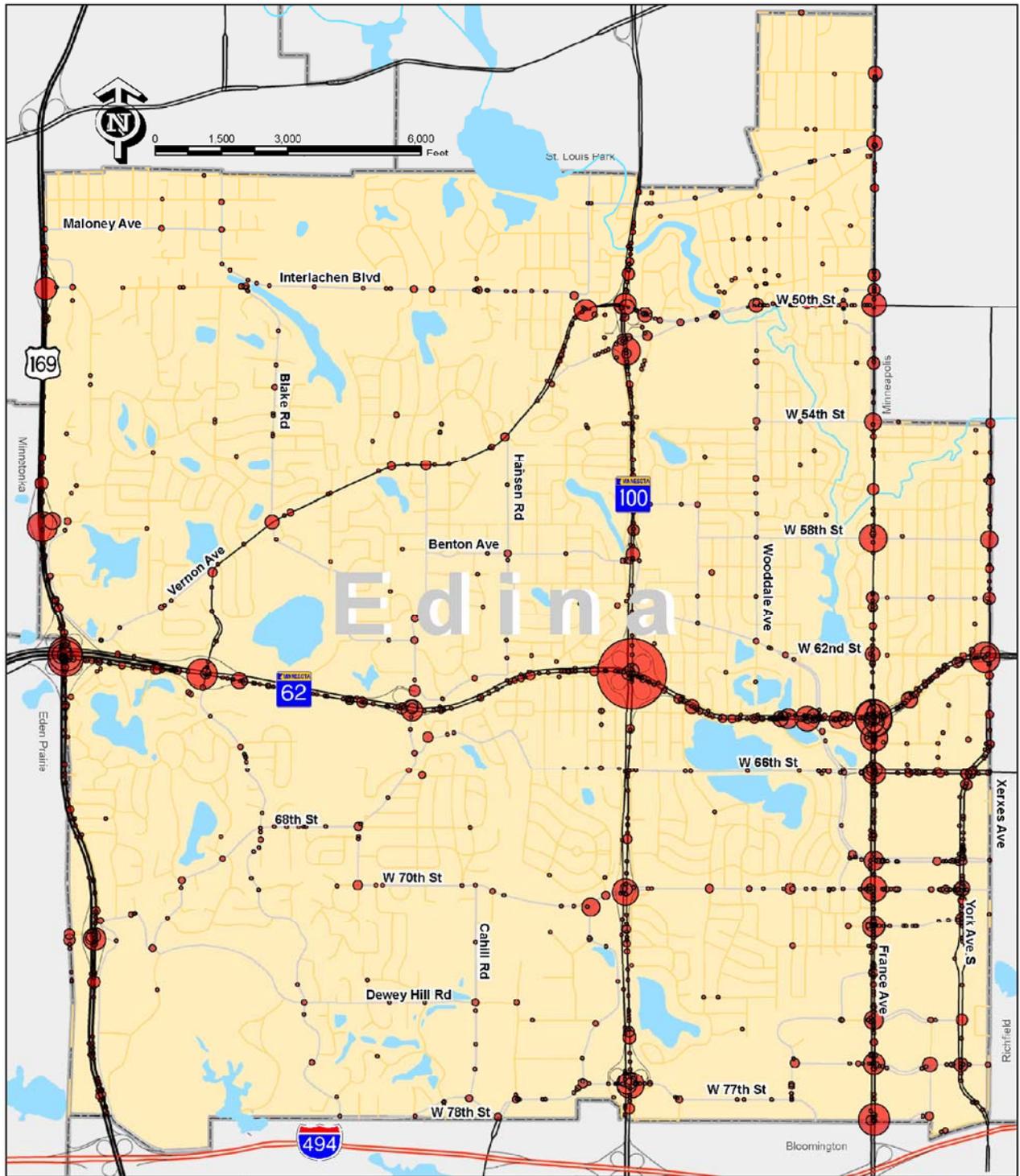
— State Aid Streets (2007 Network)



**City of Edina  
2008 Comprehensive Plan Update**

**Municipal State Aid Streets**

Figure 7.7



Source: MNDOT CMAT

**Number of Crash Events  
2002-2006**

1	5	10	25	50	75	100
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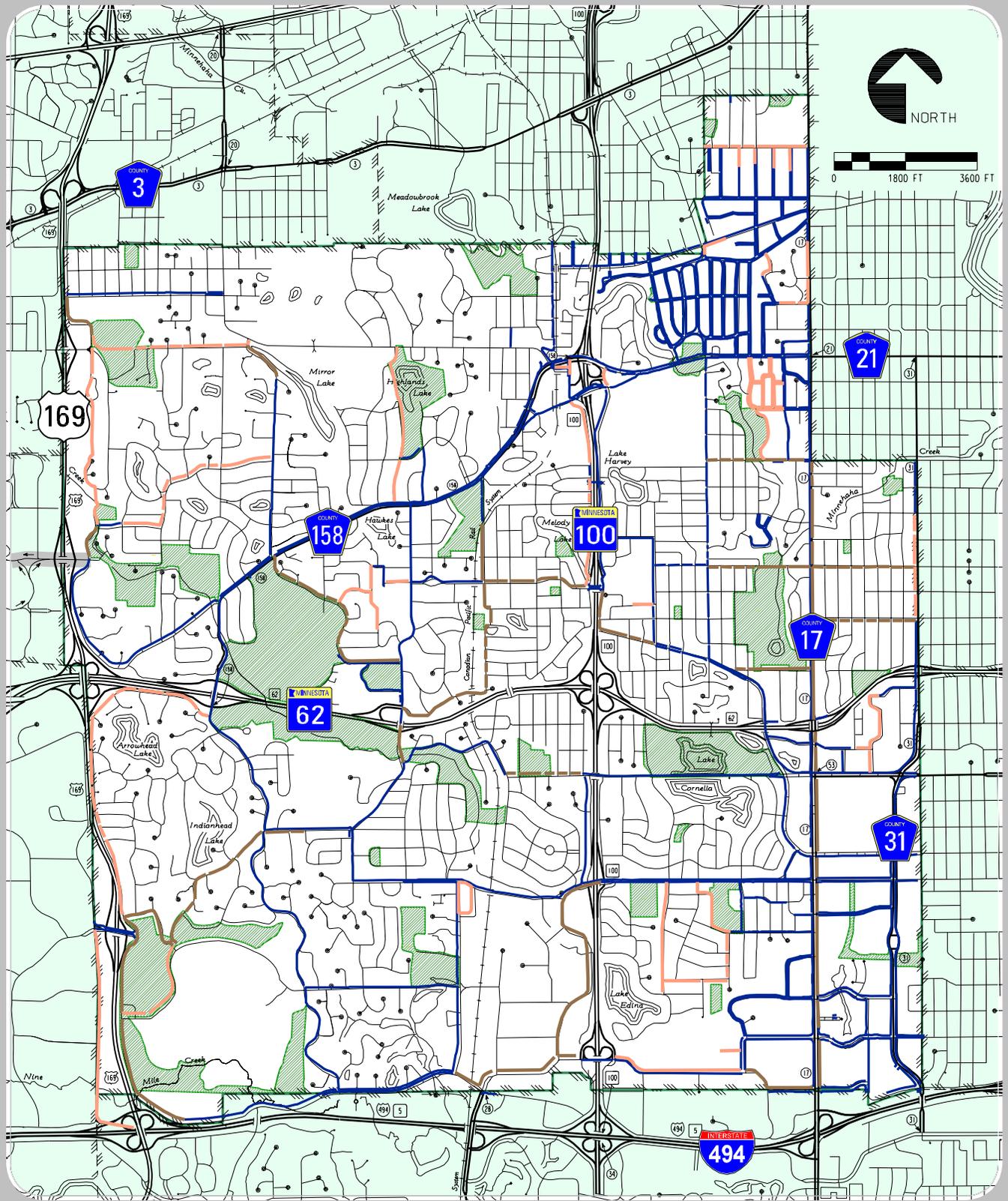


**City of Edina  
 2008 Comprehensive Plan Update**

**Crash Location and Frequency**

Figure 7.8





**LEGEND:**

- Existing Sidewalk
- Proposed School / Business Sidewalk
- Proposed State-Aid Sidewalk

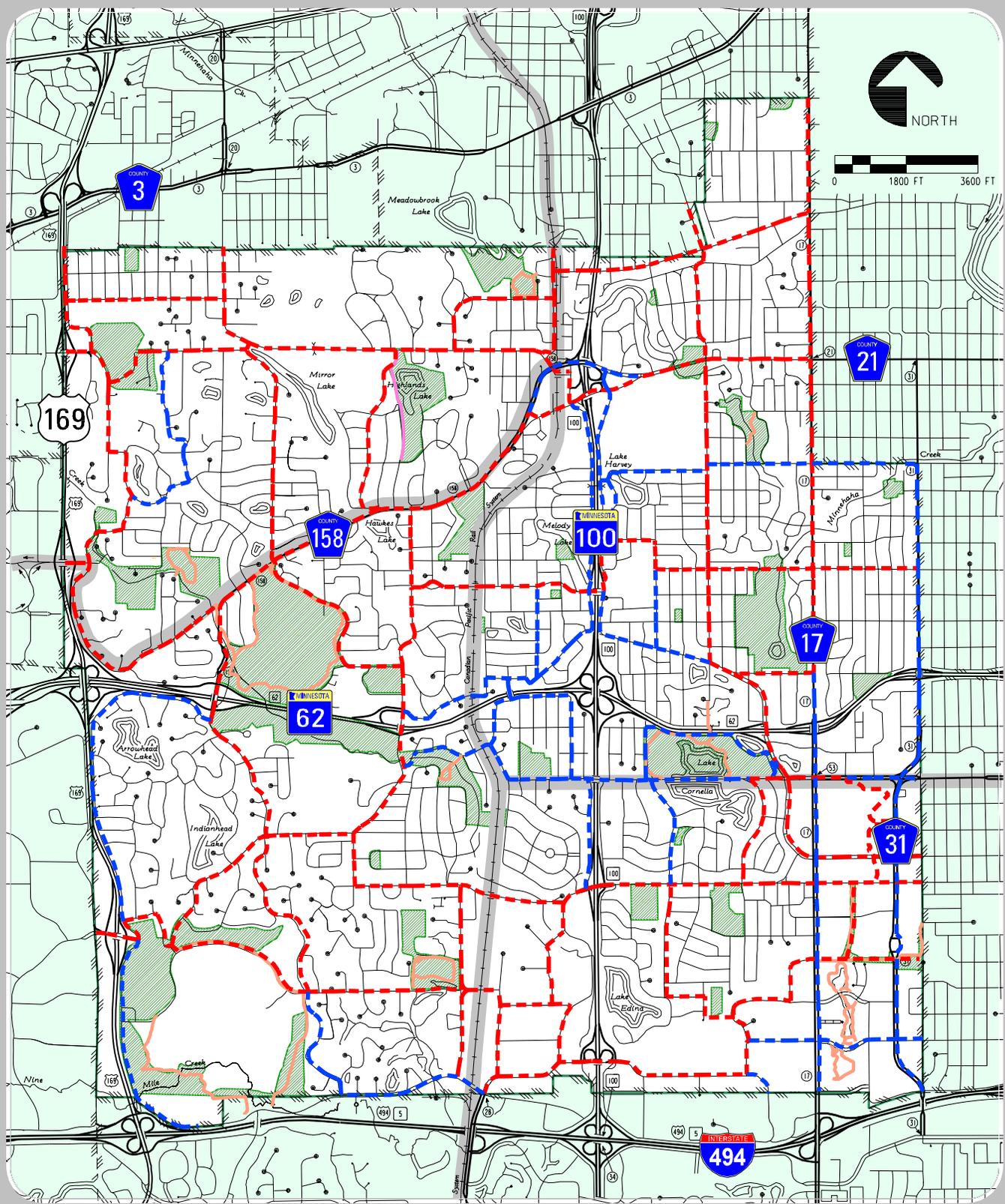
*Note: Park Pathways are included on Figure 7.11*



**City of Edina  
2008 Comprehensive Plan Update**

**Sidewalk Facilities**

Figure 7.10



**LEGEND:** Existing Park Pathway   Existing Hennepin County Corridors   Proposed Park Pathway   From the 2007 Edina Comprehensive Bicycle Transportation Plan

----- Primary Route   ----- Secondary Route

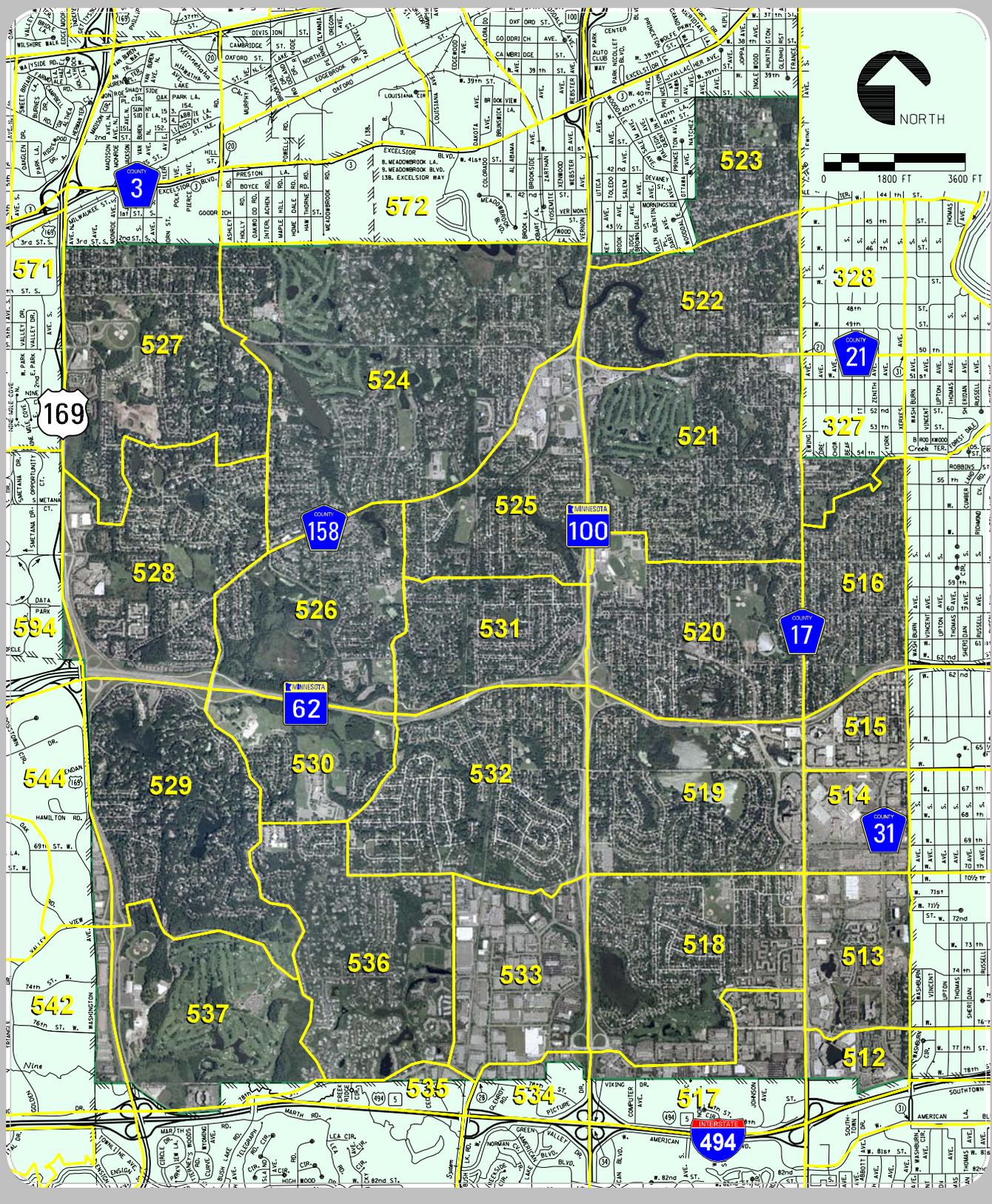


**City of Edina  
2008 Comprehensive Plan Update**

**Bicycle Facilities**

Figure 7.11

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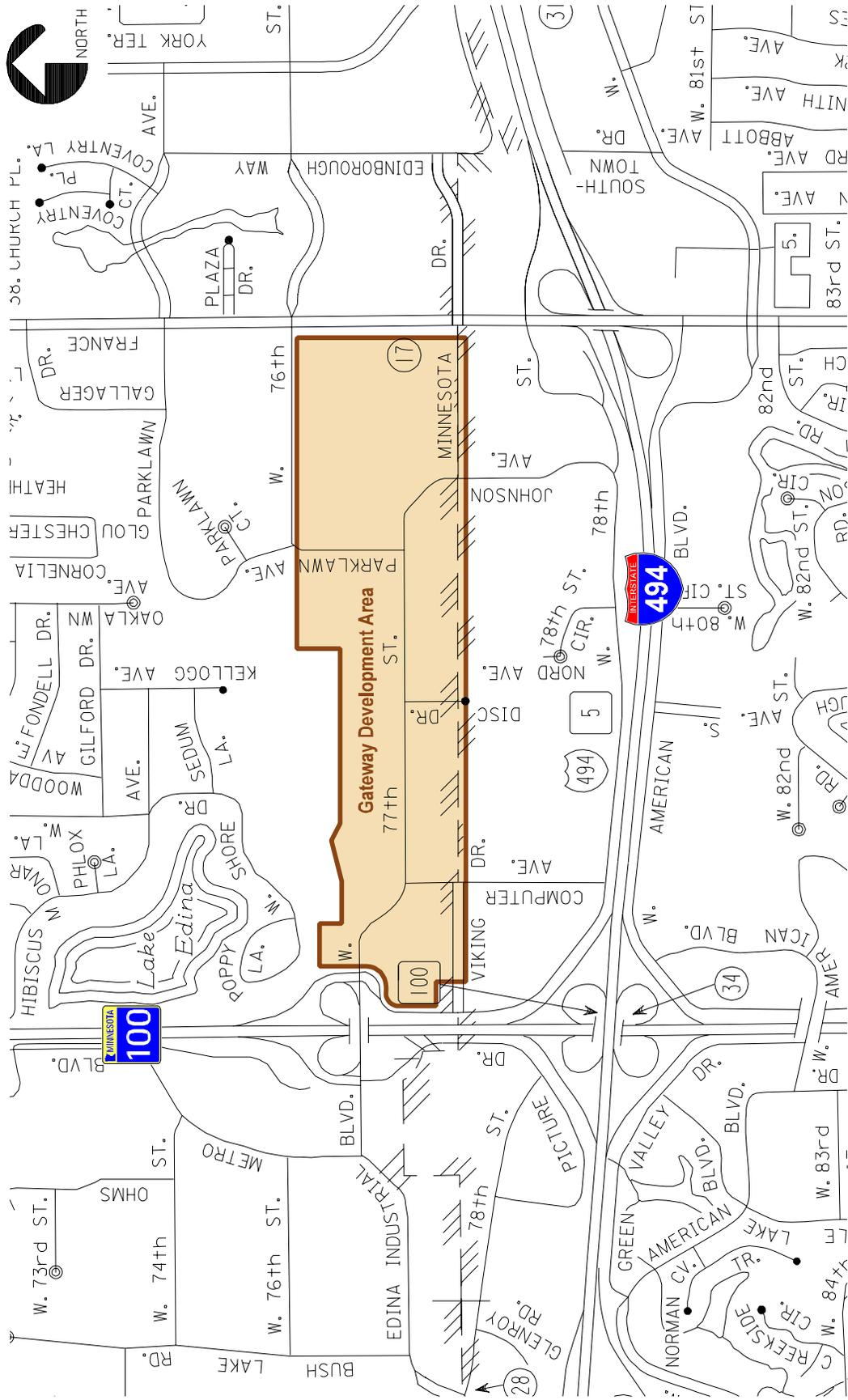
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**City of Edina**  
**2008 Comprehensive Plan Update**

**Edina TAZ Network**

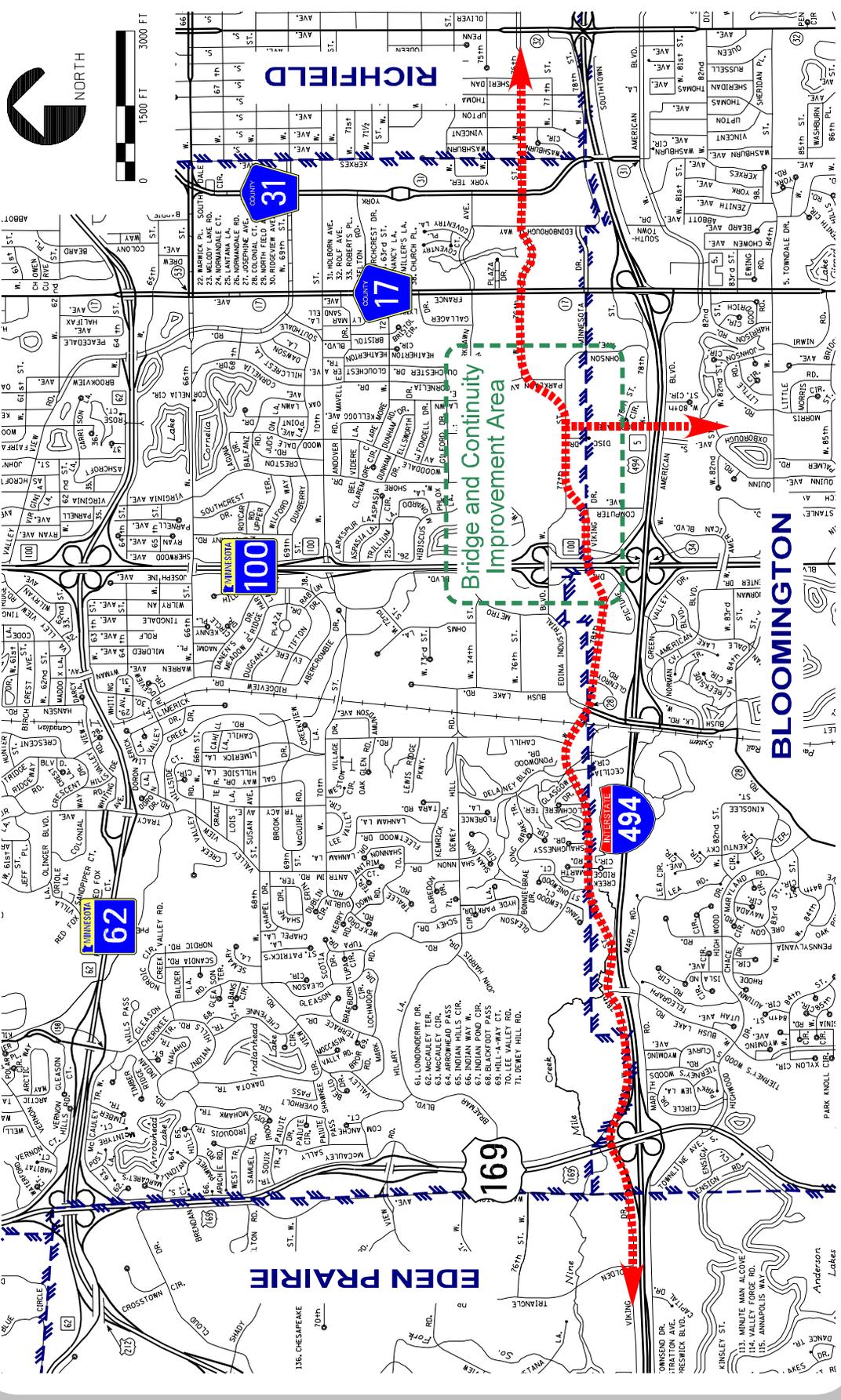
Figure 7.12



Gateway Development Area  
Location Map  
Figure 7.13

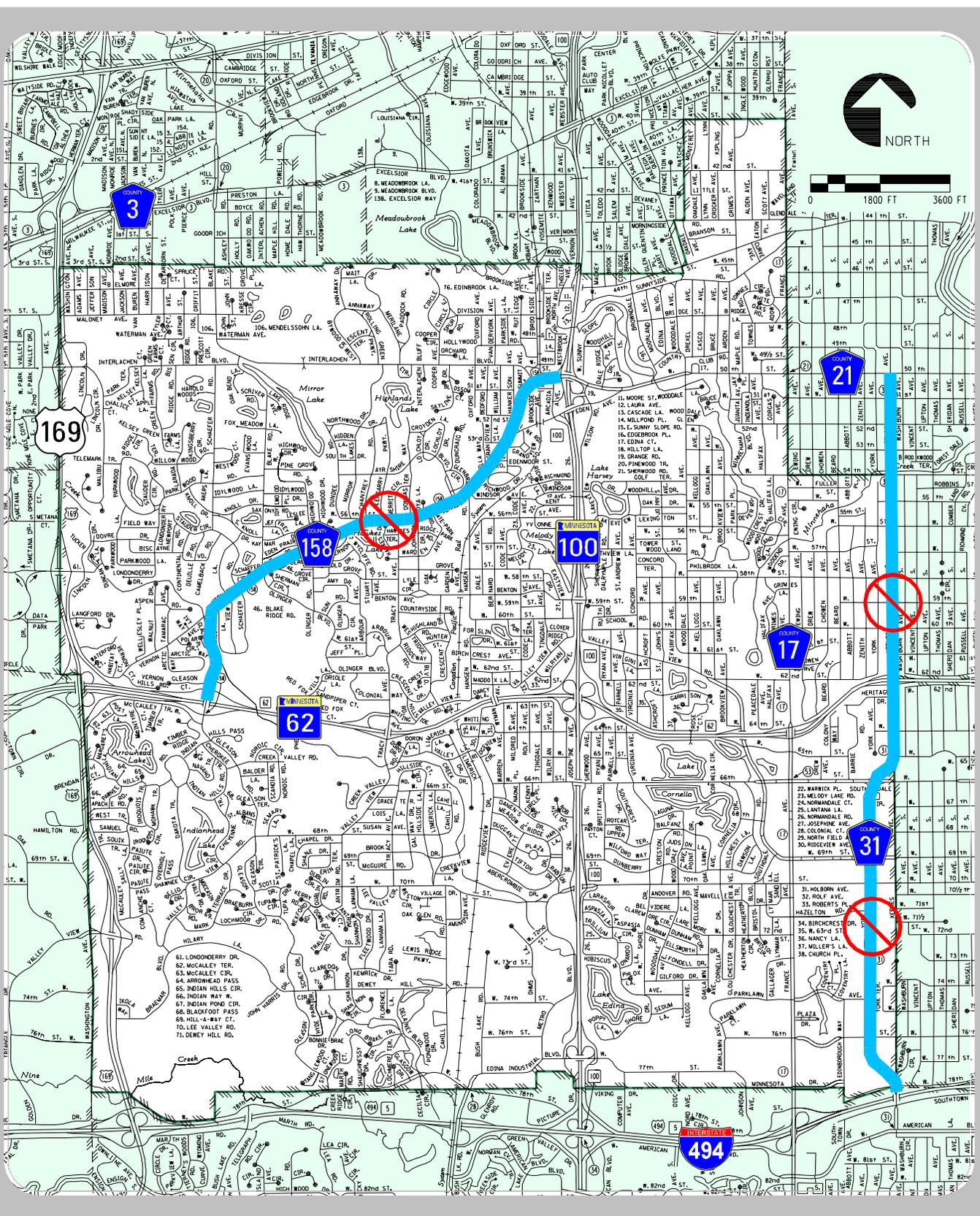
City of Edina  
2008 Comprehensive Plan Update





# City of Edina 2008 Comprehensive Plan Update

## East - West Connector Concept Figure 7.14



LEGEND:

 Identified by Hennepin County as a candidate for turnback to City

 Not endorsed by City of Edina



**City of Edina  
2008 Comprehensive Plan Update**

**Jurisdictional Turnbacks  
Proposed by Hennepin County**

Figure 7.15

Path System Concepts  
**Recommended Path and Transit Plan**

October 15, 2006



Source: URS Corporation - Edina Promenade, Urban Design Plan.

**Potential Greater Southdale Area Shuttle Service**

Figure 7.16



# 2030 Transitway System

## Transitways on Dedicated ROW

### Tier 1

- Northstar
- Northwest
- Cedar Avenue
- I-35W
- Central

### Tier 2

- Red Rock
- Rush Line
- Southwest

-  Transitways on Dedicated ROW
-  Express Commuter Bus System

August 2004

Source: Metropolitan Council





## Chapter 8: Water Resources Management

- 8.1 Wastewater and Comprehensive Sewer Plan
- 8.2 Surface Water Management Plan
- 8.3 Water Supply Plan

### 8.1 WASTEWATER AND COMPREHENSIVE SEWER PLAN

#### INTRODUCTION

The purpose of this section is to initiate goals and policies to provide for the effective and efficient removal of sanitary sewage for all areas of the City of Edina, while also eliminating Inflow and infiltration, protecting the health, safety and welfare of our citizens, and supporting the needs of a dynamic and sustainable community.

A major part of this plan is a look forward that anticipates ongoing development and potential redevelopment within the City. It quantifies how those activities will impact the sanitary sewer infrastructure in the City and the regional infrastructure owned and operated by the Metropolitan Council Environmental Services (MCES).

#### Relationship to Comprehensive Plan Requirements

This plan has been prepared in accordance with the current requirements of the Metropolitan Land Planning Act and the content of the sewer element included in the Local Planning Handbook prepared by the Metropolitan Council in 2005. In addition, it provides the data figures and descriptions specifically required in the City's system statement.

#### Relationship to Surface Water Plan

In 2003-2004, the City of Edina developed the *Comprehensive Water Resource Management Plan* to address current and future storm water issues, especially those related to future development and redevelopment. As part of the plan development, the City completed a city-wide hydrologic and hydraulic modeling analysis of the existing storm water system. The City has since undertaken a joint storm water and sanitary sewer system modeling effort to assist in identifying and eliminating inflow and infiltration to the sanitary system.



### **Relationship to Land Use Plan**

This plan has been prepared based on the current and planned land use in the City of Edina. Future sanitary sewer infrastructure needs are based on proposed land uses that are consistent with the land use portion of the City's Comprehensive Plan. A general review of the increased flows that may be produced as a result of higher density development is included in this section.

### **EXISTING CONDITIONS**

This section of the plan deals with the current condition of the sanitary sewers serving the City of Edina. The first portion of this section deals with the local sanitary sewer system which is owned and operated by the City of Edina. The second portion of this section will address the sewers that serve the City which are owned and operated by the Metropolitan Council Environmental Services (MCES) and originate at the borders of the City. These two systems must interact smoothly if the City is to ensure safe and reliable service for its population now and throughout the planning period.

### **SANITARY SEWER SYSTEM – LOCAL**

The local sanitary sewer system consists of trunk and lateral sewer lines that collect and carry sewage to the Metropolitan Council Environmental Services (MCES) interceptors. There are no MCES interceptors flowing through the City. Edina's sewer system is fully developed. There have been regular evaluations of the City's sanitary sewer system including:

- An evaluation prepared by Donohue and Associates in the 1980's.
- Another evaluation prepared by Toltz, King, Duvall, Anderson and Associates, Incorporated in 1997.
- A current system evaluation related to eliminating I&I is being performed by Barr Engineering Co. and includes a joint storm water/sanitary sewer system modeling effort.

The majority of the system was constructed in the 1940's and 50's, with some development occurring in the west half of the City during the 1960's and 70's. In the 1990's one of the last large tracts of land was developed when a local gravel mine in the southeast corner of the City stopped operation and was sold to developers, resulting in a significant amount of mixed-use development. The Edina sanitary sewer system currently serves almost all properties within the City. The only exceptions to this are



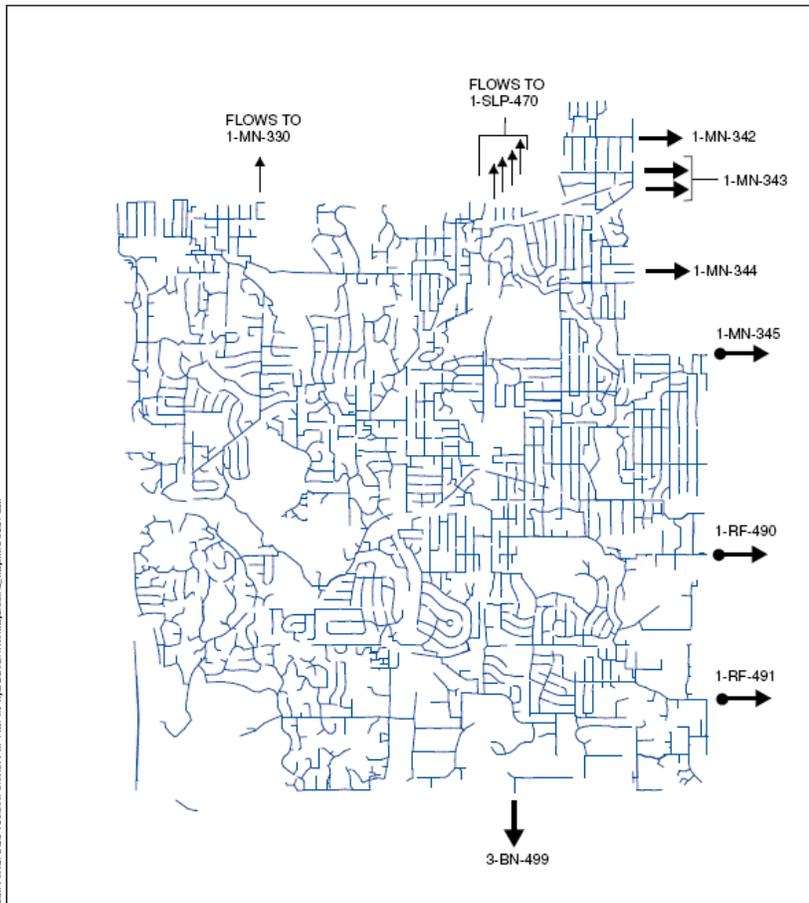
seven locations that are served by Individual Sewage Treatment Systems and regulated by Hennepin County.

Edina's sewer system consists of about 197 miles of trunk and lateral lines, 5,017 manholes, and 24 lift stations. These facilities convey Edina's sewage to interceptors that are part of the Metropolitan Disposal System (MDS) which is owned and operated by the Metropolitan Council Environmental Services (MCES). The majority of the sewage flows easterly and leaves the City along its eastern border via interceptors that are shown on Figure S-1. A small amount of sewage flows to the north into St. Louis Park through four smaller pipes that carry no more than one block each. Finally, there is a small section of commercial and industrial land along the southern border of the City that flows south into Bloomington via interceptor 3-BN-499.

The City's sewer system has been divided into five main sewer districts which are shown on Figure S-2. Four of the districts are associated with MCES interceptors based on the meter and interceptor to which they flow. The fifth is a catch-all group in the northern part of the City that includes all of the small areas that do not flow to one of the other four interceptors.

The system is further divided into sub-districts based on lift station service. Each area that is tributary to a given lift station has been color-coded. Lift station sub-districts are depicted on Figure S-3 by a system of colors. The general location where the forcemain from each lift station flows is also noted on the figure.

Note that there is one area that can flow to more than one interceptor. This is the result of a special force main constructed from lift station 4 to help alleviate excessive flows in interceptor 1-RF-491 by directing flow to 1-RF-490. Under normal conditions, flow is discharged to 1-RF-490 at a nominal flow rate determined by MCES. When incoming flow exceeds that flow rate, another set of pumps are called to operate and discharge the excess flow to 1-RF-491.

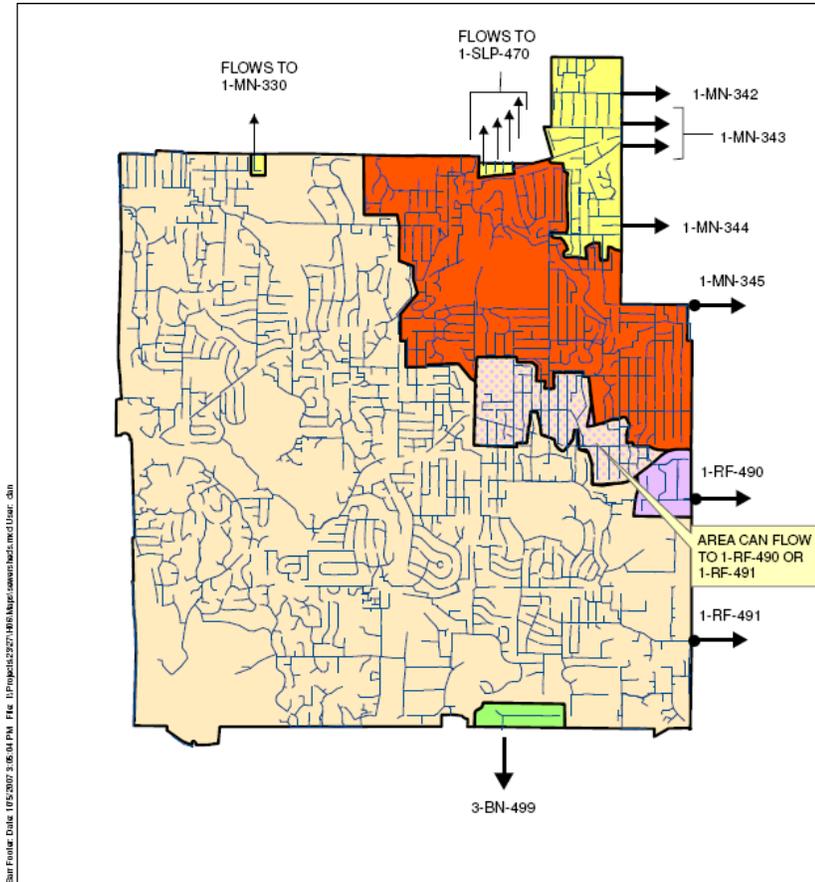


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- LEGEND**
- MCES INTERCEPTOR
  - LOCAL SEWER OUTLET
  - LOCAL SEWER PIPE
  - MCES FLOWMETER
  - 1-RF-491 MCES INTERCEPTOR LABEL



Figure S-1  
 SANITARY SEWER MAP  
 2008 Comprehensive Plan  
 City of Edina  
 Edina, MN

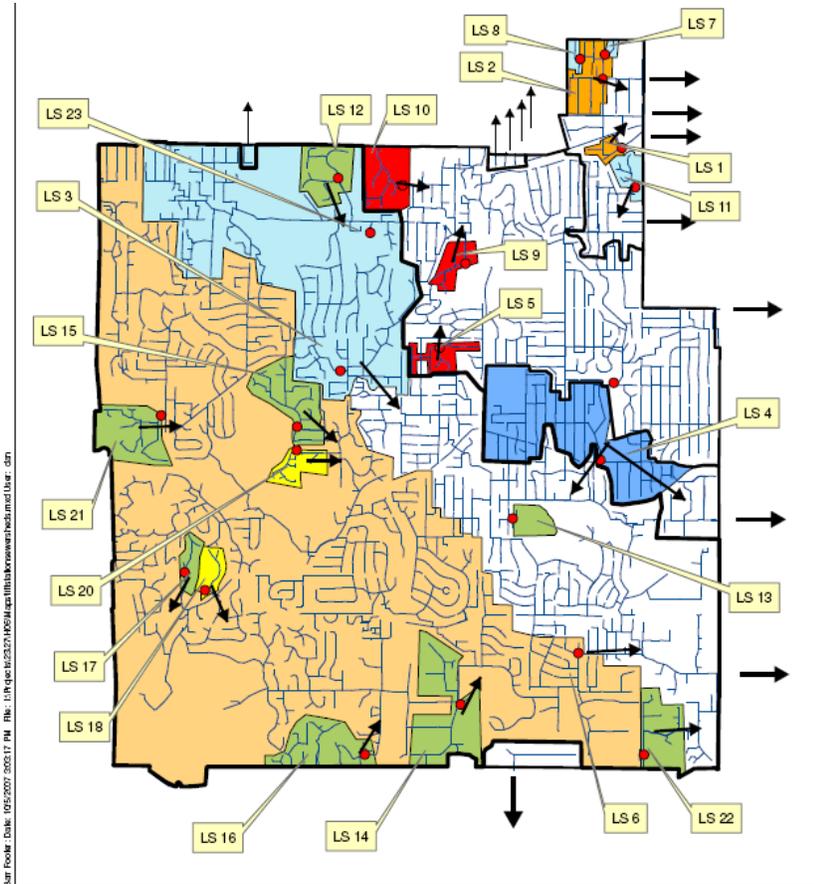


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- LEGEND**
- ➔ MCES INTERCEPTOR
  - ➡ LOCAL SEWER OUTLET
  - LOCAL SEWER PIPE
  - MCES FLOWMETER
  - 1-RF-491 MCES INTERCEPTOR LABEL



Figure S-2  
 MAJOR SEWER SHEDS AND OUTLETS  
 2008 Comprehensive Plan  
 City of Edina  
 Edina, MN



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- LEGEND**
- MCES INTERCEPTOR
  - LOCAL SEWER OUTLET
  - LOCAL SEWER PIPE
  - LIFT STATION LOCATION
  - LS 10 NAME OF LIFT STATION



Figure S-3  
LIFT STATION SEWERSHEDS  
AND OUTLETS  
2008 Comprehensive Plan  
City of Edina  
Edina, MN



**System Flows**

Annual historic sanitary flows decreased by about twenty-three percent from 1980 through 2000, as can be seen in Table S-1 Historic Sanitary Sewer Flows. From that time to the present, they have remained relatively constant. The decrease is a result of a number of factors, including the City’s efforts to reduce inflow and infiltration and increased water conservation efforts as low-flow plumbing fixtures become more prevalent. Table S-1 represents the sanitary flow metered by MCES for the majority of the City as reported by MCES. The flows below represent those metered in MCES meters M127, M128 and M129. As already noted, some flows leave the City and flow into other communities unmetered. Those flows are estimated later in this plan, but are not reflected in Table S-1.

**Table S-1  
HISTORIC SANITARY SEWER FLOWS**

Year	Population	Flow (MGY)
1979-80	46,073	2,664
1996	46,984	2,727
1994	46,841	2,508
1995	46,845	2,559
1996	47,029	2,208
1997	47,128	2,336
1998	47,227	2,150
1999	47,326	2,187
2000	47,425	2,046
2001	47,583	2,162
2002	47,740	2,238
2003	47,898	2,157
2004	48,055	2,129
2005	48,213	2,138
2006	48,370	2,133

**SANITARY SEWER SYSTEM – REGIONAL**

The collection and treatment of sanitary wastewater are primary functions of the City of Edina and the Metropolitan Council. Generally, the City’s sanitary sewer system flows in an east to southeasterly direction out of the City via three metered connections to MCES interceptors. Additional flow leaves the City via six other unmetered minor trunk



lines and five small laterals. These pipes carry flows to surrounding cities and eventually to other MCES interceptors. All effluents exiting the City are carried through MCES interceptors to the Metro Waste Water Treatment Plant, except those from south-central Edina that flow via an MCES interceptor through the City of Bloomington to the Seneca Wastewater Treatment Plant.

The MCES interceptors that carry Edina wastewater are identified as Interceptor Nos. 1MN-343, 1-MN-344, 1MN-345, 1RF-490, 1RF-491, and are depicted on Figure S-1, Sanitary Sewer Map. The MCES monitors flow rates at the border of the City in three of the main interceptors in special meter stations that it uses to determine the City's wastewater fees.

The majority of Edina's sewage flows through metered connections to these interceptors. The metered interceptors include 1-RF-491, which is served by MCES meter M129; 1-RF-490, which is served by meter M128; and 1-MN-345, which is served by meter M127. The remainder of the City's sewage flows through interceptors 1-MN-344, 1-MN-343, 1-MN-342.

Approximately two thirds of the City's sewage flows through MCES meter M-129 and into interceptor 1-RF-491. This interceptor is critical to the planning of Edina's future since the majority of planned future flow increases will be directed to this interceptor. MCES is currently in the process of planning a significant relief sewer to run roughly parallel to the current interceptor. Construction on this interceptor will be completed by approximately 2010. Planning efforts in this document take into account the increased capacity that will be available from that interceptor.

## **TRENDS AND ANALYSIS OF FUTURE CONDITIONS**

In this section, the impacts of redevelopment in the City will be discussed. Projecting future flows generated by the anticipated growth is critical in planning local trunk lines and regional facilities such as interceptors and treatment plant expansions.

## **TRENDS AND ANALYSIS OF SANITARY SEWER SYSTEM - LOCAL**

In recent years, the City has seen significant redevelopment of several large areas. The areas are generally connected and form a J shape. The area starts at Southdale and runs south to 494, then west along the southern border of the City to a point just west of Highway 100, then north to approximately 70<sup>th</sup> Street. Plans for these areas generally include a higher density of residential and commercial development than currently exists. This will result in increased sanitary sewer flows in the future. The density of this



redevelopment will determine the amount of increase in future sewage flows. Almost all of this redevelopment is planned to occur in areas tributary to MCES interceptor 1-RF-491 though a small portion will flow to MCES interceptor 1-RF-490 and another small portion along the southern border will flow to 3-BN-499.

Table S-2 shows the projected increase in flow based on the currently projected 2030 population and the flows that would be generated by the potential ultimate population. The impacts of redevelopment and the associated increased sanitary flows are considered in Scenarios 1 and 2 in the next section and also in the regional section. Scenarios 1 and 2 analyze the impacts of 2030 development and ultimate development, respectively.

**Table S-2  
Future Sanitary Sewer Flow Estimates**

Year	Population	Employment	Total Flow Based on MCES Population and Employment (MGY)
2010	48,500	52,100	2,510
2020	49,100	55,000	2,553
2030	50,000	57,400	2,600
<b>Ultimate</b>	<b>70,149</b>	<b>70,000</b>	<b>3,267</b>

Comment [dan1]: Per conversation with Wayne, BKL, and DAN

In order to plan for the impacts of this redevelopment, Barr Engineering Co. has analyzed the potential range of flows that will result from two different development scenarios. Each assumes a different total population and level of commercial development. Both scenarios would be allowable based on the proposed land use in the areas that are subject to redevelopment. The scenarios analyzed are described as follows:

**Scenario 1:** This scenario assumes Metropolitan Council projections of population, households and employment. Under this scenario, the 2030 population is assumed to be 50,000 with 22,500 households and an employment base of 57,400. The flow generated by this level of population and employment increase was calculated.

The majority of the flow will be conveyed to MCES interceptor 1-RF-491. A relief interceptor is planned to help accommodate projected growth in this area. Calculations indicate that Edina’s current sanitary system could accommodate this level of development without major trunk line upgrades. However, the MCES interceptors are



very near capacity. Even the moderate growth assumed by MCES projections will exceed conservative estimates of available capacity in interceptor 1-RF-491. The capacity available in the planned relief sewer will be adequate for this growth.

**Scenario 2:** This scenario is based upon the ultimate potential development. Under this scenario, the area of redevelopment was analyzed based on allowed land use and all areas were assumed to develop to the fullest extent allowed. This represents an ultimate build-out scenario and yields an ultimate population of 70,149 in 30,767 dwelling units.

Under this scenario, significant trunk line upgrades would be needed to meet projected flow increases. Areas where upgrades would be needed vary depending on actual redevelopment densities and patterns. Areas where upgrades may be needed are shown on Figure S-4. This figure simply shows the lines that may need to be increased in size to accommodate the added flow. The actual increase in size would be determined in subsequent analysis once the level of development is more clearly defined.

This figure should be checked whenever a project is proposed over or very near a trunk line that will need to be increased in size to handle future flows. Under some circumstances, it may be appropriate to upsize the trunk line at the time of the proposed project in order to eliminate a subsequent project in the same location just a few years down the line. The method of paying for the trunk line upgrades will be addressed initially by existing policy, and then by the City on a case-by-case basis as specific projects are proposed and may include fees distributed through out the City, assessments of entities that benefit from the trunk line improvement or other methods not yet identified.

### **SOUTHERN EDINA FLOWING TO INTERCEPTOR 3-BN-499**

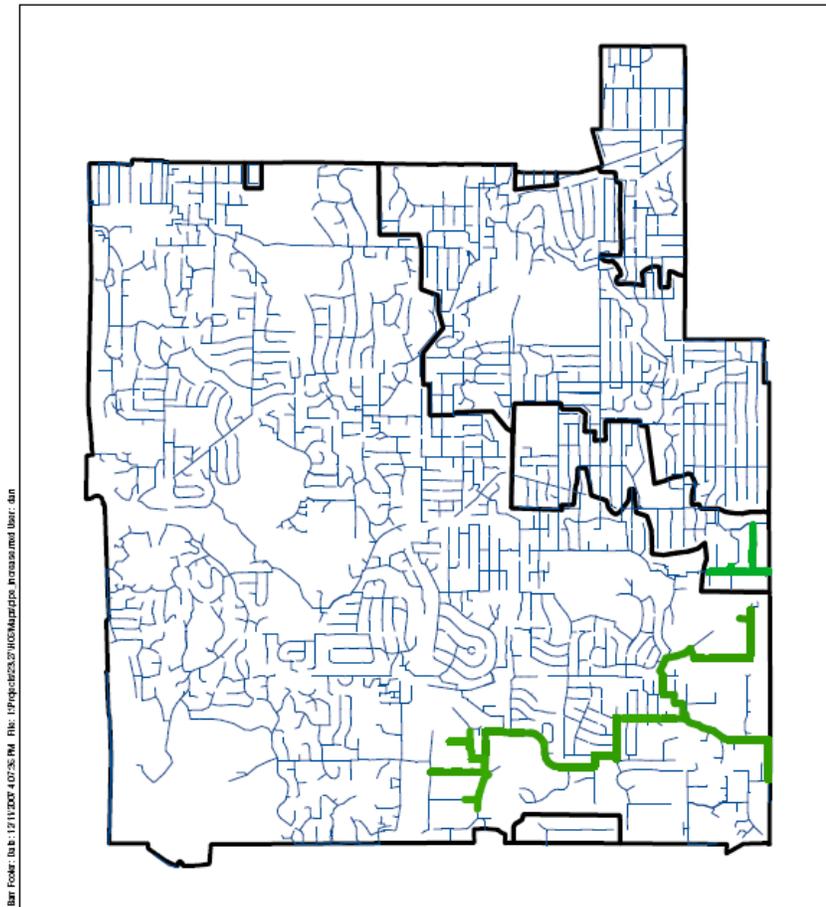
There are regions in the City where redevelopment is occurring that will affect entities other than the City. One such area is in the southern part of Edina and currently flows into Bloomington via interceptor 3-BN-499. It is expected that significant redevelopment in this area will result in increased sanitary flows. These increases will have some regional impact in this area due to potential projects planned by MCES that will involve the City of Bloomington as well. Because of this, flows in this specific area will be addressed in greater detail. The table below shows current sanitary sewer flows generated in this area, along with the projected increases that could occur up though ultimate flow generation from this area. The current flow estimate is based on water sales data from the City of Bloomington, with estimates for inflow and infiltration



included. The future estimate is based upon preliminary development plans for the area..

**Table S-3**  
**3-BN-499 Current and Future Flow Estimate**

Year	Flow (MGY)
2006	67
2010	80
2020	105
2030	136



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**LEGEND**

- LOCAL SEWER PIPE
- POSSIBLE TRUNK INCREASE
- SEWERSHED BORDER



Figure S-4

POTENTIAL TRUNK UPGRADE MAP  
2008 Comprehensive Plan  
City of Edina  
Edina, MN



**TRENDS AND ANALYSIS OF SANITARY SEWER SYSTEM - REGIONAL**

The increased flow projected in the previous section ultimately flows out of the City and to the regional treatment plants via the regional interceptors discussed earlier in this plan. Projected increases in flow will have an impact upon those facilities, as well as the City's own trunk lines. Projected sanitary sewer flows into these interceptors are shown in Table S-4 below. This table includes the 2000 Sanitary Sewer Improvement Projects that provide a divergence of a portion of the 1MN-345 interceptor flow to 1RF-490.

**Table S-4  
Metropolitan Council Sanitary  
Sewer Flow Estimates for Edina (MGY)**

SERVICE AREA	2005	2010	2020	2030	Ultimate
All interceptors north of 1MN-345	146	146	146	146	146
1MN-345	566	566	566	566	566
1RF-490	135	136	137	139	191
1RF-491	1573	1583	1599	1614	2227
Bloomington interceptor	67	80	105	136	136
<b>TOTAL</b>	<b>2487</b>	<b>2510</b>	<b>2553</b>	<b>2600</b>	<b>3267</b>

It is important that the City maintain a close working relationship with MCES as it redevelops. As the City's flows increase, the remaining capacity of some of the regional interceptors will be used up and, at some point, new larger interceptors will be needed. This is already the case for interceptor 1-RF-491, which has recently been identified as under capacity for future flows. A current plan is underway to add capacity via a parallel relief sewer which should be completed in 2010. As noted previously, the City also has the ability to divert flow from the 1RF-490 service area to the 1RF-491 service area. This allows Edina to keep flows below 0.94 MGD to 1RF-490 and any flow in excess of 0.94 MGD is directed toward 1RF-491.



## GOALS AND POLICIES

Operation of the sanitary sewer system is based on the following goal:

- Provide for the effective, efficient removal of sanitary sewage for all areas of the City of Edina, while also eliminating inflow and infiltration and protecting the health, safety and welfare of our citizens now, as well as through the year 2030.

Policies needed to maintain the system are:

- Continuously monitor sewage flow at principal metering points to insure capacity of the system.
- Continue and upgrade the monitoring of the local system through both televising lines and electronic utility data collection.
- Continue to eliminate points of inflow and infiltration to the system on public property, and require elimination of inflow and infiltration on private property as outlined above.
- Continue to maintain operating efficiency, minimize sewage blockages, and reduce potential for inflow and infiltration.
- Continue to review all sanitary sewer mains and services prior to reconstructing any roadway.
- Continue strict standards and inspections for private sewer line connections to the public sanitary sewer system.
- Repair pipes immediately upon detection of a failure or problem.
- Continue to eliminate private on-site sewage systems (only seven remaining).
- Identify all future sanitary sewer facility improvements in the Capital Improvement Plan.
- Continue to maintain and enforce the following ordinances and new ones adopted that deal with the sanitary system.

The following ordinances exist in the City's code regarding the sanitary sewer system:

- Section 445: Requiring Connections to Sanitary Sewer.
- Section 445: Restricting discharge of clear water into Sanitary Sewer.
- Section 850.16 Subdivision 12 Paragraph F: Requiring that all projects needing a conditional use permit in zoning district PCD-3 must perform an I&I study and eliminate on site I&I.



## IMPLEMENTATION

This section addresses the specific projects or day-to-day tasks that City staff undertake to implement the goals and policies laid out in this plan. Some tasks have been ongoing for many years and simply represent the high quality of service that the City has always provided to its population, while others are new initiatives that are the City's responses to recent programs implemented by MCES and to recent development..

### System Maintenance & Improvement

The City aggressively maintains the sanitary sewer system. The City has implemented a standard jet-cleaning program for all lateral collection piping. Each pipe is cleaned on a four-to-five year revolving schedule. The main trunk sewers are not included in the cleaning program since they receive regular scouring velocities from normally occurring peak flows and the flushing from cleaning in the laterals. The City also televises trunk lines and laterals to help determine areas in need of cleaning and improvements.

### Inflow and infiltration

MCES has implemented a program to reduce inflow and infiltration (I&I) throughout the metropolitan area. As part of this program, they have determined the amount of I&I that each City is allowed to contribute to the MDS. Cities in excess of their allotted amount must eliminate the excessive I&I or pay a surcharge over and above their normal sanitary sewer fees to MCES to help pay for MCES-based projects that will help deal with the excessive flows. Edina is over their allotted I&I maximum and has undertaken a number of projects in order to reduce and eliminate as much I&I as possible.

### Past Efforts

Edina has been working to eliminate excessive I&I for many years. Back in the 1980's, the City performed studies to identify sources of I&I and related mitigation measures. Again in the late 1990's, the City undertook another effort. The 1997 Evaluation of the City's Sanitary Sewer System by TKDA reanalyzed the City's I&I problem. As a result of that work, the City undertook an I&I reduction program with a goal of a 40% reduction in I&I. Programs and projects that the City has already completed as part of their I&I reduction efforts include:

- All buildings within the City were inspected for potential clear water connection.



- Buildings with sump pump systems were put on a regular inspection schedule for clear water connections.
- A one million gallon peak flow storage tank was installed in the sewer shed tributary to interceptor 1-MN-345.
- Ordinances were passed that required mitigation of I&I on private property as part of obtaining conditional use permits for redevelopment projects in certain key areas of the City.

The City recognizes that storage of peak flow caused by I&I is a temporary solution. By completion of current and future I&I reduction efforts, the need for this tank will be eliminated.

### Current Efforts

When MCES initiated its current surcharge program, Edina hired Barr Engineering to perform a new I&I study. Since past efforts had already addressed inspections of private property and the elimination of sump pump and other clear water connections from the sewer, this effort was focused on the current City system. The City is in the middle of a series of projects that should significantly reduce inflow and infiltration into its system. Those projects include:

- Modeling sanitary sewer system
- Inspecting sanitary sewer manholes
- Working with private developers who are proposing projects on large parcels with known I&I issues
- Modifying current City sanitary sewer ordinances
- Improving infrastructure to reduce inflow and infiltration

### Modeling

One of the first projects included the preparation of a sanitary sewer model of the City's system. Barr used the new model of the sanitary system in conjunction with its existing model of the City's storm sewer system to determine areas within the current sanitary system where I&I was most likely coming from.

As part of this effort, flow meters were installed at a number of locations in the City's system on two separate occasions. During the first, dry weather flows were monitored during winter months. This data was used to calibrate a sanitary sewer system model



using water sales data as the input for sewage flow generation. Model parameters were adjusted until the flow rates in the model closely approximated those measured during the dry weather flow monitoring.

A second round of flow monitoring was performed during spring when there was the high likelihood of a rainfall event intense enough to produce measurable inflow. At the same time, a series of rainfall gauges were identified that would be able to provide a rainfall distribution throughout the study area for use in the storm water model.

An intense event was captured and data from the rainfall gauges gathered during this event were input into the City's storm water model to generate flood levels expected during the event. This produced water levels that, in many areas, were above existing manhole covers. This data was then used to help set inflow parameters in the sanitary model to calibrate it so that it would produce the flows measured in the sanitary system during the inflow event. This resulted in a sanitary model that was calibrated for both dry weather and wet weather conditions.

The model was then used to identify areas where higher than expected inflow and infiltration occurred during the recorded peak flow event. These areas are being investigated to identify the most likely source of inflow and infiltration.

### **Sanitary Sewer Manhole Inspection**

As a result of the modeling, two main sources of inflow were identified. One was related to private connections to the sanitary sewer from parking ramps and other related facilities. These will be discussed in the next section. The other was from leaky manhole covers and deteriorated top sections of old manholes.

The City is now in the middle of a project to inspect every sanitary sewer manhole in its system over the next two years. A protocol was set up so that a specific and consistent set of data would be gathered on all manholes. This was facilitated by the use of a software program called City Works that Edina had elected to purchase to help with infrastructure management. The manhole inspections were prioritized based on the results of the combined sanitary sewer and storm sewer modeling effort. Those manholes most susceptible to inundation during high intensity rainfall events were inspected first.

Once these inspections are complete, the City will compile a list of manholes that are in need of rehabilitation. This list will be prioritized based upon several criteria. One of those will be that manholes most likely to contribute inflow during intense runoff events



will be given a high priority for immediate repair. Repairs of these manholes will be scheduled so that, to the extent possible, most will be complete prior to 2010.

Based on the inspections complete to date, the following is an abbreviated list of the types of repairs that will occur to mitigate inflow into the sanitary sewer system:

- Replacement of vented manhole covers solid water tight covers
- Removal of surface drainage cross connections
- Repair of manhole frames that have separated from rings in concrete street sections
- Replacement of dilapidated brick manholes with new precast manholes
- Installation of chimney seal systems on manholes that have evidence of inflow characteristics
- Complete relining or replacement of sewers constructed in low areas subject to frequent inundation, such as along creeks and wetlands

### **Work with Private Developers**

One of the main sources of inflow continues to come from private connections. One of those sources is the connection of lower levels of parking ramps to the sanitary sewer. Though upper levels of ramps are connected to the storm sewer, lower levels are connected to the sanitary sewer. When runoff events exceed the capacity of the upper level collection systems, it often simply flows to the next level down where it runs directly into the sanitary sewer. Edina is working with private developers to prevent this from occurring on future proposed ramps and, in some cases, to correct existing ramps where this is known to be a problem.

In addition to dealing with I&I, the City will also address methods to fund trunk line projects that are necessitated by ongoing redevelopment within the City. As noted earlier, methods of funding the projects will be addressed on a case by case basis.

### **Modifications to Ordinances**

The City already has ordinances prohibiting the connection of sump pumps and other clear water connections to the sanitary system. However, there are other sources of inflow from private systems that may not have been identified during earlier inspections of private buildings. The City is in the process of modifying its ordinances to require inflow and infiltration studies and corrections to certain private systems under specific



conditions that require permits for major construction. The City currently has one such ordinance but it is limited to a specific area and is only applicable to projects requiring a conditional use permit (see attached ordinance 850.16). In the future, this ordinance will be replaced by one that is wider reaching. The exact language of that ordinance has not yet been determined.

Another key component to inflow and infiltration is related to private services. Metropolitan Council Environmental Services estimates that as much as 70% of all I&I comes from private sources. As already noted, the City has completed a successful sump pump program. However, in addition to the sump pumps, many of the private sanitary sewer service laterals are old and susceptible to I&I. The City estimates that there is approximately 1,158,000 feet of service lateral in the City associated with 14,477 laterals. The City plans to modify its ordinances to deal with I&I that is being contributed to its system from the private laterals. The exact language of that ordinance also has not yet been determined.

#### **I&I Related Infrastructure Improvement Projects**

Finally, the City will be undertaking a number of infrastructure improvement projects over the next ten years in order to limit or eliminate I&I from its system. Those projects currently identified include:

- Manhole rehabilitation project based on the results of the manhole inspection project.
- Pipe rehabilitation of low lying sewers near Minnehaha Creek.
- Drainage improvements to the area near 70th and France to prevent water from ponding over floor drains connected to the sanitary system.
- Coordination with private developer to disconnect systems contributing runoff flow to the sanitary system.

A complete list of projects can be found in the City's current Capital Improvement Plan (CIP). The CIP is a five-year plan of projects the City may undertake. The CIP plan is updated every year.

## **8.2 Surface Water Management Plan**

### **INTRODUCTION**



The City of Edina believes in providing a high level of service to its residents, which includes providing effective storm water management and protecting the surface water resources of the city. In 2003-2004, the City developed the *Comprehensive Water Resource Management Plan* to address current and future storm water issues, especially those related to future development and redevelopment. The plan addresses storm water runoff management and flood control, water quality management, and wetlands protection through establishment of storm water planning policies and recommendations.

This plan was developed to assist the city of Edina in defining and implementing a comprehensive and environmentally sound system of surface water management. This plan is currently being reevaluated to reflect changes in the policies of the Minnehaha Creek Watershed District and the Nine Mile Creek Watershed District and is intended to be used as a tool to:

1. Plan for projects and other water management activities so as to correct existing problems and prevent the occurrence of foreseeable future problems.
2. Assist the City in considering water resource impacts resulting from variances to the city's long-range land use plan.
3. Enable the City to grow/redevelop in a systematic and orderly manner while protecting its vital water resources.

In order to accomplish these objectives, the plan considers a specific array of land uses within the City limits. If and when land uses change, this Plan provides the means to (1) address the proposed changes; (2) determine the impact of the changes on the city's infrastructure, flooding, and natural resources; and (3) determine the actions needed within the proposed areas of land use change to prevent undesirable impacts.

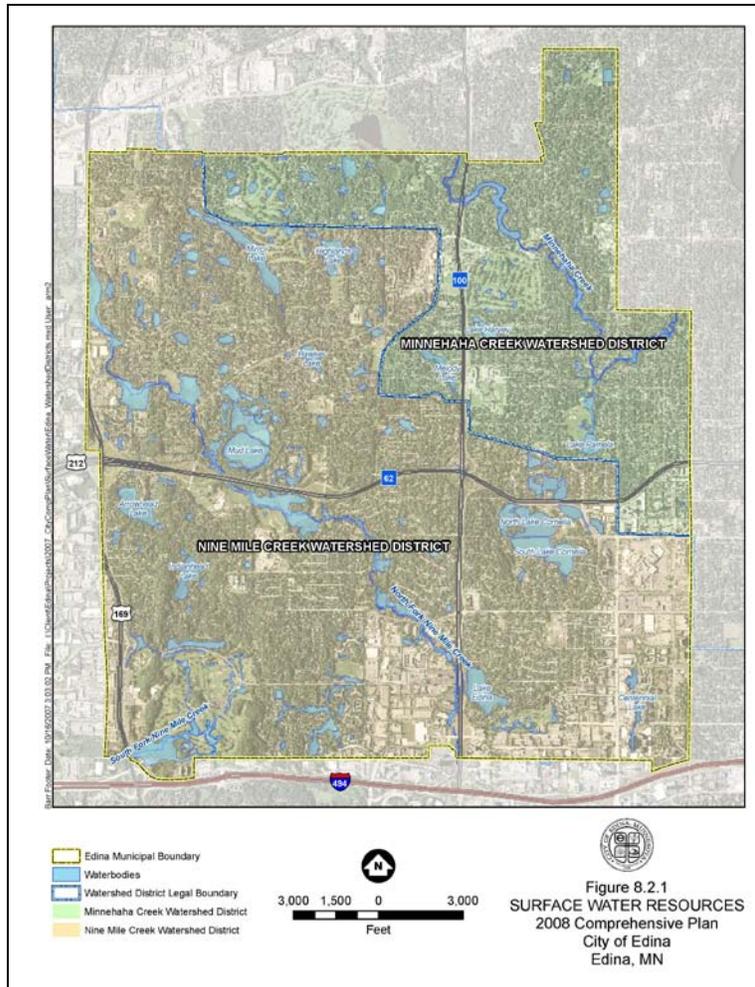
## CURRENT CONDITIONS

The City of Edina and its residents value the surface water resources within the city, which include two creek systems, a number of lakes, and numerous wetlands (see Figure 8.2.1). In addition to being a major component of the City's storm water infrastructure, these resources supply aesthetic and recreational benefits and provide wildlife habitat and refuge. The northeast corner of the City drains to Minnehaha Creek, which enters the city limits northwest of West 44<sup>th</sup> Street and T.H.100 and flows in a southeasterly direction through the city, exiting near West 54<sup>th</sup> Street and York Avenue. The southwest corner of the city drains to the South Fork of Nine Mile Creek, which



meanders through the Braemar Golf Course and then exits the city limits toward Bloomington at West 78<sup>th</sup> Street. The remainder of the city drains to the North Fork of Nine Mile Creek, which enters the Edina city limits in the northwest corner of the city north of the intersection of T.H. 169 and Londonderry Road and flows in a southeasterly direction through the city, exiting to Bloomington near the intersection of T.H. 100 and Interstate 494.

The City of Edina encompasses portions of two watershed districts: the Nine Mile Creek Watershed District and the Minnehaha Creek Watershed District (see Figure 8.2.1). Watershed districts are local units of government that specifically address the management and protection of water resources based on hydrologic boundaries instead of political boundaries. Each District is governed by a Board of Managers, comprised of citizens appointed by the boards of the counties with land in the watershed district. The districts are charged by State statute "to conserve the natural resources of



the state by land use planning, flood control, and other conservation practices using sound scientific principles for the protection of the public health and welfare and provident use of the natural resource.” Because these watershed districts are granted authority to regulate, conserve, and control the use of water resources within the district,



the City is required to comply with the specific storm water and water resource related requirements of each District.



The City of Edina places a high importance on providing quality storm water management service to its residents. Since the City of Edina has been a developing community throughout much of the past century, the age and condition of the existing storm water infrastructure is quite variable. The City completed a city-wide hydrologic and hydraulic modeling analysis of the existing storm water system as part of the Comprehensive Water Resource Management Plan to evaluate the capacity of the existing storm sewer system and identify storm water management and flood control issues. The storm water model was used to develop recommendations for system improvements and will continue to serve the City as a tool to evaluate additional storm water management initiatives and the impacts of future development and redevelopment.

#### **TRENDS AND CHALLENGES**

Recent years have seen significant changes in the regulation of storm water runoff and its impacts on surface water quality. A brief description of the regulatory changes and the associated impacts on the City of Edina are discussed below.

#### **NPDES MS4 General Storm water Permit- SWPPP and Nondegradation Requirements**

In 1990, the EPA promulgated rules establishing Phase I of the National Pollutant Discharge Elimination System (NPDES) Storm water Program, which regulated storm water runoff from large municipal separate storm sewer systems (MS4s), generally serving populations of 100,000 or greater. In 1999, the Phase II Rule of the NPDES Storm water Program extended the coverage of the NPDES program to operation of "small" MS4s in urbanized areas and operation of small construction sites. As a result,



the City of Edina was required to apply for coverage under the Minnesota Pollution Control Agency MS4 General Permit by March 10, 2003. Under this permit, MS4s are required to develop and implement a Storm Water Pollution Prevention Program (SWPPP), which must contain, at a minimum, the following six control measures:

1. Public education and outreach on storm water impacts.
2. Public involvement and public participation.
3. Illicit discharge detection and elimination.
4. Construction site storm water runoff control.
5. Post-construction storm water runoff control in new development and redevelopment.
6. Pollution prevention and good housekeeping for municipal operations.

The SWPPP must include best management practices (BMPs) and measurable goals for each of the six control measures. An annual report detailing the implementation of the control measures must be submitted by March 10 each year beginning in 2004. A copy of the City's SWPPP is available on the City's website.

In addition to development and implementation of a SWPPP, the City of Edina was selected as one of thirty cities in Minnesota required to complete a loading assessment and nondegradation report to determine whether additional control measures can reasonably be taken to reduce pollutant loading. The loading assessment evaluates the change in the City's storm water discharge loading for average annual flow volume, total suspended solids, and total phosphorus for the time periods from 1988 to 2007 and from the 2007 to 2020.

Results from the loading assessment indicated that the City's storm water pollutant loading has expanded since 1988 and is expected to increase slightly in the future. In response, an analysis of future BMPs was completed to address nondegradation and determine whether additional control measures can reasonably be taken to reduce pollutant loading from storm water runoff. The analysis found that through implementation of runoff design standards for development and redevelopment, such as the standards adopted by the Nine Mile Creek Watershed District in March 2008, the overall average annual flow volume from the City in 2020 is expected to decrease to levels below 1988 conditions. The City submitted the Non-degradation Report to the MPCA in December 2007.



### Volume Reduction of Storm water Runoff

The city and watershed districts have implemented conventional storm water quality treatment requirements since the late-1980s, typically in the form of storm water detention ponds. Due to the developed nature of the city, regional detention ponds have generally been encouraged by the City, as opposed to individual on-site storm water treatment. Storm water detention ponds are effective for removal of sediment and phosphorus from storm water runoff.

In recent years, storm water quality treatment trends have shifted to incorporate volume reduction of storm water runoff, in addition to the removal of sediment and phosphorus. This movement comes in response to both the desire of citizens and local governments to embrace the challenge of protecting our urban surface water resources and the MPCA MS4 nondegradation requirements for storm water volume. Storm water volume reduction can be accomplished by reducing the fraction of impervious surface on a site and/or implementing BMPs to increase rainfall abstraction processes such as infiltration, evaporation, water storage, and vegetation management.

The Nine Mile Creek Watershed District adopted revised storm water management rules in March 2008 that include storm water volume reduction requirements. The Minnehaha Creek Watershed Districts is currently in the process of revising their storm water management rules which are also likely to include storm water volume reduction requirements. Once the Minnehaha Creek Watershed Districts' rule revisions are finalized, the City of Edina will update their *Comprehensive Water Resource Management Plan* to reflect the watershed district's new storm water management requirements.

As the City strives to meet the storm water volume reduction requirements of the MPCA MS4 nondegradation plan and the revised storm water rules of the watershed districts, it may be necessary to revise the City's ordinances.

### Lake Water Quality Studies

The Nine Mile Creek Watershed District developed Use Attainability Analyses for several lakes within the City of Edina, including Lake Cornelia, Indianhead Lake, Arrowhead Lake and Mirror Lake. A Use Attainability Analysis is a scientific assessment of a water body's physical, chemical, and biological condition. The studies include a water quality assessment and prescription of protective and/or remedial measures for the lakes and their tributary watersheds. The City will work with the Nine Mile Creek Watershed District to implement the improvement recommendations presented in these studies.



## Impaired Waters

The federal Clean Water Act (CWA) requires states to adopt water quality standards to protect the nation's waters. Water quality standards designate beneficial uses for each waterbody and establish criteria that must be met within the waterbody to maintain the water quality necessary to support its designated use(s). Section 303(d) of the CWA requires each state to identify and establish priority rankings for waters that do not meet the existing water quality standards. The list of impaired waters is updated by the State every two years. For impaired waterbodies, the CWA requires the development of a total maximum daily load (TMDL), which establishes the pollutant loading capacity within a waterbody and develops an allocation scheme amongst the pollutant contributors, which include point sources, non-point sources and natural background pollutants.

Several waterbodies within the City of Edina have been listed on the draft 2008 Impaired Waters list, including Lake Cornelia and Lake Edina for total phosphorus impairment, Nine Mile Creek for chloride, turbidity, and fish bioassessment, and Minnehaha Creek for chloride, fecal coliform, and fish bioassessment. The City of Edina will work with the MPCA and other agencies to improve the quality of the waterbodies on the Impaired Waters list so that they can be removed from the list.

The Minnehaha Creek Watershed District has completed a draft TMDL study for Lake Hiawatha, in conjunction with the MPCA, to address the phosphorus impairment. Although Lake Hiawatha is not located in the City of Edina, a portion of the city drains to Minnehaha Creek, which impacts the water quality of Lake Hiawatha. As a result of the draft TMDL study, the Minnehaha Creek Watershed District has included an annual phosphorus load reduction requirement of 67 lbs for the City of Edina in the District's *2007 Comprehensive Water Resource Management Plan*. The City will work with the Minnehaha Creek Watershed District to develop a strategy to achieve the desired loading reduction.

## GOALS AND POLICIES: SURFACE WATER MANAGEMENT

The City's *Comprehensive Water Resource Management Plan* addresses storm water runoff management and flood control, water quality management, and wetlands protection through establishment of water resource management goals, policies, and design standards. The City's plan is required to conform with the existing watershed district plans, as well as future watershed district plan updates. The Nine Mile Creek Watershed District adopted their *Water Management Plan* in March 2007 and the Minnehaha Creek Watershed District adopted their *Comprehensive Water Resource Management Plan* in July of 2007. The City intends to revise its *Comprehensive Water*



*Resource Management Plan* in 2009 to be consistent with the most current watershed district plans and rules.

A brief summary of the management goals in the City of Edina *Comprehensive Water Resource Management Plan* are summarized below. Additional information on the policies and design standards can be found in the latest version of the City's plan.



## Storm water Runoff Management and Flood Control



- Adopt and implement a storm water management ordinance reflecting the policies and design standards detailed in the *Comprehensive Water Resource Management Plan*.
- Place high priority on providing 100-year level of protection for the City's storm water system.
- Require 10-year level of service for new storm water systems and for existing conveyance systems as opportunities arise.

#### **Water Quality Management**

- Modify City review, permitting and enforcement processes for construction activities to ensure water quality goals are met.
- Heighten community awareness of water quality management through education and training.
- Manage city water resources so that the beneficial uses of streams, wetlands, ponds, and lakes remain available to the community.
- Work with the adjacent municipalities to encourage upstream pollutant reduction in areas closer to the source of such pollutants.
- Encourage use of regional detention areas as opposed to individual on-site detention to reduce flooding, control discharge rates, and provide for water quality management.
- Promote storm water retention through infiltration practices and demonstration projects where soil conditions permit and where groundwater supplies will not be impacted.
- Adopt and implement a storm water management ordinance reflecting the water quality management standards and the erosion and sediment control policies detailed in the *Comprehensive Water Resource Management Plan*.

#### **Wetland Protection**

- Achieve no net loss of wetlands, including acreage, functions, and values.



- Discourage wetland alteration. Unavoidable wetland alterations must be mitigated in conformance with the Wetland Conservation Act (WCA) requirements and must be guided by the following principles, in descending order: avoid the impact, minimize the impact, rectify the impact, reduce or eliminate the impact over time, and compensate for the impact.
- Work in conjunction with the local government units (LGU) responsible for administering the Wetland Conservation Act in the City of Edina, the Nine Mile Creek Watershed District and the Minnehaha Creek Watershed District, on issues pertaining to wetland alterations within the city boundary.
- Maintain and periodically update the wetland inventory data and the wetland management classifications provided in the City's *Comprehensive Water Resource Management Plan*.
- Seek to restore previously existing wetlands and enhance existing wetlands.
- Provide buffer zones of native vegetation, where feasible, around ponds and wetlands to provide habitat. The City will educate the public regarding wetland protection and the importance of creating and maintaining vegetative buffers. Land use and property ownership may limit the ability to provide buffer zones.
- Encourage the minimization of water level fluctuations (bounce), where feasible, in wetlands to prevent adverse habitat changes.
- Involve the appropriate regulatory agencies (MPCA, U.S. Army Corps of Engineers, and the MnDNR) in the planning of any proposed water quality or flood control facilities identified in this plan that may be located within a wetland.



## IMPLEMENTATION

The City of Edina has historically placed a high importance on providing quality storm water management services to its residents, with increased flood protection efforts following the significant rainfall events of 1987 and 1997. Design criteria have been established to ensure that a proper level of service for storm water management and level of protection from flooding is provided to residents of the City. The existing storm sewer system throughout the City has been analyzed using hydrologic and hydraulic computer modeling software to identify areas throughout the city where the current storm water management and flood protection system does not meet the City's design standards. The problem areas and potential solutions have been identified and the resulting capital improvements and other related activities to be undertaken in the next ten years are summarized in the City's *Comprehensive Water Resource Management Plan*.

The City of Edina and its residents value the surface water resources within the City. To protect the quality of the city's waters, the City has established water quality management policies and design standards. As part of the *Comprehensive Water Resource Management Plan*, a water quality computer model was used to simulate the generation and transport of pollutants through the water bodies within the City. Recommendations for upgrades to storm water detention ponds throughout the city to maintain and improve the pollutant removal efficiency by these ponds are summarized in the City's *Comprehensive Water Resource Management Plan*. In addition to

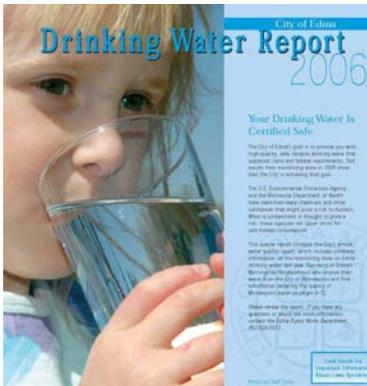


pursuing the recommended pond improvements, the City will also protect its surface water resources by implementing the NPDES MS4 Storm Water Pollution Prevention Plan (SWPPP) and related non-degradation requirements. The City will also work with the local watershed districts to comply with revised water quality management rules and standards, address water quality impairments and implement water quality improvement projects.

### 8.3 WATER SUPPLY PLAN

#### INTRODUCTION

Although several events have occurred during the past several years affecting Edina's long term sustainable supply, the City has ample production capacity to meet existing demand and has begun planning to address some of the existing concerns. Edina's water system is currently providing good and reliable service to its residents and businesses. The combination of 18 wells, three inactive due to vinyl chloride or radium), and five storage facilities have been able to meet maximum day demands in the past. The current storage reservoirs provide sufficient storage volume as well as additional volume for emergencies such as short term power outages or available fire flow. The current size and location of the elevated towers allow for turnover and mixing of the stored water. Water production relies on filtered water to remove iron during the low demand periods of the year while additional unfiltered wells pump to the system during high demand periods when a significant portion of water is used for lawn irrigation.





**CURRENT CONDITIONS**

During the past five years, Edina has completed various studies pertaining to water supply sources and the distribution system. Some of these studies used to complete this portion of the comprehensive report include:

- Wellhead Protection Plan. Completed May 2001. Plan outlines vulnerabilities of aquifers to potential as well as known contaminant sources and outlines plans to protect sources of water for the City’s long term sustainability.
- Water Distribution System Analysis. Completed August 2002 Plan includes a computer model of the City’s water distribution system to identify deficiencies in pressure and available fire flow. The plan also identifies capital improvements to address future growth of the City and how best to serve the growth.

The City of Edina provides water service to the majority of the residents and businesses located in the City. Several smaller residential and commercial areas in Edina are served by the cities of Bloomington, Eden Prairie, Minneapolis, and St. Louis Park, based on geographic boundaries depicted in Figure 1. Through these areas, the City of Edina has the ability to interconnect in the event of emergency with water supplied by the cities of Bloomington, Eden Prairie and Minneapolis, and vice versa. Absent an emergency, should the City of Edina seek to shift any or all of these areas to water supplied by and from the City of Edina, it first will conduct full public process, including written notice to, and written survey of, all affected residents and property owners, public hearings, and City Council approval.

The Edina water system is comprised of water mains ranging in size from four inches to 16 inches in diameter. In addition, five storage facilities provide water to the distribution system as identified in Table 1. The locations of these distribution facilities are shown in Figure 2.

Facility Name	Location	Year Constructed	Type	Storage Capacity (MG)	Usable Storage Capacity (MG)
Dublin Reservoir	700 Dublin Road	1960	Ground	4.0	0
Gleason Road Tank	6001 Gleason Road	1970	Elevated	1.0	0.5
Community Center Tank	5901 Ruth Drive	1955	Elevated	0.5	0.5
Van Valkenburg Tank	4949 Malibu Drive	1989	Elevated	1.0	0.5
Southdale Tank	6853 France Avenue S	1956	Elevated	0.5	0.5
<b>Total</b>				<b>7.0</b>	<b>2.0</b>



Eighteen Wells shown in Table 2 supply water directly to either water treatment plants or to the distribution system during periods of high demand. In total, eight of the existing wells are treated by oxidation and filtration, seven provide unfiltered water and three are currently inactive. The inactive wells include: #7 (Vinyl Chloride), #9 (Radium) and #15 (Radium). These three inactive wells currently exceed the EPA's Maximum Contaminant Level (MCL), for the contaminants identified and are being studied to address the best course of action including either treatment or abandonment. The supply and treatment facilities are shown in Figure 3.

**Table 2 Existing Supply Wells**

	Status	Treated	Supply Capacity (gpm)	Supply Capacity (MGD)
Well #2	Active	WTP 1	1000	1.44
Well #3	Active	NA	680	0.98
Well #4	Active	WTP 2	720	1.04
Well #5	Active	NA	1000	1.44
Well #6	Active	WTP 2	960	1.38
Well #7	Inactive (Vinyl Chloride)	NA	680	0.98
Well #8	Active	NA	825	1.19
Well #9	Inactive (Radium)	NA	840	1.21
Well #10	Active	WTP 3	450	0.65
Well #11	Active	WTP 3	1,100	1.58
Well #12	Active	WTP 4	900	1.30
Well #13	Active	WTP 4	900	1.30
Well #14	Active	NA	750	1.08
Well #15	Inactive (Radium)	NA	2000	2.88
Well #16	Active	NA	1,000	1.44
Well #17	Active	NA	950	1.37
Well #18	Active	NA	1000	1.44
Well #19	Active	NA	1,000	1.44
<b>Total</b>			<b>16,755</b>	<b>20.18</b>

In 2006, the average daily demand (AD) of the City's water system was 7.62 million gallons per day (MGD). This demand has varied during the past five years from 6.78 to 8.16 MGD as shown on Table 3. In addition, the maximum daily demand (MD) has varied from 14.54 to 21.78. This ratio of the AD to the MD is referred to as the water use peaking factor and typically ranges from 2.5 to 3.0 for suburban communities. While Edina's peaking factor of 3.0 is on the high side of this range, it is not surprising given Edina's location as a metropolitan suburb.



**Table 3 Existing Demands**

Year	AD Demand (MGD)	MD Demand (MGD)	MD Peaking Factor
2002	6.78	12.87	1.90
2003	8.16	21.78	2.67
2004	7.26	14.54	2.00
2005	7.14	21.21	2.97
2006	7.62	19.07	2.50

**TRENDS AND CHALLENGES**

Future water demands shown in Table 4 are based on Metropolitan Council projections and indicate no additional need for storage. In this scenario, an additional two wells are needed beyond the existing wells to meet the Metropolitan Council maximum day demand of 2030, if the existing peaking factor of 3.0 stays the same. If the peaking factor is reduced, the City may meet demands with one additional well.

Based on ultimate build out of the City including significant areas of redevelopment, Edina could experience a significant increase in water demands. Based on a historical peaking factor of 3.0, it may be necessary to significantly decrease water demand by conservation water use changes or major capital improvements. If peaking factors are reduced in phases from 3.0 in 2005 to 2.75 by ultimate development, an additional five new wells in addition to proposed wells 20 and 21 may be needed.

**Table 4 Ultimate Water Demand Projections**

Year	Met Council Population	AD Demand (MGD)	MD Demand (MGD)	MD Peaking Factor
2005	47,425	7.35	12.87	3.00
2010	48,500	7.6	22.7	3.0
2020	49,100	7.7	23.0	3.0
2030	50,000	7.8	23.4	3.0
Ultimate	70,149	10.9	30.1	2.75

Figures 4 and 5 include Average Day Pressures and Maximum Day Fire Flow contours respectively. The figures were calculated with the aid of the computer model and generally show satisfactory results throughout the majority of the City. The City has



begun to provide looping of water main where feasible to aid in providing higher available fire flow.

### **GOALS AND POLICIES: WATER SUPPLY PLAN**

1. Provide the City's water customers with safe, high quality potable water.
  - Meet or exceed all Federal and State drinking water standards.
  - Provide treatment or replace existing wells with contaminants that exceed EPA Maximum Contaminant Levels.
2. Provide sustainability of the city's water system through preservation and conservation.
  - Protect the City's existing sources of supply by implementation of the Wellhead Protection Plan.
  - Continue to implement a conservation oriented water rate system that charges increasing fees for increasing use of water.
  - Continue to provide education regarding conservation through mailings, website, newspaper and public involvement.
3. Provide a reliable water system that can provide a safe supply of water during emergencies.
  - Continue the relationship with adjacent communities to provide interconnections for emergency needs.
  - Continue to complete water main looping of dead ends to improve available fire flow to customers.
4. Continue to improve the quality of water throughout the distribution system by aggressively pursuing solutions to water quality complaints.
  - Implement an aggressive unidirectional flushing program throughout the system.
  - Continue to replace sections of aging water mains in areas with water quality and/or hydraulic deficiencies.
  - Implement new technologies including pipe bursting and cleaning and lining to limit full reconstruction of utilities.

### **IMPLEMENTATION**



The City currently has an excellent distribution system with well looped trunk watermain throughout the City. Several sources of supply and storage placed strategically throughout the City continue to strengthen the demand of the existing customer base. However, improvements to treatment are needed to allow the use of these wells. The City is currently proposing two additional filter plants to improve the use of these wells as well as reduce unfiltered water pumped into the system during peak demands.

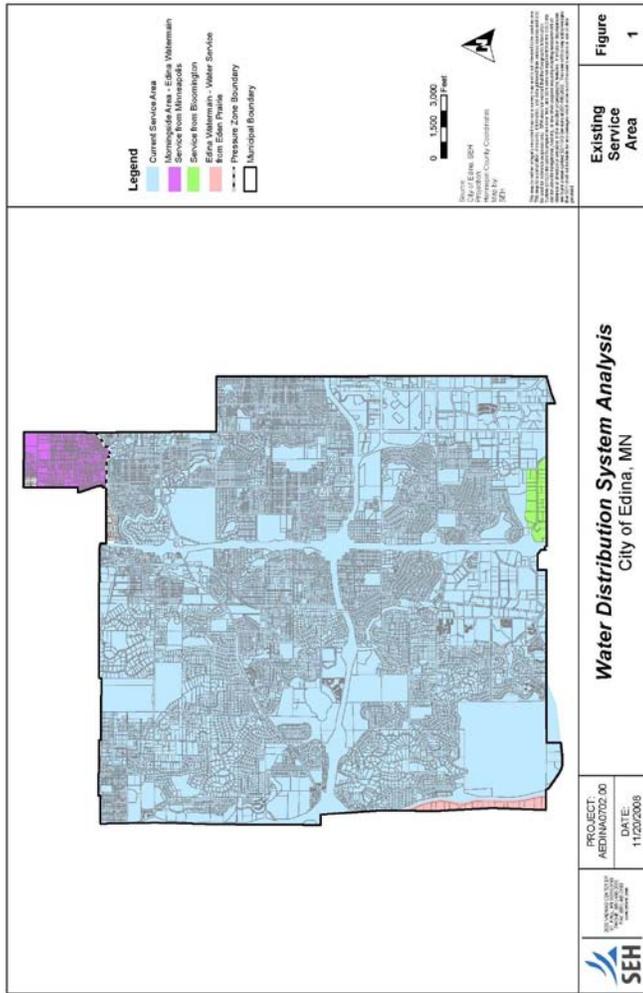
This unfiltered water in part contributes to aesthetic problems including red and/or brown water complaints from high concentrations of iron and manganese. Another factor in contributing to these colored water complaints are old unlined cast iron mains throughout various portions of the City. In the past few years, the City has aggressively pursued replacing these unlined mains with new water mains in the worst areas of town. The City has also recently begun to investigate the use of pipe lining technology to reduce red water complaints in the future.

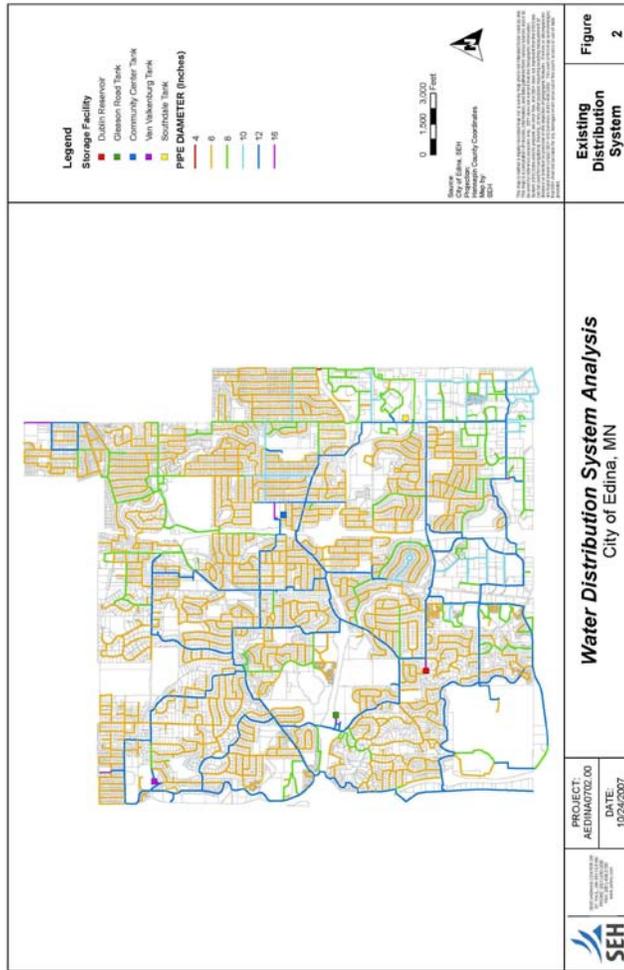
While the City's potential growth may require additional sources of water supply, the remainder of the distribution system including storage and water mains should remain capable of providing excellent service to the City's residents and businesses. These portions of the system are initially sized with providing fireflow so increases in domestic flow typically have minimal impacts. This is especially true for the area near the Southdale area which includes a large network of 12 inch trunk water mains for this generally commercial area.

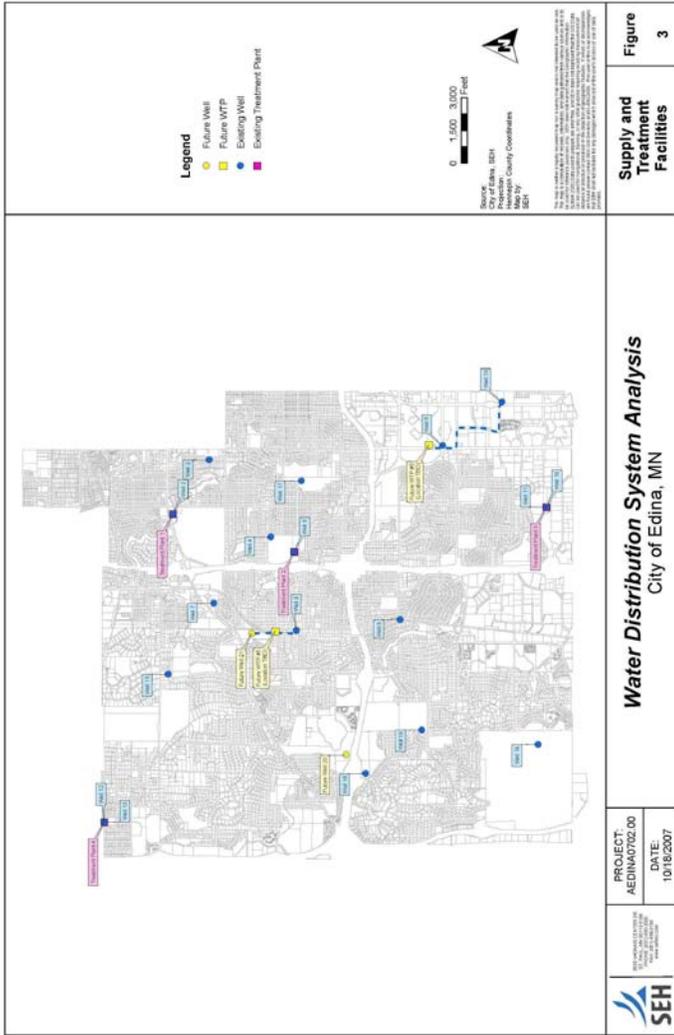


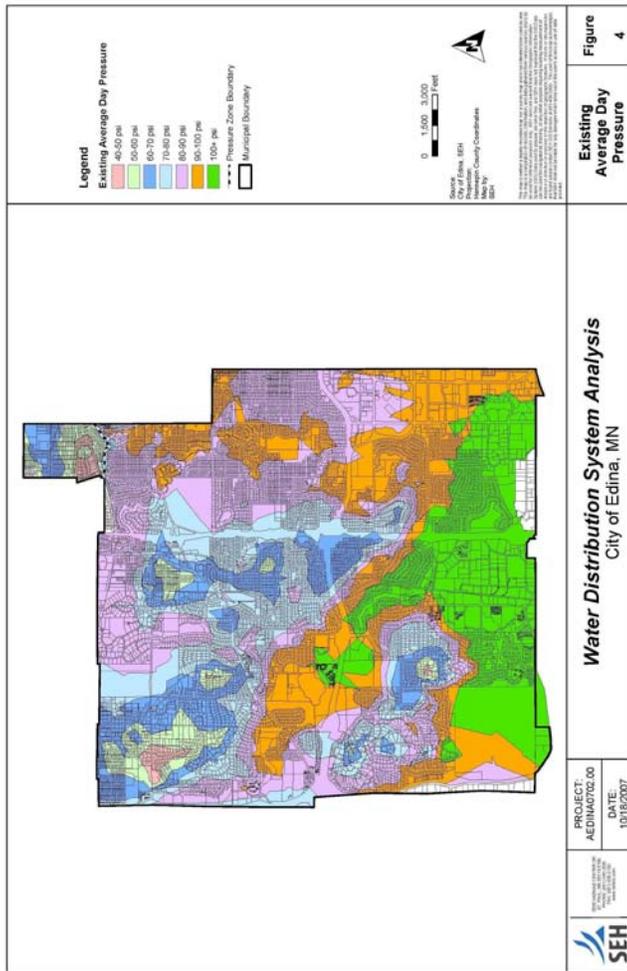


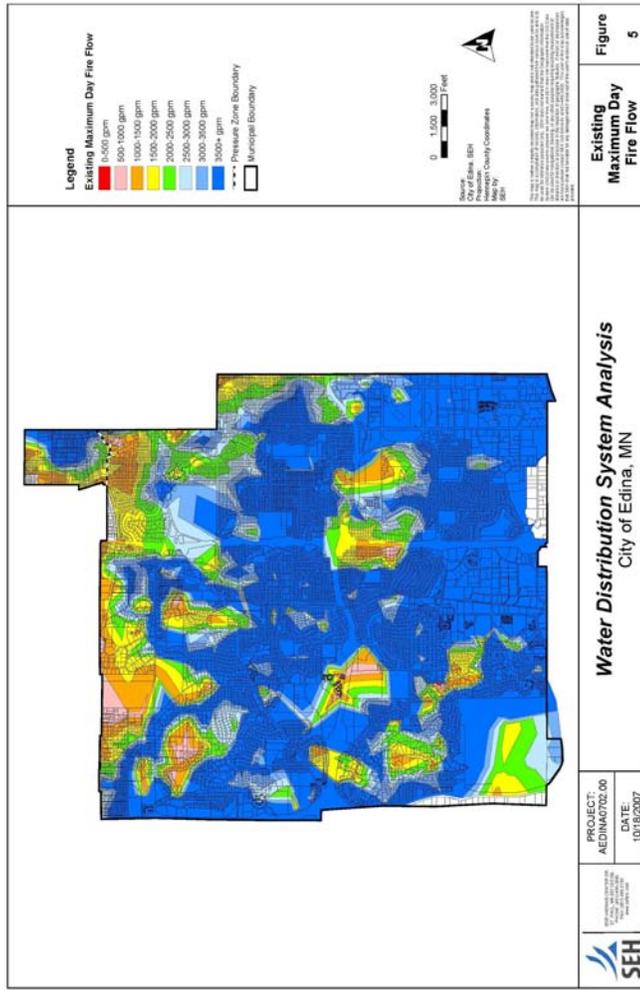
In total five additional wells will be needed to meet the proposed future maximum day demands for ultimate buildout. However, as previously indicated, a reduction in water demand may reduce the overall need for future wells if effective conservation measures are implemented. The City has taken effective initial steps by implementing a tiered inclining block rate structure. Other measures have been identified in the City's recently completed Water Supply Plan to encourage a reduction in water demand. This Plan has been submitted separately to both the Metropolitan Council and the Minnesota Department of Natural Resources.

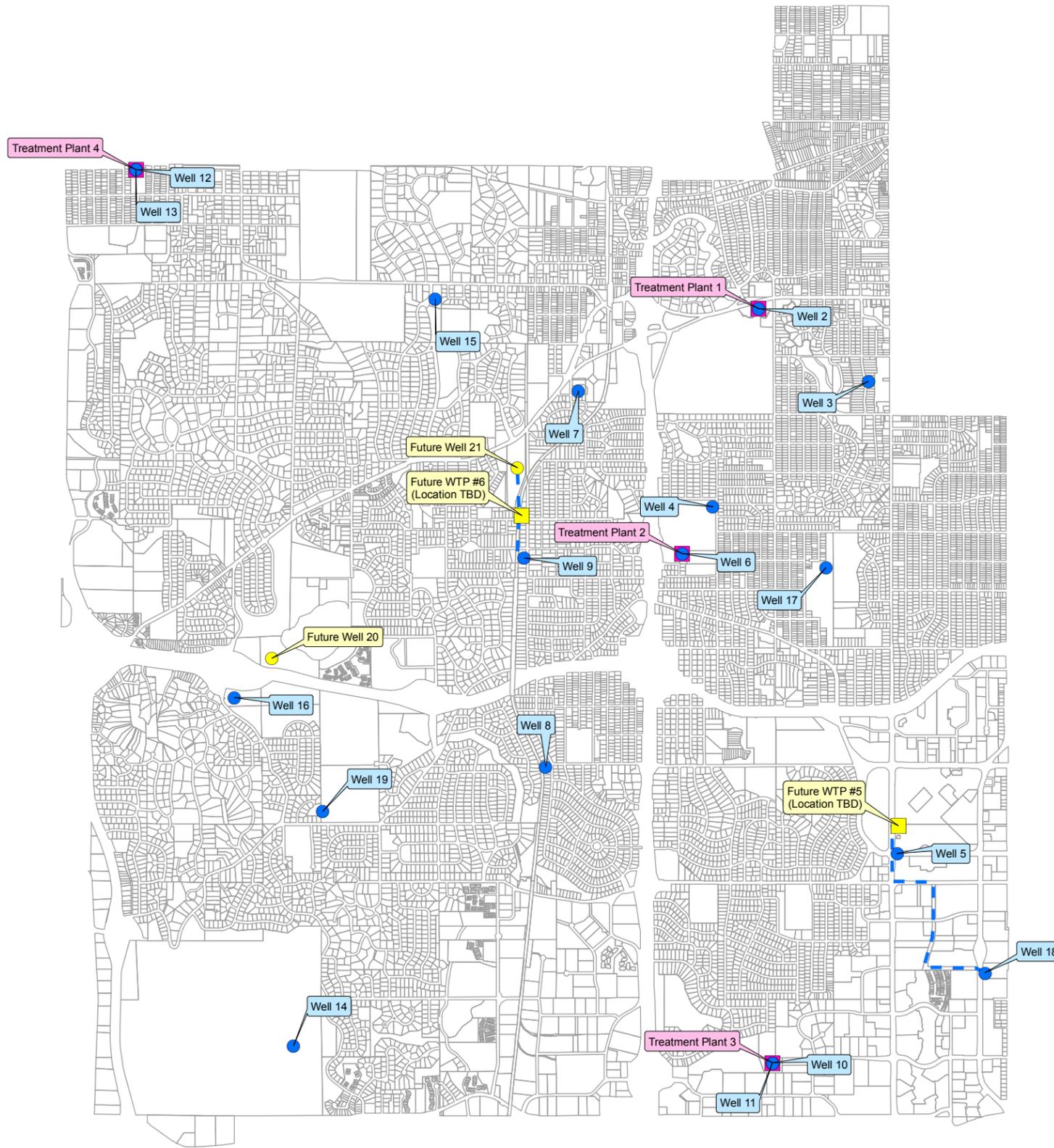






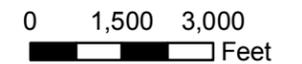






**Legend**

- Future Well
- Future WTP
- Existing Well
- Existing Treatment Plant



Source:  
City of Edina, SEH  
Projection:  
Hennepin County Coordinates  
Map by:  
SEH



This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. If errors or discrepancies are found please contact SEH GIS Services at 651-490-2000. This user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.



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DATE:  
10/18/2007

# Water Distribution System Analysis

## City of Edina, MN

**Supply and  
Treatment  
Facilities**

**Figure  
3**



## Chapter 9: Parks, Open Space, and Natural Resources

### 9.1 Introduction

### 9.2 Current Conditions

### 9.3 Trends and Challenges

### 9.4 Goals and Policies: Parks, Open Space, and Natural Resources

### 9.5 Implementation

## 9.1 INTRODUCTION

Edina residents value and are very passionate about their park lands, facilities and programs. Residents are always willing to volunteer to serve the public to provide the best parks and recreation programs, services and facilities. Edina's volunteers are a critical and extremely valuable resource in the delivery of park and recreation programs and services. The City relies heavily on Edina's volunteers to provide a comprehensive and quality recreation program.

As Edina plans for the next 20 years, the plan is to be mindful of energy efficiencies. In addition, our focus will also be mindful of the preservation of natural resources and, where appropriate, restoration of natural resources to create an environment that promotes sustainable natural resources. There is a strong interest among residents and staff in improving water quality. The City will be working to ensure compliance with the established "Surface Water Quality Plan." The City will also continue to work closely with the Nine Mile Creek Watershed District and the Minnehaha Creek Watershed District to coordinate and support future efforts to create, protect and preserve wetland areas and restoration projects that improve shoreline stabilization, establish and maintain environmentally sound shoreline buffer zones and other water quality best practices projects.

This Comprehensive Plan also addresses the community's strong desire to create more greenways to tie park system components together to form a more cohesive park environment.

The City, with the help of volunteers, will respond to a growing trend of childhood obesity by creating and administering new and innovative programs, facilities and services that address this important issue. The City Council adopted a resolution to support a Minnesota State initiative called "Get Fit" in an effort to heighten awareness of the growing epidemic of childhood obesity and show a commitment to do its part.



The Edina Park and Recreation Department recognizes the importance of establishing a common vision that leads to a preferred future. This common vision positions us to proactively address future trends, meet the needs of a rapidly changing society, and place parks and recreation at the table when critical issues are framed and decisions are made. The Park and Recreation Department's Vision Statement is; "We Create Community through People, Parks and Programs." In a sense, this vision is a perpetual action plan and will be the cornerstone of future strategic planning efforts.



The benefits of parks and recreation are endless. The core mission of Edina's Park and Recreation Department is diverse, meaningful and comprehensive. The community will continue to have ever changing needs. It will be the City's challenge to adapt to these inevitable ever changing needs through facilities, programs and services and be mindful of existing facilities, programs and services offered in nearby surrounding communities so as not to create duplication.

See Figure 9.1 Parks and Open Space Map (at end of this chapter)

## 9.2 CURRENT CONDITIONS: PARKS, OPEN SPACES, AND NATURAL RESOURCES



## Park, Recreation, Open Space and Greenway Classification

In 1995, the National Recreation and Park Association (NRPA) and the Academy of Park and Recreation Administration revised the suggested classifications for parks, recreation areas and open spaces. The key changes were the inclusion of park-school sites, athletic fields, private park/recreation facilities, natural resource areas/preserves and greenway classifications.

This new classification system states that there are essentially two types of park and recreation land:

1. Publicly owned land.
2. Privately owned land that contributes to the public's park and recreation system.

Examples of privately owned land that contribute to the public's park and recreation system would include:

- Edina Country Club
- Interlachen Country Club
- Church-owned properties
- Southdale YMCA
- The meadows in White Oaks neighborhood
- Power line easements
- Other miscellaneous privately owned vacant space

These privately owned spaces and facilities provide the public with valued park and recreation services and benefits.

The National Park and Recreation Association (NRPA) periodically publishes "Park and Open Space Standards and Guidelines" for municipal park and recreation agencies to assist in comprehensive planning. The NRPA suggests that the "national standards" be used only as a benchmark guideline because each community has its own unique profile in regards to demographics, total acreage, terrain, climate and a host of other affecting factors. Nonetheless, Edina currently exceeds the national standard guideline for acres per 1,000 residents.

The NRPA suggests a national standards guideline of 25 acres per 1,000 residents. This standard would include all local, County, and State-owned property within the community. Edina has no county, state or federal parklands. The City's 1,565 total park and open space acreage computes to 33 acres per 1,000 residents (based on the 2000 census population of 47,425).



The NRPA also suggests that each community should devote 10% of the total area of a city to park and open space. Edina has a total of 10,240 acres of which 1,565 acres are park and open space. Thus, 15.3% of Edina's land area is currently devoted to park and open space.

### **Regional Parks and 2030 Regional Parks Policy Plan**

There are currently no county, state or federal park lands in Edina. All 1,565 acres of park land and open space are owned and maintained by the City. There are however regional public parks and facilities in the Twin Cities area that serve Edina residents. For example, Three Rivers Park District owns and maintains regional parks, such as Bryant Lake Regional Park in Eden Prairie, Hyland Lake Park Reserve in Bloomington and 16 other regional parks within the Three Rivers Park District.

These regional parks offer a variety of recreation opportunities, some of which are not available in Edina but are within a reasonable driving distance. For example, Three Rivers Park District parks offer snowmobiling, horseback riding, boating, archery, camping, canoeing, downhill skiing, nature centers and historic farm facilities. As we plan for development of future park facilities, it will be important to be mindful of existing public park and recreation facilities throughout the Twin Cities area so as not to unnecessarily duplicate services.

To the north, the Minneapolis Park Board offers miles of trails for walking, running and biking around its chain of lakes and the Grand Round trail system. As stated later in this Chapter, it is the goal to make trail connections to give Edina residents access to the Minneapolis Park Board's Grand Rounds trail system and the Three Rivers Park District's Cedar Lake LRT Regional Trail.

The 2030 Regional Parks Policy Plan adopted by the Metropolitan Council in June 2005 is the metropolitan system plan for regional recreation open space. The 2030 Regional Parks Policy Plan does not involve acquisition or development of any land for park purposes in Edina with the exception of the proposed development of two regional trails:

South Hennepin Regional Trail-West – This is a proposed regional trail that would follow an existing north-south railroad grade owned by Canadian Pacific Railroad in the City of Edina. It would connect to Hyland-Bush-Anderson Park Reserve on the south and the Cedar Lake LRT Regional Trail north of the Edina city limits. The railroads are still in active use so planning for the conversion to a regional trail requires joint use of the



Right-of-Way. The proposed trail alignment as shown in Figure 9.2 is the preferred route.

Nine Mile Creek Regional Trail – This is a proposed regional trail that would be an east-west connecting trail in Edina. The City of Edina has been working closely with Three Rivers Park District and others to identify the most appropriate alignment of this east-west regional corridor. The general alignment is shown in Figure 9.2.

Other than the two proposed regional trails mentioned above, there are no plans within the 2030 Regional Parks Policy Plan that involve any property in Edina.

**Natural Resource Open Space Areas**

The National Recreation and Park Association defines Natural Resource Areas as lands set aside for preservation of significant natural resources, remnant landscapes, open space, and visual aesthetics/buffering. These lands consist of:

- Individual sites exhibiting natural resources.
- Land that is unsuitable for development but offers natural resource potential. (Examples include parcels with steep slopes, and natural vegetation, drainage-ways and ravines, surface water management areas (man-made pond areas, and utility easements).
- Protected lands, such as wetlands/lowlands and shorelines along waterways, lakes, and ponds.

All natural resource open space areas were inventoried and categorized as follows:

(Quadrants were determined by the two dividing highways in Edina: TH 62 and TH 100).

<u>NORTHWEST QUADRANT</u>	<u>ACREAGE</u>
Nine Mile Creek Right of Way	148.15
Lincoln Drive Floodplain	17.16
Division Street Storm Water Drainage	18.14
Moore Property (Melody Lake)	4.96
Normandale Rd. (NW Benton & Hwy 100)	2.14
Garden Park Addition	6.70
Glenbrae & Ayrshire	4.30
Krahl Hill	7.75
Pine Grove Rd. (S and E of dead-end)	4.39





Melody Lake	5501 Melody Lake Dr.	4.18 Acres	NW
Sherwood	Sherwood Rd. & Edenmoor	1.53 Acres	NW
St. Johns	W. 60 <sup>th</sup> & St.Johns Ave.	.94 Acre	NE
Tingdale	W. 59 <sup>th</sup> & Tingdale Ave.	.67 Acre	NW
York Park	5448 York Ave.	2.05 Acres	NE

**Neighborhood Parks - 12 Parks - 112.85 Acres**

Neighborhood parks are designed to serve primarily the needs of children six to fourteen years of age. Tennis courts, softball diamonds, basketball and ice skating facilities are commonly provided in neighborhood parks. Some of Edina’s neighborhood parks have one or more scheduled athletic facilities, such as outdoor hockey rinks and/or fields for soccer, football, baseball and softball. Neighborhood parks typically range in size from approximately two acres to twenty acres. Service Area = 1 Square Mile.

<u>Park</u>	<u>Address</u>	<u>Size</u>	<u>Quadrant</u>
Alden	6750 Belmore Lane	5.12 Acres	NW
Arden	5230 Minnehaha Blvd.	17.75 Acres	NE
Cornelia School	7124 Cornelia Drive	10.75 Acres	SE
Countryside	6240 Tracy Ave.	9.01 Acres	NW
Fox Meadow	Blake Rd. & Fox Meadow Ln.	3.84 Acres	NW
Heights	5520 W. 66 <sup>th</sup> Street	4.00 Acres	SW
Normandale	6501 Warren Ave.	10.06 Acres	SW
Strachauer	6200 Beard Ave.	4.50 Acres	NE
Utley	50 <sup>th</sup> & Wooddale Ave.	5.73 Acres	NE
Wooddale	W. 50 <sup>th</sup> & Wooddale Ave.	4.70 Acres	NE
Yorktown	W. 73 <sup>rd</sup> & York Ave.	3.42 Acres	SE
Todd Park	4429 Vandervork Ave.	33.97 Acres	NW



**Community Playfields – 8 Parks - 253.68 Acres**

Community playfields typically range in size from approximately 20 to 60 acres. These parks are designed to provide facilities for diverse recreational activities for young people and adults, although a section is also typically set aside for smaller neighborhood children. All of Edina’s Community Playfields have one or more scheduled athletic facilities, such as outdoor hockey rinks and fields for soccer, football, baseball and softball. Service area - 9-16 square miles.

<b><u>Park</u></b>	<b><u>Address</u></b>	<b><u>Size</u></b>	<b><u>Quadrant</u></b>
Creek Valley	W. 64 <sup>th</sup> & Gleason Road	10.00 Acres	SW
Garden	5520 Hansen Road	18.74 Acres	NW
Highlands	5200 Doncaster Way	44.05 Acres	NW
Lewis	Dewey Hill & Cahill Road	21.04 Acres	SW
Pamela	5900 Park Place	62.00 Acres	NE
Van Valkenburg	4935 Lincoln Drive	41.76 Acres	NW
Walnut Ridge	5801 Londonderry Road	44.24 Acres	NW
Weber	4115 Grimes Ave.	11.85 Acres	NE





**Community Parks - 4 Parks - 549.05 Acres**

The community park is usually a large park of more than 100 acres, or a smaller park containing special community facilities.

<u>Park</u>	<u>Address</u>	<u>Size</u>	<u>Quadrant</u>
Braemar	SW Corner of Edina	500.00 Acres	SW
Centennial Lakes	7495 France Avenue	25.00 Acres	SE
Kenneth Rosland	4300 West 66 <sup>th</sup> Street	22.05 Acres	SE
Edinburgh	7700 York Avenue South	2.00 Acres	SE

**Special Purpose Parks - 7 Parks - 277.11 Acres**

The special purpose park provides a single or specific form of recreation. Service Area is city-wide.

<u>Park</u>	<u>Address</u>	<u>Size</u>	<u>Quadrant</u>
Arneson Acres	4711 West 70 <sup>th</sup> street	15.00 Acres	SE
Bredesen	Vernon Ave. & Olinger Blvd.	206.00 Acres	NW
Richards Golf Course	7640 Parklawn Ave.	39.65 Acres	SE
Southdale Gateway	SE Corner of Edina	9.97 Acres	SE
Tupa	4918 Eden Avenue	1.00 Acre	NE
Williams	West 50 <sup>th</sup> & Browndale	.34 Acre	NE
Grandview Square/ Senior Citizen Center	5280 Grandview Square	5.15 Acres	NW

**Inventory Summary**

<u>PARK TYPE</u>	<u>ACRES</u>
Natural Resource Areas (19 areas)	352.13
Mini-Parks (12)	21.12
Neighborhood Parks ( 12)	112.85
Community Playfields ( 8)	253.68
Community Parks (4)	549.05
Special Purpose Parks (7)	<u>277.11</u>
Total Parklands & Natural Resource Areas	1,565.94



**OTHER MAINTAINED GRASS AREAS**

Plazas, Triangles, and circles	5.00
Storm Water and Drainage Areas	60.00
Parklands and Natural Resource Areas	<u>1,565.94</u>
Total Parks, Natural Resource & Other Areas	<u>1,630.94</u>

**Parkland and Natural Resource Areas Acreage Summary**

The following are parkland acreage totals per park classification:

<u>COMPONENT</u>	<u>CHARACTER</u>	<u>SVC AREA</u>	<u># OF PARKS</u>	<u>TOTAL ACREAGE</u>
Natural Resource Areas	Vary in size	Varies	19	352.13
Mini-Parks	Less than 2 acres	¼ sq.mi.	12	21.12
Neighborhood Parks	Serve children ages 6-14	1 sq.mi.	11	78.88
Community Playfields	Serve recreational needs of young people and adults	9-16 sq.mi.	9	287.65
Community Parks	Large parks in excess 100 acres. Serve pre-school -adult active and passive recreational pursuits	4-16 sq.mi.	4	549.05
Special Purpose Parks	Provide a special form of recreation	City Wide	7	277.11
<b>Total Parkland &amp; Natural Resource Areas</b>			<b>62</b>	<b>1,565.94</b>



## 9.3 TRENDS AND CHALLENGES

### Community Attitude and Interest Citizen Survey (“Needs Assessment Survey”)

The City has a very comprehensive and continually progressive park system that serves the leisure needs of residents of all ages and abilities.

A Community Attitude & Interest Citizen Survey (herein referred to as the “Needs Assessment Survey”) was conducted in 2006. The Needs Assessment Survey was mailed to a random sample of 3,000 households in the City in September 2006. 865 surveys were completed and returned by the deadline. 91 percent of respondents indicated that they had visited an Edina park during the past year. 97 percent rated the level of maintenance as either excellent or good. The facilities used by the highest percentage of respondent households were Centennial Lakes Park, Edinborough Park, Braemar Golf Course, Bredesen Park walking or biking trail, and the Edina Aquatic Center.

Based on the results of that survey, 77 percent of respondents are either very satisfied or somewhat satisfied with the overall value their household receives from the City. 11 percent of respondents indicated “neutral,” and 8 percent said “don’t know.” 88 percent of respondents indicated that they were either very satisfied or somewhat satisfied with the number of Edina parks. 93 percent were either very satisfied or somewhat satisfied with the maintenance of the parks.

The Needs Assessment Survey results repeatedly show the community’s strong support and desire for more walking and biking trails throughout the park system. In cooperation and collaboration with neighboring communities and Three Rivers Park District, Edina’s goal is to create north/south and east/west corridor trails that connect with neighboring communities and ultimately the greater regional trail system. The plan will be to further pursue the development of the “Nine Mile Trail,” which is the east/west corridor across Edina from Richfield to Minnetonka. The plan will also be to work with the Bike Edina Task Force, Three Rivers Park District and cities to the north and south to plan and develop a north/south corridor that connects with the greater regional trail system as called out in the 2030 Regional Parks Policy Plan.

The Needs Assessment Survey results also indicate residents’ strong desire to support the maintenance of parks. Residents recognize the value and importance of maintaining existing park lands and infrastructure. As the City develops more infrastructure within the park system, it should be mindful of the importance of planning



for adequate resources to maintain parks at a level that meets or exceeds residents' expectations.

### **Trends Influencing the Planning Process**

There are a number of trends listed below that will influence the park and recreation planning process of the future. In this post-industrial age of rapid change, constant monitoring will be required to develop a keen awareness of the global and local trends that are shaping the world and this community. The City will need to continually provide sensitive and appropriate responses to changes in social, demographic, technological, economic, political and environmental trends. The magnitude of these changes will demand flexibility in planning practices to appropriately respond to rapidly changing needs.

#### Demographic Trends:

Although Edina's overall population is expected to increase only a modest 3 percent over the next 20 years, residents aged 65 years and older are projected to increase by over 100 percent from 2005 to 2030. The projected increase in population of those under the age of 20 by the year 2050 is expected to be only 1.3 percent, the number of residents ages 21-44 is projected to decrease by 2 percent and the number of residents ages 45-64 is projected to increase by 5.4 percent. The projected 102.5 percent increase (in Hennepin County) in the 65+ age group by the year 2030 will significantly impact the need for more recreational services for seniors. Trends suggest that seniors will live more active lifestyles in the future. Therefore, there will be an increased demand for even more trails and recreational opportunities for seniors. There will be a greater emphasis on mobility by non-vehicular transportation for that age bracket, including walking and biking.

#### Nation-wide Trends:

According to the National Recreation and Park Association (NRPA) and the American Academy for Park and Recreation Administration, the following are emerging trends that are evident in many communities across the country. NRPA suggests that the implications of these trends on public parks and recreation will be profound, affecting every facet of systems planning and the delivery of services. The following is an abbreviated list of identified national trends, some of which may be evident in Edina. Those trends that do affect Edina will likely have an effect on the future planning and delivery of parks and recreation services in Edina.



### Environmental Trends:

- Disappearing resources – significant open spaces and natural habitats, original landscapes, wetlands and natural drainages, ancient forests, water and energy resources, remnant landscapes.
- Reduction of pollution and waste; recycling.
- Environmentally sensitive lifestyles – low impact, non-consumptive use (walking, bicycling) and increased aesthetic appreciation.
- More environmentally sound practices and habits – reduced and modified use of pesticides and herbicides.
- NIMBY and no growth attitudes – “not in my back yard” resistance to change, growth, development.
- Natural areas management – maintaining and reclaiming natural values and open spaces.
- The Greenhouse effect – may disrupt some regional economies within 10-20 years.
- Federal water quality mandates – natural drainage systems become more important as urban waterways and wetlands are protected.

### Social Trends:

- Increased crime and violence – domestic violence, gangs, violence in schools and other public places, drugs, vandalism, racial tension.
- Increased numbers of children at risk – child abuse and neglect, teen pregnancies, suicides, family instability, loneliness, alienation, rebelliousness, substance abuse.
- Change-related stress – economic, social and technological change continues in 21<sup>st</sup> Century, at rates creating stress.
- People empowerment – opportunities for building community and social bonding, neighborhood watch, community policing.
- Citizen participation – involvement of “stakeholders” in public planning and decision-making; planning with, not for people.
- Social service networking – organizing community resources to attack complex social problems.
- Increasing concerns for personal and family safety.
- Major public health issue – continuing AIDS epidemic, STDs, etc.
- Increased importance of wellness activities.
- Desire to preserve and maintain cultural heritages.
- Volunteerism – making more effective and efficient use of volunteers.



### Economic Trends:

- Reduced discretionary or leisure spending.
- Increasing public costs – associated with health, social services, environmental protection and clean-up, aging infrastructure.
- Increasing labor and energy costs – consuming higher percent of budgets.
- Tax limitation measures – reduction in and/or caps on revenue traditionally used to support public programs (education, recreation, etc.).
- Increase in national poverty rate.
- Leisure services provided by multiple providers – private and non-private sectors.
- More partnerships – doing more with less in conjunction with others.
- Recognition of economic value of parks, open spaces, and amenities in infrastructure.

### Technological Trends:

- Technological change – rapid pace will continue.
- Easing of the effects of aging.
- Advances in information technology – making products, services and information more accessible and targeted.
- Increased contact with computers.
- Information technology will blur distinction between work and home.
- Increased media maladies – information overload, privacy, objectionable material, distorted reality.
- More public meetings aired on public/access cable television – more education on issues and services.
- Greater energy costs shaping technology – smaller cars and multi-modal transportation systems, more efficient buildings.

### Trends in Urban Patterns:

- Increased urban sprawl – located primarily along major transportation corridors and mass transit routes.
- Greater “in-fill” development – lands considered marginal will be upgraded for new development, increasing density in the urban core.
- Revitalizing and retrofitting downtowns, industrial plants and commercial centers – amenities included to make them more marketable – mixed use development.



- Increasing importance of amenities – recognized as essential for maintaining competitiveness.
- Historic preservation – valuing heritage resources as treasures.
- Continued gentrification – caused by increasing land values in central city areas.
- Affordable housing – community mandates and improved technology.
- Increased traffic congestion – placing more emphasis on mass transit and transportation options using existing open space.
- More political pressure for urban growth management – balancing sustainable future.
- Growth of partnerships – public and private partnering to address complex urban needs.



### Implication of Trends on Parks, Recreation, Natural Resource Areas, and Greenway Planning:

NRPA suggests that the above listed trends will have a significant impact on the planning, design, and delivery of parks and recreation programs, facilities and services. NRPA suggests that the following defines some of these impacts:

- Greater focus on benefits-driven needs assessments which link planning decisions more directly to community values and goals.
- Greater emphasis on comprehensive open space planning and preservation, including broader definitions of open space and green space.
- More greenway planning along urban waterways and other corridors, supporting flood plain management, fish and wildlife habitat protection, water quality enhancement, off-street bikeways and pathways, aesthetic amenities and passive recreation.



- More emphasis on bio-filtration of storm water run-off using natural drainage systems.
- More protective measures for wetlands, waterways and uplands in natural resource planning.
- Increasing importance of recreation and open space contributing to more walkable, livable and sustainable communities.
- Merging of recreation, open space and transportation goals, especially multi-modal systems.
- More stakeholder involvement, as in adopt-a-park projects, park stewardship committees, friends-of-the-park groups, park watch and other forms of community volunteering.
- The legitimization of parks and open spaces as part of the urban land use planning and development process.
- Greenspaces contributing to downtown and neighborhood revitalization.
- More collaboration between parks and schools through joint acquisition, development and use of lands, and joint construction and use of facilities.
- Prevention recreation – recreation, parks and open spaces as antidote for social problems.
- Joint use of utilities for linear connectors, pathways and bikeways.
- Collaboration among providers – partnering and cooperation between public, private and nonprofit sectors in leisure delivery, especially social service agencies.
- Pressure to increase capacity and infrastructure of existing parks and facilities; concern for adequate maintenance.

## 9.4 GOALS AND POLICIES

### Overall Goal and Goals and Policies for Programmatic Areas

The **Overall Goal** of the Edina Park and Recreation Department is to do its part in further developing, preserving, and maintaining the City of Edina's parks, recreation programs and resources as a premier and comprehensive park and recreation department in the Twin Cities area.

### Goals and Policies for Programmatic Areas

The following **Goals and Policies** are intended to serve as a guide for future decisions pertaining to Edina's park and recreation areas for the next twenty years. These goals reflect the results of the Community Attitude and Interest Survey conducted in 2006. However, the goals are not intended to appear in order of priority. These goals also



reflect the input from the community received during the comprehensive planning process.

## **Parkland and Open Space**

### **Background**

The City is 100 percent developed. Therefore, the City is no longer actively acquiring additional property to develop as park land or open space. However, it plans to retain all of the current publicly owned park land and consider any additional property that may be offered in the future as potential additional park property. For example, the Grandview Square development resulted in a one-acre park nestled in the center of a mixed developed site that includes offices, condominiums, library and senior center. Other successful mixed-use developments have been created at Centennial Lakes Park and Edinborough Park. As Edina approves future redevelopment projects that result in more population density (both commercial and residential), there will be a demand for additional park land, open space and additional recreational opportunities to serve that growing population. These newly created park lands and open spaces should ideally be connected via greenway to other existing parks and trails to create connections throughout the park system. Edina's population is projected to grow 3 percent in the next 20 years, which will likely demand more park land and open space. As these opportunities arise, each new development should be studied on a case by case basis, with specific solutions determined by factors including whether the population increase is commercial and/or residential, as well as the age/lifestyle of the new residents or workers.

### **Goals**

1. Continue to devote a minimum of 15 percent of Edina's land area to parkland and open space in the future.
2. As commercial and residential population density increases due to redevelopment, provide additional parkland and/or open space, or connections to nearby parks, as needed, or facilitate the connection of new private facilities to the public system.
3. Maintain existing parks and facilities in a fashion that maintains Edina as a premier place for living, learning, raising families, and doing business.
4. Retain, maintain, and protect and preserve all park and open space property currently owned by the City.
5. Acquire additional park and open space land as more private land may become available for public acquisition.



## Policies

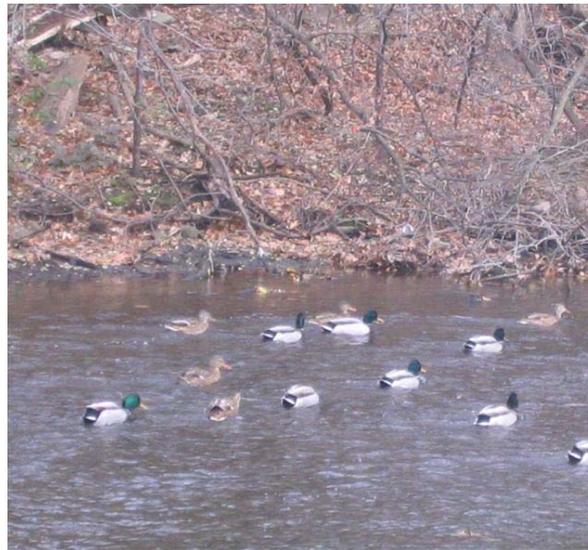
1. Do not sell any park and/or open space property currently owned by the City of Edina. An exception to this policy might include a property exchange for land of equal or greater value that is determined to be in the best interest of the community.
2. Study the feasibility of acquiring additional park and open space property within the City limits as it may come available for public ownership.
3. Study the feasibility of acquiring or leasing additional property outside the City limits not greater than a five mile radius of the City limits for athletic field purposes.
4. Study the feasibility of partnering with surrounding communities to gain priority access to additional property within five miles of the City limits for athletic field purposes.
5. As population density increases (commercial and/or residential), secure additional property as needed for park land and/or open space to serve that population. Every effort will be made to create additional trails and greenways to connect these new park lands and open spaces to existing trails, greenways and other existing parks.
6. When seeking additional park land and/or open space to accommodate increased population density, explore and consider all opportunities and options available to acquire additional park land and/or open space. For example, the City will entertain the options of easements, joint uses, purchases, partnerships, leases and donations to acquire and develop additional park lands and/or open space.
7. Consider the purchase of additional potential park and/or open space acreage if and when future opportunities arise. However, each opportunity will be judged on its individual merit and value to the total Edina Park Systems. Special consideration will be given to parcels which are currently owned by a public or quasi-public entity other than the City of Edina, or privately owned, and currently serve in a open space or parkland capacity.
8. When considering land dedication or cash in lieu of land in the future, strongly consider “the Platting Ordinance Guidelines”, which applies to Edina Ordinance No.810. More commonly known as Edina’s Park Developers Fund, this is not anticipated to be a significant source of funding in the future for park development, acquisition or renovation simply because Edina is essentially fully developed.
9. Consider the creation of a “Redeveloper’s Fund,” to create a source of funding for park development, acquisition, or renovation from the redevelopment of land to new uses and/or to higher densities.



## **Natural Resources Conservation and Management**

### **Background**

Over the past decade, residents of the Twin Cities metropolitan area and nation-wide have shown an increased interest in the preservation and restoration of open space and unique natural areas. Consistent with national trends, Edina residents have voiced a strong interest in the protection and restoration of Edina's natural resources. The community wants to examine ways to better restore native landscaping and maintain native vegetative buffers along the riparian corridors of Minnehaha Creek and Nine-Mile Creek, and the small lakes in Edina, to maintain and improve water quality, and to provide more and higher quality habitat for birds and wildlife.



The Community Needs Assessment Survey shows that 66 percent of Edina residents have a need/desire for natural areas and wildlife habitats compared to 48 percent which is the national benchmark response for that need/desire. Edina residents feel strongly about natural resources, natural areas and their protection and (where appropriate) restoration. The need/desire for natural areas and wildlife habitat was second only to the highest need/desire, which was walking and biking trails at 86 percent. Third place was the need for golf courses (49 percent) and fourth was playground equipment at 45 percent.



The City owns over 1,565 acres of park land and open space areas and the City is essentially 100 percent developed. Therefore, in establishing goals for Edina's natural resources the primary focus is on establishing restoration and preservation management practices. Open space areas owned by the City are intended to remain protected and preserved from any future development. Therefore, the focus will be to determine what level of management and restoration is desired for Edina's natural resources.

## Goals

1. Establish a scientifically-based Natural Resources Conservation and Management Plan to identify, restore and/or protect natural resources and native wildlife habitat. The primary reason to restore and/or protect natural resources is to sustain their ecological integrity and functions and protect the health and safety of the public. Natural resource areas shall include prairies, woods and wetlands. The Water Resources Management Plan is addressed under the Water Resources section of this Comprehensive Plan.
2. Ensure that Edina's development regulations include provisions for protection of the shorelands of those sections of Minnehaha Creek and Nine-Mile Creek within Edina, and for the shorelands of the lakes within Edina.
3. Identify a master landscape plantings plan for all Edina parks, which is the final phase of park development that has yet to be completed.
4. Conserve, and replace as necessary, Edina's urban forest to ensure the long-term vitality and viability of this integral part of Edina's overall identity and attractiveness.

## Policies

1. Conduct a resource inventory and assessment to identify Edina's prairies, woods and wetlands and produce a landscape comprehensive resource map. Conduct a woodland survey, resource assessment and production of a landscape comprehensive resource map to assess ecological functions. This survey and resource assessment is intended to identify rare plant and animal species, and exotic non-native plant species assessment. The assessment can also include other important information such as soil types, existing infrastructures, and areas of significant historical and cultural values.
2. Once a resource inventory assessment is completed, establish a Natural Resources Conservation and Management Plan. At that time, natural resource



management policies will be proposed and adopted. For example, exotic or invasive plants may be controlled to protect native habitats for the health and safety of the public.

3. Identify what and where additional landscape plantings are desired for each park. This master plan of landscaping would be addressed on an annual basis.
4. Continue to carry out all Minnesota state mandates for shade tree disease control and noxious weed control.
5. Create a program for maintaining trees throughout the City, and replacing them as necessary,
6. Work closely with the Energy and Environment Commission to embrace and utilize volunteer service that provides valuable resident input and advice on natural resource conservation and management plans.
7. Seek State and Federal grant funding to assist with financing the resource inventory process.
8. Do not sell any park and/or open space property currently owned by the City. An exception to this policy might include a property exchange for land of equal or greater value that is determined to be in the best interest of the community.

## **Wildlife Management Plan**

### **Background**

Edina is home to a variety of wildlife, some of which make Edina their home year around and other wildlife that migrate in and out of Edina. Wildlife is more often than not viewed by residents as an asset to community and a wonder of nature for park users to view and enjoy. In some cases, wildlife poses a threat to public safety and in some cases wildlife may be considered a nuisance to park users and traffic.

In managing wildlife, the focus is to manage habitat for wildlife and, when necessary, target specific wildlife species for removal. The Natural Resources Conservation and Management Plan will help identify any rare animals that may require additional attention to provide better habitat protection. The Natural Resources Management Plan will identify specific plants for wildlife needs. The Wildlife Management Plan defines an appropriate population target and management process approved by state and/or federal government agencies.

### **Goals**



1. Maintain existing wildlife sanctuaries and create new ones where appropriate to protect significant plant communities and associated wildlife from the impacts of human activity.
2. Manage animal and bird populations that are considered to be a threat to public health or safety; or considered hazardous to the environment and/or infrastructure; or create an unacceptable public nuisance that could result in financial or social hardship if not controlled.
3. Continue to improve shoreline fishing opportunities for the public.

### **Policies**

1. The City of Edina will continue to work with the Minnesota Department of Natural Resources to maintain a healthy herd of 40 to 60 deer (or as otherwise directed by the Minnesota DNR) within the City of Edina. Professional contractors or trained City staff will be used to assist with deer control and the City will continue to support aerial deer count surveys during the winter months to assess the size of the City's deer herd.
2. The City of Edina plans to continue to control geese populations in targeted park settings where their presence can create a threat to public health and/or an unacceptable public nuisance. As a federally protected migratory waterfowl, geese are difficult to control in an urban setting. The City will continue to use a dog as a means of forcing geese off of golf courses. The City will also continue to engage a professional contractor to round-up geese throughout targeted areas in the City during the goose molting season.
3. The City of Edina will continue to control other animal species (especially beaver) that are considered harmful to the environment, the general public and/or the watershed. Beaver can disrupt the flow of storm water, cause flooding, and need to be removed.
4. The City of Edina will continue to work closely with the Minnesota Department of Natural Resources Fisheries Division to enhance shoreline fishing opportunities for the public, which includes stocking of game fish, improving habitat and water quality for game fish, offering Minnesota DNR shoreline fishing programs and supporting educational opportunities for the public to learn more about fishing.

### **Walking and Biking Trails Pathways Plan**



## Background

The 2006 Community Attitude and Interest Citizen Survey clearly showed that the most important amenity requested by residents is walking/biking trails. One question in the survey asked; "Which Parks and Recreation Services Do You Think Should Receive the Most Attention from City of Edina Officials over the Next TWO Years?" The results were:

- 54% Maintenance of Edina parks
- 53% Number of walking/biking trails
- 16% Number of nature conservation areas
- 14% The City youth programs
- 13% Number of Edina parks
- 12% Quality of outdoor athletic fields
- 9% Quality of indoor athletic fields
- 8% Quality of outdoor swimming pools
- 8% Availability of info about Edina programs/facilities
- 8% Quality of programs/facilities for adults age 55+
- 6% The City adult programs
- 6% Fees charged for recreation programs

Residents were also asked to identify their top three choices that they are most willing to fund with additional tax dollars; and the results were:

- 66% develop walking and biking trails
- 42% develop a new indoor recreation center
- 21% develop outdoor athletic fields for sports
- 21% aggressively remove buckthorn from city parks
- 19% develop new indoor sports facility for games, etc.
- 17% develop a new outdoor dog exercise park
- 13% develop new outdoor artificial hockey rink
- 5% other

The survey also asked for reasons that residents would use walking and biking trails in the City of Edina. The results were:

- 84% for exercise and fitness
- 84% for enjoying outdoors/nature
- 25% for transportation
- 7% would not use trails



The survey results clearly indicate that residents desire and support more park trail opportunities in their local park to use for fitness and enjoying nature and the out of doors more so than for transportation purposes.



To create more recreational trail opportunities for residents to enjoy nature and the out of doors, the City is working closely with Three Rivers Park District to develop regional trails to create connections to neighboring community trail systems that are subsequently connected to the greater regional trail system.

Three Rivers Park District maintains the popular 27-mile trail formerly known as the Southwest Regional LRT Trail. The corridor between Hopkins and Victoria is named the Cedar Lake LRT Regional Trail and the corridor between Hopkins and Chanhassen is named the Minnesota Bluffs LRT Regional Trail. With grades of five percent or less, the 10-foot wide crushed limestone trail is ideal for biking, walking or running. The trail is two-way and includes wooden bridges and several road crossings. The corridors were acquired by the Hennepin County Regional Railroad Authority (HCRRA) for future light rail transit use. A cooperative agreement between HCRRA and Three Rivers Park District allows the corridors to be used for interim recreational purposes. As stated below, it is the City's goal to find strategic trail connections for Edina residents to have access to this popular regional trail, which will require a connection on the north side of Edina. The long-range plan is to have this trail also make connection with Bloomington and/or Eden Prairie in the future to complete a north/south corridor.

It is also recognized that children need safe trails/sidewalks to walk and bike to schools and libraries. Therefore, where trails are needed within parks to create safe passage for youth to walk and bike to schools, those trails will take high priority. The greater



issue of safe sidewalks for children to get to schools is addressed in the Transportation Plan Chapter of the Comprehensive Plan.

## Goals

1. Maintain existing walking/biking trails.
2. Develop additional walking/biking trails within each of Edina's parks wherever appropriate and desired and maintain existing trails at a level that meets or exceeds residents' expectations.
3. Create connectivity between Edina's individual interior trails and regional trails that connect Edina's parks to neighboring community trails and particularly trails that are part of the greater regional trail system.

## Policies

1. With extensive input from residents, review each park for potential development of new walking/biking trails within the park.
2. Continue to work with the Bike Edina Taskforce and Public Works staff to implement the new bike pathway master plan for the City of Edina. The objective is to identify the best routes for connecting existing and future internal park trail systems, as well as to identify the most appropriate routes for links to regional trails that will connect to neighboring community trails.
3. Continue to work closely with Three Rivers Park District and neighboring communities to develop a comprehensive trail system that connects to the greater regional trail system.
4. Acquire easements and purchase property where needed and available to develop future greenways that connect Edina's parks and connect to neighboring community trails and ultimately the greater regional trail system, such as the Southwest LRT and the Minneapolis Grand Round.
5. Do not sell any park and/or open space property currently owned by the City of Edina. An exception to this policy might include a property exchange for land of equal or greater value that is determined to be in the best interest of the community.
6. Study parking needs and feasibility as part of the development of a comprehensive trail system.
7. Add new internal park walking/biking trails to the park system as funding becomes available under the capital improvement plan.
8. Maintain existing trails on a regular basis to keep them safe and user friendly.



## **Park Maintenance and Aging Infrastructure Renovation and Replacement Plan**

### **Background**

The Community Needs Assessment showed that, of all park and recreation services, residents want “Maintenance of Edina Parks” to receive the most attention from the City. 77 percent of respondents are either very satisfied or somewhat satisfied with the overall value their household receives from the parks and recreation services in Edina. The national benchmark average is 57 percent that are either very satisfied or somewhat satisfied. Even with those high marks, residents recognize the importance of maintaining existing infrastructure to maintain the value of recreation services. Maintaining parks was the most important tax supported function even over the second most important expenditure, the development of new walking/biking trails (54 percent vs. 53 percent).

Of the 26 different parks and recreation facilities to choose from, survey respondents rated playground equipment as the fourth most important recreation facility needed/desired (24 percent). The top three were:

1. Walking and biking trails (64 percent).
2. Natural areas and wildlife habitats (30 percent).
3. 18 and 9 hole golf courses (27 percent).

Resources to maintain park lands and facilities will be an ongoing challenge as facilities continue to age and will require either renovation or replacement.

Twelve of the 27 park buildings currently maintained by the Edina Park Maintenance Department are 25 to 100 years old or even older.

1. Arden Park Shelter Building
2. Bredesen Park Comfort Station
3. Cahill School Historical Building
4. Countryside Park Shelter Building
5. Creek Valley Park Shelter Building
6. Grange Hall Historical Building
7. Highlands Park Shelter Building
8. Lewis Park Shelter Building
9. Normandale Park Shelter Building
10. Pamela Park Shelter Building
11. Strachauer Park Shelter Building
12. Utley Park Comfort Station



The two historical buildings at Tupa Park are maintained and valued as historically and culturally significant buildings. The other ten aged buildings are approaching the end of their life span and will be in need of either major renovation or total replacement within the next 20 years. In determining renovation vs. replacement, each building's function needs to be analyzed as to whether or not it serves the current needs and desires of park users. In some cases, the current architecture and design of a building may meet residents' expectations. In other cases, the building may no longer meet residents' expectations.

The four newest park shelter buildings in the park system were built in 1997 as part of a successful general obligation bond. Those buildings were built at:

1. Cornelia School Park
2. Todd Park
3. Walnut Ridge Park
4. Weber Park

These newer facilities can accommodate social gatherings, meetings, classes, recreation programs. They also serve as a warming house to change skates and warm up during the winter skating season. The older shelter buildings serve primarily as a place in which to change skates during the winter skating season but are not used for other purposes during the non-winter seasons other than for their restroom facilities.

### **Goals**

1. Continue to provide a high level of park maintenance services that meets or exceeds residents' expectations.
2. Continue this level of service on a daily basis as well as maintain or replace existing park infrastructure in a timely manner that meets or exceeds residents' expectations.

### **Policies**

1. Through an aggressive Capital Improvement Plan and annual operating budget, maintain park infrastructure in a timely manner that meets or exceeds residents' expectations.
2. Continue to fund and employ an appropriate number of full-time professional park maintenance staff and part-time seasonal staff to perform all daily maintenance



functions needed to maintain Edina parks at a premier standard. As more infrastructure is added to the park system, more professional staff and equipment will be needed to maintain parks at a premier standard.

3. Do not rely on voter approved general obligation bonds to replace worn infrastructure.
4. Do not sell any park and/or open space property currently owned by the City of Edina. An exception to this policy might include a property exchange for land of equal or greater value that is determined to be in the best interest of the community.

## **Athletic Fields and Facilities Plan**

### **Background**

The nation-wide trend in youth athletics is that there are more outdoor athletic field programs offered to more youth each year. More and more program offerings are extended to children at younger ages and both sexes each year. There are well established and emerging sports that compete for the same fields, such as, soccer, rugby, football, lacrosse and ultimate Frisbee. It is not uncommon for youth athletic associations to offer athletic field programs to youth who are pre-kindergarten age.

The Needs Assessment Survey results state that 66 percent of households are either somewhat supportive (43percent) or very supportive (23percent) of developing outdoor athletic fields for sports, which ranked third highest (21%) of what residents are most willing to fund with additional tax dollars. Developing walking and hiking trails was first (66percent) and developing a new indoor recreation center was second (42 percent). There is simply more demand than supply of outdoor athletic fields to accommodate the ideal schedule for all youth sports. When asked in the survey what they think should receive the most attention from City of Edina officials over the next two years, only 4 percent stated that “number of city soccer fields” should receive the most attention. Therefore, survey results state that residents are supportive of developing outdoor athletic fields for sports; however, residents prefer that, within the next two years, resources should first be spent developing walking and biking trails before developing more outdoor athletic fields for sports. Given the demographics of Edina, the large senior population understandably has little or no interest in developing outdoor athletic fields. There are very few remaining park lands that could be developed into scheduled



outdoor athletic field space. There is also a problem of over-scheduled fields which demands artificial turf to withstand the heavy use. Survey results also showed that the quality of outdoor athletic fields ranked much higher than the number of City soccer fields. 58 percent of respondents stated that they would support partnering with surrounding communities to develop sports facilities in communities within 1-5 miles of Edina.

There is an emerging trend that youth athletic associations and families are reluctant to accept youth athletic program offerings during the weekday and weekend times. The window of acceptable days and times of the day have shrunk, thus putting more pressure on demand for more facilities to accommodate the ideal schedule for families, especially for dual working parents and single-parent families.

### Goals

1. Develop and maintain additional multi-purpose athletic fields where possible and reasonable within Edina's forty parks to help meet the demand for outdoor athletic fields.
2. Explore partnership or ownership opportunities within five miles of Edina to develop and/or secure additional outdoor athletic fields.
3. Expand program offerings to weekday and weekend times to maximize availability of existing facilities.

### Policies

1. Explore the feasibility of developing existing park lands into more outdoor athletic fields at parks such as Walnut Ridge Park, Pamela Park and Lake Edina Park.
2. Explore athletic field development and partnership opportunities with the Edina School District.
3. Explore the feasibility of converting one or more athletic fields into artificial turf surfaces.
4. Explore alternative scheduling opportunities such as Friday evenings and weekend events plus scheduled events during the working day.
5. Do not sell any park and/or open space property currently owned by the City of Edina. An exception to this policy might include a property exchange for land of equal or greater value that is determined to be in the best interest of the community.



## **Collaborations and Partnerships Plan**

### **Background**

The Edina Park and Recreation Department has entered into several collaborations and partnerships as an efficient and effective method of providing recreation programs and facilities. Examples include the successful collaborative with the cities of Richfield and Bloomington and the Southdale YMCA to develop and operate the YMCA Tri-City Skate Park. Another good example is the Adaptive Recreation/Learning Exchange (ARLE) four-city partnership to provide adaptive recreation programs and services for residents with disabilities.

*Adaptive Recreation:* The cities of Bloomington, Eden Prairie, Edina and Richfield each have programs that are specifically designed for people with disabilities of all ages. These programs include: softball, bowling, swimming lessons, fitness programs, skiing/snowboarding, basketball, as well as a number of social activities for both youths and adults.

*Learning Exchange:* The school districts of Bloomington, Edina, Eden Prairie and Richfield Community Education Adults with Disabilities programs are working together to offer customized classes for adults with developmental and/or physical disabilities. Classes include cooking, independent living skills, health & fitness and other leisure learning activities.

The collaborative effort between the City and Hennepin County Library resulted in a very successful new Senior Citizen Center with a new 18,000 square foot library building on the second level. The City of Edina is also exploring a partnership opportunity with the cities of St. Louis Park and Minneapolis to provide another off-leash dog park location in Edina. The property, which is located just west of France Avenue in Edina and St. Louis Park, is owned by the City of Minneapolis. The City of Minneapolis is still undecided of its long-term need for that property and they are aware of the two cities' interest in using the property as an off-leash dog park. The City of Edina entered into a lease agreement with a private company that originally built and operated what is now the Braemar Golf Dome. Other public/private partnerships have been studied in the past.



The Edina Park and Recreation Department also works closely with County and State levels of government to offer park and recreation services and facilities. The City of Edina is working closely with Three Rivers Park District to construct a regional trail or two in Edina to connect with the greater regional trail system. The Edina Park and Recreation Department also works closely with the Minnesota Department of Natural Resources in efforts to provide quality shore line fishing opportunities. There are numerous other examples; however, the point is that partnerships and collaborations should continue to be a viable option when considering new park and recreation services and/or facilities.

### Goal

1. When considering options to provide new services and/or facilities, consider and assess the use of partnerships as a cost-effective and efficient option.

### Policies

1. When considering new recreation program services, explore partnership opportunities that may be the most cost-effective and efficient means of providing the new recreation program experience.
2. When considering development of new recreation facilities, explore partnership opportunities (public/private and public/public ventures) as a potential method of offering recreational facilities on a cost-effective and efficient basis that is in the best interest of the community.



3. Do not sell any park and/or open space property currently owned by the City of Edina. An exception to this policy might include a property exchange for land of equal or greater value that is determined to be in the best interest of the community.

## **Use of Volunteers Plan**

### **Background**

One of Edina's greatest assets is its volunteers. Without volunteers, the Edina Park and Recreation Department would not be able to provide the extensive recreation programs and services available today. The Edina Park and Recreation Department also relies heavily on volunteers (those appointed and managed by the City as well as independent volunteer groups and individuals) to provide a number of services, only some of which include to:

- Provide comprehensive historical services (archival services, historical museum, historical artifact preservation, etc.) through the Edina Historical Society.
- Provide gardening opportunities and services throughout Edina's parks via the Edina Garden Council.
- Provide comprehensive youth athletic program services for a wide variety of different sport opportunities via Edina's 12 independently incorporated youth athletic associations and its two sport clubs (swimming and figure skating).
- Provide sound and informed advice to the City Council on important policies and other park and recreation matters via the Edina Park Board.
- Provide sound and informed advice to the City Council on important visual arts policies and matters via the Edina Art Center Board.
- Provide quality band concert music free to residents on a year around basis via the John Phillip Sousa Memorial Band.
- Provide advice to the staff at the Edina Senior Center via the Edina Senior Center Advisory Committee.
- Provide extensive clerical and light duty services to the Edina Senior Center.
- Provide numerous park improvement projects via Eagle Scout candidates.
- Provide extensive park clean-up twice a year at each park via the Adopt-A-Park program.
- Provide valuable input and feedback to the staff at Braemar Golf Course via the Braemar Golf Course Greens Committee.
- Provide assistance to golfers, downhill ski enthusiasts, and other recreation program registrants who have developmental disabilities.



The point is that the Edina Park and Recreation Department relies heavily on volunteers who donate thousands of hours of selfless service each year to help others and further the mission of the Edina Park and Recreation Department.

### Goals

1. Recruit, utilize and empower Edina's volunteers to provide a wide variety of important services to help serve the mission of the Edina Park and Recreation Department.
2. Thank and properly recognize volunteers for their valuable and self-less services to the City of Edina.

### Policies

1. Rely on, support and empower volunteers to provide recreation services as a cost effective method of provide recreation services to residents.
2. Recruit, train and supervise volunteers where needed to provide recreation services at minimal cost to residents.
3. Recognize (via the Annual Volunteer Awards Reception and Annual Board and Commission Reception) outstanding volunteers and the value they bring to the City of Edina.

## Indoor Fitness and Exercise Facilities Plan

### Background



The results of the 2006 Needs Assessment Survey show that 75 percent of respondents are either very supportive (44 percent) or somewhat supportive (31 percent) of developing a new indoor recreation center in Edina. Results showed that a new indoor recreation center was the second most important new facility of respondents' choice. Developing walking and biking trails was first place at 89 percent, with respondents either very supportive (65 percent) or somewhat supportive (24 percent). When asked what they would be most willing to fund with additional tax dollars, respondents clearly stated that developing a new indoor recreation center (42 percent) was again second to developing walking and biking trails (66 percent). Developing outdoor athletic fields for sports finished third at 21 percent. When asked how they would allocate \$100 in extra funds if made available for the City of Edina, the response was:

- \$29 for improvements and maintenance of existing parks and recreation facilities.
- \$26 for new walking and biking trails.
- \$15 for a new indoor recreation center.
- \$9 for removal of buckthorn.
- \$7 for new outdoor and indoor sports facilities.
- \$6 for a new indoor nature center.
- \$4 for a new artificially refrigerated outdoor hockey rink.
- \$4 other.

The survey asked respondents to choose from a list of 15 potential indoor programming spaces the ones that they and members of their household would use if they were developed in an indoor community center. Walking and jogging track (58 percent) was the indoor programming space that the highest percentage of respondent households would use. Other indoor programming spaces that at least 30 percent of respondents would use include: weight room/cardiovascular equipment (40 percent), aerobics/fitness/dance class space (40 percent), leisure pool (35 percent), and lanes for lap swimming (30 percent). Clearly the majority of respondents desire more indoor recreation space venue opportunities for exercise and fitness purposes.



Developing indoor fitness opportunities seems to be a priority for residents that should be addressed.

## Goals

1. Explore and study opportunities to provide indoor exercise and fitness opportunities for Edina residents. This desired facility may best be provided solely by the private or quasi-public sector such as the Southdale YMCA and/or Lifetime Fitness and/or public/private partnership.

## Policies

1. Actively seek a location and funding source to provide more indoor exercise facilities within the next five to ten years.
2. Actively support the development of an indoor exercise facility in Edina, whether it is a public, private or partnership venture.
3. Explore a potential partnership opportunities.
4. Do not sell any park and/or open space property currently owned by the City of Edina. An exception to this policy might include a property exchange for land of equal or greater value that is determined to be in the best interest of the community.

## Outdoor Hockey and General Skating Rink Plan

### Background



Due to the trend of warmer winter seasons, the Edina Park Maintenance Department finds it more challenging each year to provide and maintain quality outdoor skating ice for longer than six to eight weeks. There was a time when outdoor ice was easily attainable by December 20. Outdoor ice was not attainable for skaters until after the first of the year for the 2006-2007 outdoor skating season. There is little debate that winters are getting warmer and outdoor ice is becoming more difficult to develop early and late in the season.

This trend may very well suggest that communities need to consider a form of artificial refrigeration to ensure quality outdoor ice for skating during the winter months. Most neighborhoods desire a hockey rink in the park nearest their home. The Edina Hockey Association desires outdoor hockey rinks for many of their games and practices during the winter months. If winter weather continues to be warmer each year, then communities will be faced with exploring other best practices to cost effectively provide and maintain quality ice during the winter season. These best practices may include artificial refrigeration systems, high molecular density plastic rinks, covered ice rinks (large roof structures or shade materials), ice resurfacing machines and/or other creative methods to build and maintain quality outdoor ice.



The Needs Assessment Survey results indicate very little community-wide support to fund a new outdoor uncovered artificially refrigerated hockey rink. The following are the results of “what respondents are most willing to fund with additional tax dollars:”



Develop Walking and Biking Trails 66%  
Develop a New Indoor Recreation Center 42%  
Develop Outdoor Athletic Fields for Sports 21%  
Aggressively Removing Buckthorn from City Parks 21%  
Develop a New Indoor Nature Center 19%  
Develop New Indoor Sports Facility for Games 19%  
Develop a New Outdoor Dog Exercise Park 17%  
Develop New Outdoor Artificial Ice Hockey Rink 13%  
Other 5%

Even though there is not strong community-wide support for artificially refrigerated outdoor hockey rinks, there may be interest in pursuing the concept with donated funds.

## Goals

1. Continually explore best practices to provide and maintain quality outdoor ice hockey rinks in an effective and energy efficient manner.
2. Continually monitor the demand for outdoor hockey rinks for scheduled play (games and practices) for the Edina Hockey Association, adult athletics (such as broomball and 4-man hockey) as well as the general public's demand/desire for recreational hockey.

## Policies

1. Actively pursue best practices to develop and maintain quality outdoor ice hockey rinks during the winter skating season.
2. Continue to provide a manageable (ability to maintain quality outdoor ice with given manpower and equipment resources) number of outdoor hockey rinks that meets the demand for both scheduled hockey rink play as well as general hockey rink play.

## Recreation Programs and Services Plan

### Background



Edina offers a wide variety of recreation programs and services for all residents, toddlers through senior citizens. The Park and Recreation professional staff and volunteers seek to offer programs and services that meet the physical, intellectual, emotional and social needs of all residents. Recreation programs are offered year round.

### Adaptive Recreation

The City of Edina made a commitment to individuals with disabilities before it was required by the Americans with Disabilities Act. Edina is a part of a partnership that includes four cities and four school districts to offer a variety of recreation opportunities specifically designed for individuals with disabilities ages 3 and older. Edina Adaptive Recreation is also responsible for providing inclusion services to provide a successful opportunity for individuals with disabilities who choose to participate in general recreation programs.

### General Recreation Programs

The Park and Recreation Department offers a wide variety of year round opportunities for residents of all ages.

#### *Youth*

For youth ages 4-14 the Recreation Department offers programs at neighborhood parks during the summer months. From "Fab 4 & 5" to "You're Not Too Old for this..." there is something for everyone. During the winter a few special programs are also offered for our residents from "Tea for Two" to "Drive in Movies." Residents can register for these family friendly activities.

#### *Adults*

A variety of adult athletic programs is also offered throughout the year. From Broomball to Kickball residents have the opportunity to register teams at all ability levels.

#### *Tennis*

For youth and adults ages 5 and older Edina offers tennis lessons at all ability levels.

### Shoreline Fishing Opportunities

The Edina Park and Recreation Department has long promoted and supported efforts to offer shoreline fishing opportunities in Edina's parks. Through a successful partnership with the Minnesota Department of Natural Resources, the City of Edina has improved shoreline fishing opportunities at Rosland Park and Centennial Lakes Park. The



Minnesota Department of Natural Resources provided the City of Edina a grant to purchase and install a fishing pier at Rosland Park on Lake Cornelia. The Park and Recreation Department also supports fishing clinics and programs sponsored by the Minnesota DNR at Centennial Lakes Park. We continue to work with the professionals at the Minnesota DNR to improve habitat for fishing, educate youth about the sport of fishing and nature, and promote water quality.

#### Youth Athletic Associations

Edina Athletic Associations and Clubs currently offer athletic opportunities to over 9,000 youth of all abilities through fourteen clubs and associations. The independently incorporated youth athletic associations and clubs are run by volunteers with the help of a professional recreation staff liaison. In 2006, the City of Edina appointed a Youth Sports Task Force to address the current issues related to athletic opportunities available to youth in Edina. The outcome of this task force is as follows:

1. Updated relationship agreement
2. Updated priority use of outdoor facilities
3. Formal grievance process to be followed which supersedes existing association grievance processes
4. Resolution of Youth Sports Core Values and Community Strategy
5. Uniform Code of Conduct

#### Enterprise Facilities

The Enterprise Facilities within the Edina Parks and Recreation Department offer a comprehensive variety of programs and services in unique environments.

The Edina Art Center offers a variety of programs for all ages to meet the creative visual arts needs of our residents. The Edina Art Center contracts with specialists to implement a variety of course offerings ranging from pottery to photography.

Braemar Ice Arena is home to the Edina Hockey Association and Braemar City of Lakes Figure Skating Club. Braemar also internally offers skating lessons and open skating to meet the recreational ice skating needs of residents.

For golf enthusiasts, Braemar Golf Course offers lessons to youth ages 11 and older and adults. Braemar employs golf professionals to offer beginning through advanced lessons in group settings or one to one. Braemar also offers tee times for 36 holes of golf.

The Edina Senior Center currently has over 1,500 members ages 55+ seeking a variety of program offerings. Programs are created and implemented by staff and volunteer



seniors. The Senior Center is home to over 40 programs, from bridge to softball, to meet the needs of all members.

Centennial Lakes is a beautiful setting in the southeast quadrant of the City. During the winter months Centennial Lakes offers skate rental and open skating for residents to enjoy the 10 acres of carefully maintained ice. During the summer residents are welcome to golf on the natural 18 hole grass putting course. Also available are free outdoor concerts, a croquet field, and 1.5 miles of pathways.



Edinborough Park currently offers five special events per year for residents to enjoy the Park. Adventure Peak is a recently added but more importantly frequently updated, play structure that attracts youth up to age 12 from all over the metro area.

The Edina Aquatic Center offers waterslides, a zero depth pool with a play structure, diving boards, a cable ride, and a themed dry play area for patrons to enjoy. For patrons who seek to improve their swimming skills, the Aquatic Center contracts with Foss Swim School to offer lessons for youth ages three and older and adults.

## Goals

1. As residents enter retirement, the Edina Park and Recreation Department will follow the trends and offer diverse opportunities for seniors. What used to be softball and bridge is soon to be volunteering and rock climbing. The retired seniors of tomorrow will be looking for recreation opportunities outside of the traditional senior center environment.



2. Youth obesity is now considered an epidemic. Today's children are the first generation in which their life expectancy will be lower than that of their parents. The Park and Recreation Department has an opportunity to tackle this epidemic head on by providing recreation opportunities that lure children away from the TV and out into the parks.
3. Residents of all ages need not only programs but also opportunities for unstructured recreation
4. It is the Park and Recreation Department's goal to continue to support improved shoreline fishing opportunities, educate youth about the sport of fishing, and support efforts to improve fish habitat including water quality.

## **Policies**

1. The City will continue to add fitness based programs for residents of all ages.
2. The City will explore program opportunities for aging adults.
3. The City will explore options to provide safe opportunities for children to play at their local park in an unstructured environment.
4. The City will continue to work closely with the Minnesota DNR to promote and support improved shoreline fishing opportunities in Edina, improve fish habitat, water quality and educate youth about the sport of fishing.
5. It shall be the policy of the City of Edina to not sell any park and/or open space property currently owned by the City of Edina. An exception to this policy might include a property exchange for land of equal or greater value that is determined to be in the best interest of the community.

## **Enterprise Facilities Plan**

### **Background**

The City of Edina owns and operates six different enterprise facilities within the Park and Recreation Department:

1. Edina Art Center
2. Braemar Golf Course and Fred Richards Golf Course
3. Braemar Golf Dome
4. Edina Aquatic Center
5. Edinborough/Centennial Lakes Park
6. Braemar Arena



Each enterprise facility has its own mission statement:

#### EDINA ART CENTER

The mission of the Edina Art Center is to provide facilities, faculty programs and services that meet and reflect the needs of its residents and neighbors for participation, education and enjoyment in the arts with emphasis on fine arts.

#### BRAEMAR AND FRED RICHARDS GOLF COURSES

The mission of the Braemar Golf Course and Fred Richards Golf Course is to be a premier golf facility – keeping golf accessible and affordable to our residents, but not exclusive to Edina residents. We strive to be an exceptionally friendly, community based recreation amenity. Meeting our fiscal responsibilities and improving our facility for continued recreational pleasure is essential. Income generation is not our primary goal.

#### BRAEMAR GOLF DOME

The mission of the Braemar Golf Dome is to be the leader in the winter golf industry in the Minneapolis/St. Paul metropolitan area by providing: the best quality golf balls and mats, a comfortable environment, and a friendly staff at a reasonable price to encourage repeat visits by customers.

#### EDINA AQUATIC CENTER

The mission of the Edina Aquatic Center is to be a premier public aquatic facility and to make swimming accessible and affordable to primarily, but not exclusively, Edina residents and yet remain competitively priced in the Twin Cities area.



### EDINBOROUGH AND CENTENNIAL LAKES PARK

The mission of Edinborough and Centennial Lakes Park is to serve as a premier gathering spot for social, cultural and recreational opportunities, primarily, but not exclusively for the Edina community.

#### Objectives:

- Provide a safe, comfortable and aesthetically pleasing environment for park patrons.
- Provide premier recreational opportunities that are unique, inclusive and cost effective.
- Provide a diversified level of quality cultural programming that is cost effective and entertaining.
- Provide quality rental facilities to meet the needs of the City and community.

### BRAEMAR ARENA

The mission of the Braemar Arena is to be a premier public ice facility and to make skating accessible and affordable to primarily, but not exclusively, Edina residents and yet remain competitively priced in the Twin Cities area.



In the 2006 Needs Assessment Survey, residents were asked which Edina Park and Recreation Department facilities they used most the previous year. The results were:

- 44% - Centennial Lakes Park
- 28% - Braemar Golf Course
- 27% - Edinborough Park
- 27% - Bredesen Walking or Biking Path
- 24% - Edina Aquatic Center
- 14% - Braemar Arena
- 13% - Rosland Park Walking Trail
- 9% - Fred Richards Golf Course
- 8% - Edina Art Center
- 7% - Edina Senior Center
- 6% - Arneson Acres Park
- 4% - Van Valkenburg Park Off-Leash Dog Park
- 10% - Other

Edina's enterprise recreation facilities provide a wide variety of popular recreational opportunities to residents and non-residents. Each enterprise facility is operated as a business; however, the mission as stated above (and unlike the private sector) is not to maximize profits but to provide recreational opportunities that are "accessible and affordable to primarily, but not exclusively, Edina residents and yet remain competitively priced in the Twin Cities area."

Each enterprise facility has its own unique business plan that is updated approximately every six years. The business plan for each enterprise facility includes a market analysis, competitive analysis, environmental analysis, marketing strategy, financial performance and business strategy. Surveys are conducted within each facility to better understand who uses the facility, what their opinions are about the facility and programs, where they reside and how they hear about the facility.

## Goals

1. For each of Edina's enterprise facilities, provide recreational opportunities that are accessible and affordable to primarily, but not exclusively, Edina residents and yet remain competitively priced in the Twin Cities area.
2. Provide fee-based revenue generating recreation enterprise facilities that collectively cover all facility and program expenses, including capital improvements, land purchase and all operating expenses.



## Policies

1. The City will continue to update the business plan for each enterprise recreation facility every six or seven years.
2. The City will conduct surveys on a routine as needed basis to provide critical information in updating the business plan for each enterprise facility
3. The City will annually adjust fees and charges for enterprise facilities in a manner that is in keeping with the goal to provide recreational opportunities that are accessible and affordable to primarily, but not exclusively, Edina residents and yet remain competitively priced in the Twin Cities area.
4. The City will continue to modify each enterprise facility and its services on an as needed basis in a manner that reflects the current identified and validated demand for recreation opportunities.
5. It shall be the policy of the City of Edina to not sell any park and/or open space property currently owned by the City of Edina. An exception to this policy might include a property exchange for land of equal or greater value that is determined to be in the best interest of the community.

## 9.5 IMPLEMENTATION

### CAPITAL IMPROVEMENT PLANS

The following pages show the five-year Capital Improvement Plans (2008-2012) for the Edina Park and Recreation Department. Each enterprise facility also has its own Capital Improvement Plan. The funding for the Capital Improvement Plan is approved on an annual basis by the City Council; however, funding is only approved for the following calendar year. The following four years are shown for planning purposes and are adjusted annually to adapt to changing needs.

Funding for the Capital Improvement Plan comes from a variety of sources, such as:

- Revenue Bonds
- Revolving Funds
- General Obligation Bonds
- Public Improvement Revolving Bonds
- Internal Transfers – Transfer from Reserves

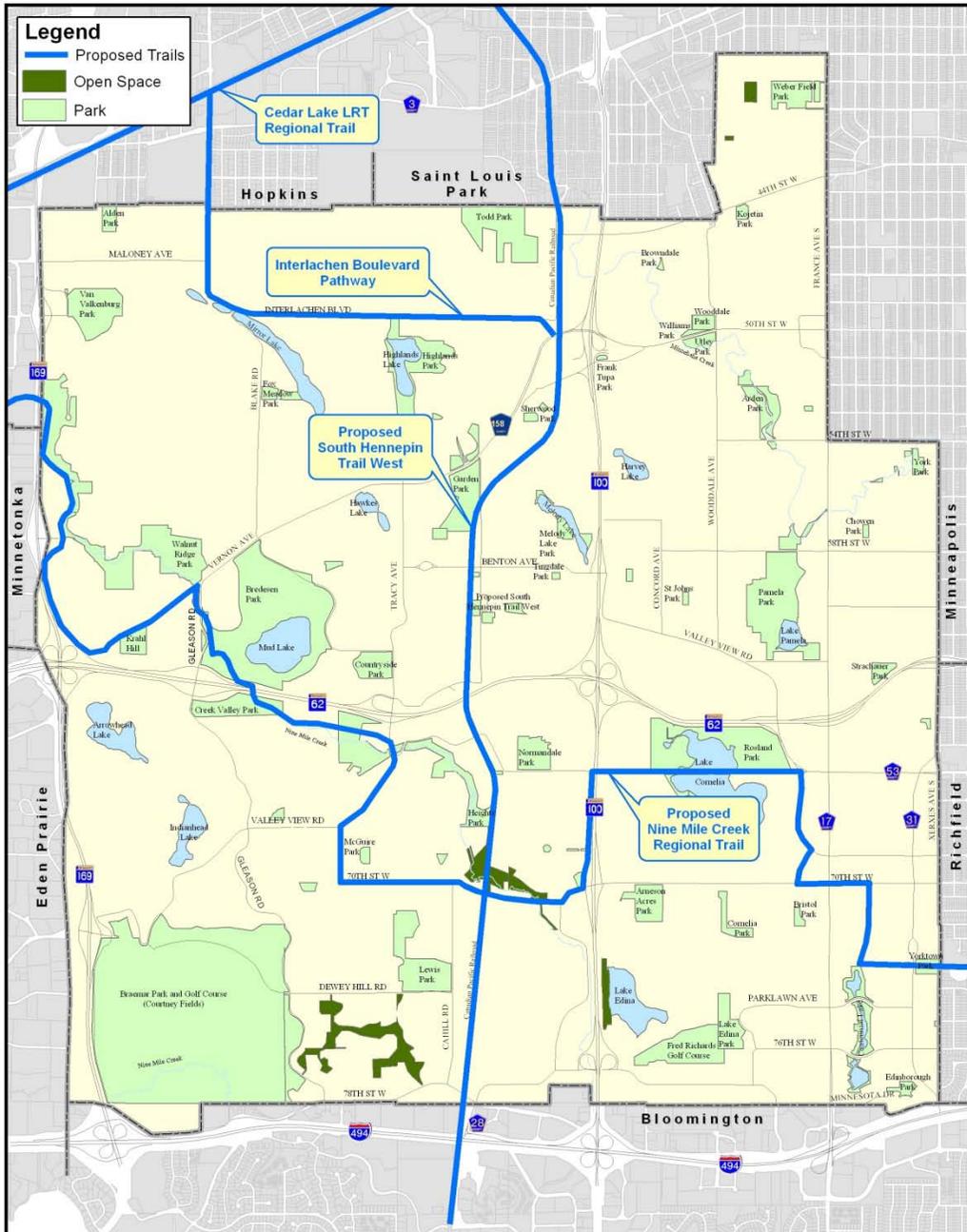


See the 2008-2012 Capital Improvement Plan on the next page.



## Edina Parks and Recreation Department Capital Improvement Plan for 2008-2012

	2008	2009	2010	2011	2012
Pathway Repairs/Additions: Arneson Acres		45,000			
Parking Lot: Weber Park	38,800				
Playground: McGuire Park	120,000				
Playground: Pamela Park		150,000			
Renovate softball field: Todd Park			91,000		
Renovate W. baseball field: Countryside Park			138,000		
Renovate pathway: Todd Park			45,000		
Playground: Chowen Park		120,000			
Playground: York Park	120,000				
Batting/Pitching Cage: Pamela Park			30,000		
Hockey Rink Relocation: Walnut Ridge Park		90,000			
Off-Leash Dog Park: France Avenue Site				40,000	
Replace Playground equip.: Countryside Pk		110,000			
Window Replacement: Arneson Acres Pk		10,000			
New Athletic Field w. lights: Pamela Park				400,000	
Neighborhood Park: Van Valkenburg Park					600,000
Replace Light Fixtures/Poles: Pamela Park	80,000				
Pathway Plan Completion: Garden Park	90,000				
Softball Field Lighting: Pamela Park			250,000		
Softball Field Fencing: Pamela Park	30,000	30,000			
Concrete Maintenance Apron: Pamela Park	11,000				
<b>TOTALS</b>	<b>489,800</b>	<b>555,000</b>	<b>554,000</b>	<b>440,000</b>	<b>600,000</b>

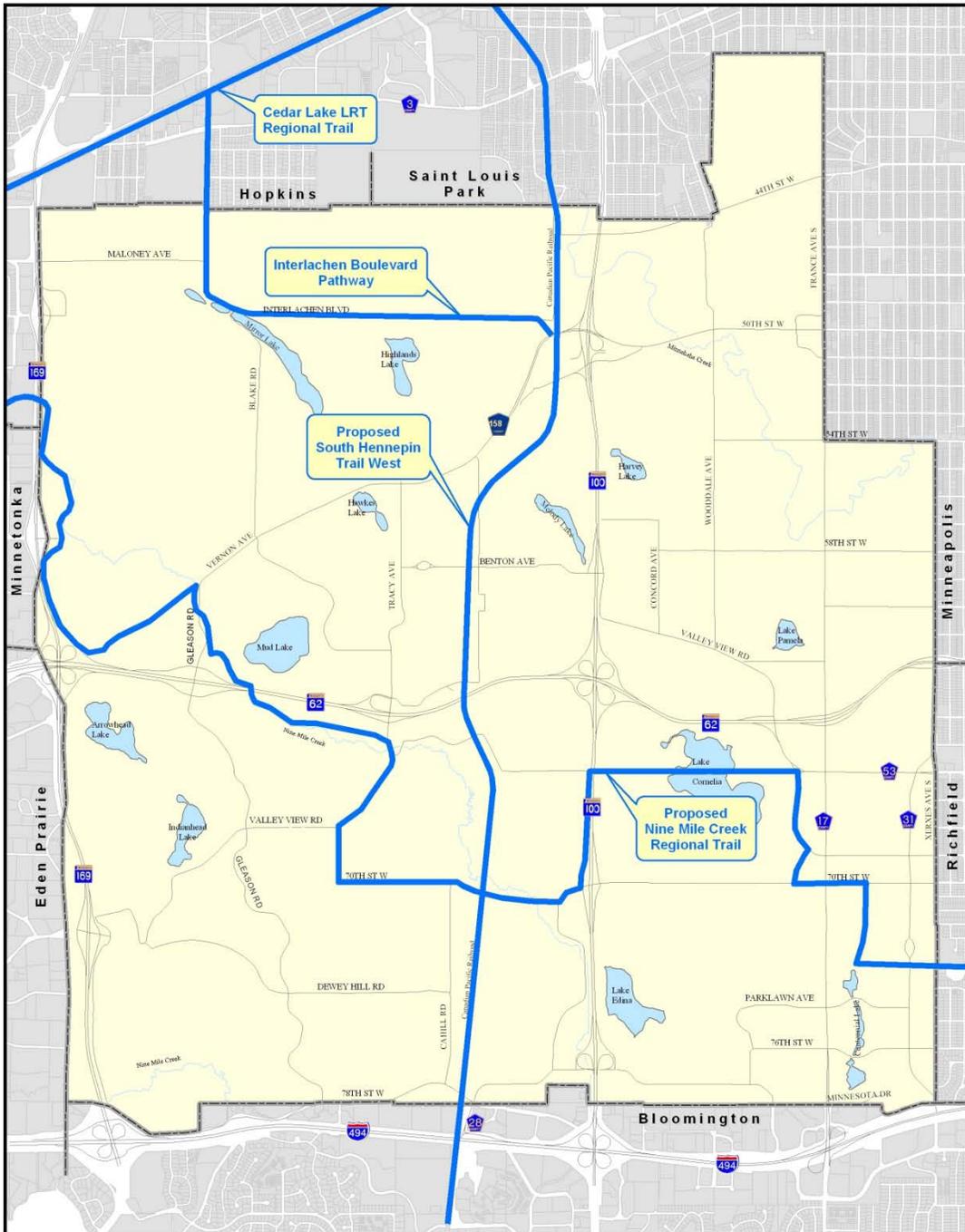


City of Edina  
2008 Comprehensive Plan Update



0 0.5 1 Miles

Figure 9.1  
Parks & Open Space  
October, 2008



City of Edina  
2008 Comprehensive Plan Update



0 0.5 1 Miles

Figure 9.2  
Trails  
October, 2008



## Chapter 10: Energy and Environment

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## ***10.1 Introduction – Edina’s History of Environmental Action.***

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From the early 1970s, when recycling was still a novel idea and environmental programs were first being established, to the present, as the City takes on the challenges of global warming and energy policy, Edina has sought to be in the forefront on environmental and natural resource issues.

This Chapter 10 identifies the City’s goals, policies, and objectives in the following areas:

- Climate Change and Global Warming
- Clean Energy and Energy Efficiency
- Recycling and Solid Waste Management
- Outdoor and Indoor Air Quality

The following environmental topics are covered in other chapters of this plan:

- Land Use and Community Design - See Chapter 4
- Transportation – See Chapter 7
- Water Quality and Water Resource Management—See Chapter 8.
- Urban Forest, Parks, and Open Space - See Chapter 9
- Noise – See Section 11.4

### **History of the Energy and Environment Commission**

In 1971 the City of Edina established the Environmental Quality Commission, which was disbanded in 1977. On April 3, 2007, the Edina City Council established the Energy and Environment Commission in response to the global warming crisis, and to support and advance environmental protection, conservation efforts, energy conservation, and water protection. On June 18, 2007, the City Council appointed the first members of the newly created Energy and Environment Commission, significantly expanding Edina’s commitment to comprehensively address environmental and energy issues.



### **Duties of the Edina Energy and Environment Commission.**

The Council gave the new commission its mandate in City Ordinance Section 146:

- A. Examine and recommend best practices for energy conservation for Edina's citizens and businesses, including recommendations for a "green" building code, use of Energy Star appliances, and other energy reduction targets.
- B. Examine and recommend changes in City Government purchasing and operations to conserve energy.
- C. Evaluate and monitor the provision of a residential recycling program.
- D. Evaluate and monitor the provision of a privately provided solid waste program, as well as a reduction in municipal solid waste produced by Edina residents and businesses.
- E. Evaluate and encourage improvements in air and water quality.
- F. Promote the establishment of targets for the reduction of greenhouse gas emissions produced by the City's buildings, equipment and operations.
- G. Educate the public about energy issues, reduction, conservation, reuse, recycling and environmental protection.
- H. Examine and promote renewable energy options for transportation, heating, and cooling, and other energy uses.

The Energy and Environment Commission held its first meeting in July 2007. Since then, the nine-member commission has formed three Working Groups (WG): (i) Climate Change; (ii) Education and Outreach; and (iii) Recycling and Solid Waste. The three WG have taken on additional citizen volunteers and are now developing and implementing work plans in their areas. The next sections of this chapter discuss Edina's policies, goals and actions in the areas of global warming and climate change, energy use and conservation, recycling and waste management, and air quality.





## **10. 2. Climate Change and Global Warming.**

**10.2.1. Introduction and Current Conditions – Climate Change and Global Warming.** *“Global warming is a reality. It threatens both our society and life, as we know it on earth. The overwhelming consensus of the scientific community for the past decade has been that the planetary warming we are now experiencing, and the resulting climate change, is largely a human induced phenomenon. This is brought on mainly by the release of carbon dioxide through the burning of fossil fuels, which blankets our atmosphere raising the earth’s surface temperature.”<sup>2</sup>*

This was the message that renowned polar explorer Will Steger brought to Edina on January 11, 2007, when he spoke at St. Patrick’s Church in the first “Edina Dialogue” sponsored by the Edina Community Foundation and Edina High School’s Project Earth student group. Over 1,000 residents, including Edina’s mayor and City Council members, resolved to respond to the problem of global warming.

### **10.2.2. Trends and Challenges – Climate Change and Global Warming.**

The City has since taken two very significant actions to address global warming. First, on February 6, 2007, Edina joined over 700 U.S. cities in signing the U.S. Mayors Climate Protection Agreement. Second, on November 5, 2007, the City Council voted to join the International Council for Local Environmental Initiative (ICLEI) Cities for Climate Protection (CCP). The City and the Energy and Environment Commission are now identifying actions that will reduce greenhouse gas emissions in our community.

#### **The U.S. Mayors Climate Protection Agreement.**

The Energy and Environment Commission is now working to implement many of the actions under the Mayor’s Agreement. These activities are discussed in this chapter. The U.S. Mayors Climate Protection Agreement reads as follows:

A. Urge the federal government and state governments to enact policies and programs to meet or beat the target of reducing global warming pollution levels to seven percent below 1990 levels by 2012, including efforts to: reduce the United



States' dependence on fossil fuels and accelerate the development of clean, economical energy resources and fuel-efficient technologies such as conservation, methane recovery for energy generation, waste to energy, wind and solar energy, fuel cells, efficient motor vehicles, and biofuels; (Note: In 2007, the Minnesota legislature adopted one of the most aggressive goals in the nation. This omnibus energy policy bill includes the Global Warming Mitigation Act of 2007 which commits to reducing the State's greenhouse gas emissions by 15% by 2015, 30% by 2025, and 80% by 2050 compared to 2005.)

B. Urge the U.S. Congress to pass bipartisan greenhouse gas reduction legislation that 1) includes clear timetables and emissions limits and 2) a flexible, market-based system of tradable allowances among emitting industries; (Note: In the fall of 2007, Edina Mayor Jim Hovland signed a letter urging Edina's congressional members to pass such legislation, as proposed in the Safe Climate Act, H.R.1590.)

C. Strive to meet or exceed Kyoto Protocol targets for reducing global warming pollution by taking actions in our own operations and communities such as:

1. Inventory global warming emissions in City operations and in the community, set reduction targets and create an action plan;
2. Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities;
3. Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for car-pooling and public transit;
4. Increase the use of clean, alternative energy by, for example, investing in "green tags", advocating for the development of renewable energy resources, recovering landfill methane for energy production, and supporting the use of waste to energy technology;
5. Make energy efficiency a priority through building code improvements, retrofitting City facilities with energy efficient lighting and urging employees to conserve energy and save money;
6. Purchase only Energy Star equipment and appliances for City use;
7. Practice and promote sustainable building practices using the U.S. Green Building Council's LEED program or a similar system;
8. Increase the average fuel efficiency of municipal fleet vehicles; reduce the number of vehicles; launch an employee education program including anti-idling messages; convert diesel vehicles to bio-diesel;



9. Evaluate opportunities to increase pump efficiency in water and wastewater systems; recover wastewater treatment methane for energy production;
10. Increase recycling rates in City operations and in the community;
11. Maintain healthy urban forests; promote tree planting to increase shading and to absorb CO<sub>2</sub>; and
12. Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution.

### **ICLEI Cities for Climate Protection Campaign.**

On November 5, 2007, the City Council unanimously approved Edina's membership in ICLEI's Cities for Climate Protection (CCP) campaign. Edina is the eighth city in the state of Minnesota to join ICLEI. Hennepin, Ramsey and Dakota counties are also members.

ICLEI – the International Council for Local Environmental Initiatives – is an international association of local governments and national and regional local government organizations that have made a commitment to sustainable development. ICLEI created the CCP in 1994, and today this effort assists over 800 cities across the world to adopt policies and implement quantifiable measures to reduce local greenhouse gas emissions, improve air quality and enhance urban livability and sustainability.

Edina's membership in ICLEI's CCP will provide the City with technical support, training and specific action steps for reducing carbon emissions. The City should also realize financial savings in reduced utility and fuel costs and improved air quality, contributing to the general health and well being of the community. The CCP works with the U.S. Mayors Climate Protection Agreement to help local governments reduce carbon emissions and integrate climate change mitigation into their decision-making processes.

The CCP campaign is based on an innovative performance framework structured around five milestones that allow local governments to understand how municipal decisions affect energy use and how these decisions can be used to mitigate global climate change while improving community quality of life. The five milestones provide a flexible framework that can accommodate varying levels of analysis, effort, and availability of data. ICLEI's CCP provides member cities with a simple, standardized means of calculating greenhouse gas emissions, establishing targets to lower emissions, reducing greenhouse gas emissions, and



measuring and reporting performance. ICLEI has developed several software tools that help cities comply with the methodology.

### **10.2.3. Goals and Policies - Climate Change and Global Warming.**

The City's actions in joining the U.S. Mayors Climate Protection Agreement and ICLEI's Cities for Climate Protection campaign have framed Edina's goals and policies on climate change. The goals and policies adopted by the City under the U.S. Mayors Climate Protection Agreement are listed in Section 10.2.2. In addition, the five ICLEI CCP milestones form a framework for the implementation of the goals and policies of the Mayors Agreement. The five ICLEI milestones that serve as the City's goals and policies on climate change are:

**Milestone 1. Conduct a baseline emissions inventory and forecast.** Based on energy consumption and waste generation, the City will calculate greenhouse gas emissions for a base year (e.g., 2007) and for a forecast year (e.g., 2015). The inventory and forecast provide a benchmark against which the City can measure progress.

**Milestone 2. Adopt an overall greenhouse gas reduction goal and an emissions reduction target based on the forecast year.** The City will use its best efforts to reduce community greenhouse gases by 15 percent by 2015, 25 percent by 2025, and 80 percent by 2050 in agreement with the Global Warming Mitigation Act of 2007. The City will also develop milestone emission reduction target for City operations from the baseline year. The GHG reduction goal and reduction targets both foster political will and create a framework to guide the planning and implementation of measures.

**Milestone 3. Develop a Local Action Plan.** The City will develop a Local Action Plan that describes the specific policies and measures that it will take to reduce greenhouse gas emissions and achieve its emissions reduction target. The plan should include a timeline, a description of financing mechanisms, and an assignment of responsibility to departments and staff, and incorporate public awareness and education efforts.

**Milestone 4. Implement policies and measures.** The City will implement the policies and measures in the Local Action Plan. Policies and measures should include energy efficiency improvements to municipal buildings and water treatment facilities, streetlight retrofits, public transit improvements, and installation of renewable power applications.



**Milestone 5. Monitor and verify results.** The City will monitor and verify progress on the implementation of measures to reduce or avoid greenhouse gas emissions in an ongoing process. Monitoring should begin once measures are implemented and continue for the life of the measures, providing important feedback that can be use to improve the measures over time.

#### ***10.2.4. Implementation – Climate Change and Global Warming.***

The main focus of the Edina Energy and Environment Commission’s Climate Change Committee will be to implement the action steps and milestones outlined in the Mayors Climate Protection Agreement and ICLEI Cities for Climate Protection campaign as limited by the City of Edina’s Ordinance in Section 146. These actions will include: (1) establishing the municipal carbon footprint, including an emissions inventory, baseline, and forecast for greenhouse gas emissions; (2) identifying actions that will reduce greenhouse gas emissions, (3) implementing educational actions with public and private partners, including the school district, residential, commercial and industrial sectors, that will result in quantifiable greenhouse gas reductions, and (4) establishing a procedure for measuring and reporting greenhouse gas reductions in the community. The outcome of these actions will be, at a minimum, a reduction of greenhouse gas emissions by the percentages set in the Minnesota Global Warming Mitigation Act of 2007.

## ***10.3 Energy***

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### ***10.3.1 Introduction - Energy***

Energy is the driver of the modern world as we know it. Sources of energy can be either converted to electricity or transported to homes and businesses over power lines, or directly used (“burned”) to power machines. A majority of the electricity consumed in Edina is generated from coal, gas, and nuclear reactors. The last decade has brought clarity to the immense consequences of such fossil fuel based sources on our shared environment and social structure. The impact of global climate change is already being felt across the globe and is only expected to accelerate in the coming decades. The City of Edina must not only strive to secure adequate energy to meet its needs in the future but also ensure that it uses and produce energy that is “clean”, affordable, and safe. Alternative energy sources such as solar power, wind power, geothermal, and power from biomass, are classified as renewable and clean sources of energy because of



their potentially unlimited supply and minimal environmental impact. As we learn more about alternative forms of energy, it is important to note that we should evaluate them in a comprehensive manner to determine the forms of energy that are ideally suited for Edina. As new technologies develop and current technologies mature with respect to cost (referred to as “grid parity”), these evaluations must be revisited. This section will describe the current energy status of Edina, current trends and challenges, and will lay out the goals and suggest policies that will put Edina at the forefront of energy efficiency, utilization, and renewable energy in the State.

### **10.3.2 Current Conditions - Energy**

Coal-fired power plants typically account for nearly two-thirds of Minnesota’s electricity generation. Two nuclear plants near the Twin Cities also account for nearly one-fourth of the State’s electricity production.<sup>3</sup> Thus, greater than 95% of electricity in Minnesota during 2005 was generated from energy sources that are neither clean nor renewable.<sup>4</sup>

The good news is that Minnesota has one of the strongest renewable energy standards in the US. Xcel Energy, the largest electricity producer in the state, has been mandated to generate 30 percent of its energy from renewable resources by 2020, with at least 25 percent generated by wind energy. All other utilities are required to generate at least 20 percent of their energy from renewable sources by 2025.

Edina residents and businesses are customers of Xcel Energy. They can subscribe to wind energy through the Windsource Program by dedicating either a portion or their entire electrical consumption to energy produced using wind power. Windsource customers also get a credit for the avoided fuel costs of conventional sources of energy, resulting in a net wind energy service adjustment charge of less than a dollar per 100 kWh. Xcel Energy also offers the residential Saver's Switch program. Residents receive a bill credit during the summer months in exchange for agreeing to have their air conditioning systems cycled on and off during peak energy demand periods.

Natural gas is the preferred energy source in Minnesota for residential and commercial heating and it is transported through federally regulated interstate pipelines. Center Point Energy is the Edina’s provider of natural gas. It offers energy saving programs such as energy audits and rebates for heating systems, food service equipment and for the installation of heat recovery systems.



Personal and commercial transportation relies on either gasoline or diesel fuels. By Minnesota statute, gasoline sold in the state must be blended with 10% ethanol (E10), and diesel must contain 2% biodiesel (B2). The Agriculture and Veteran bill signed by Gov. Pawlenty in May 2008 contains provisions (Section 51) that increase the state B2 mandate to B5 (i.e. 5%) by 2009, B10 by 2012 and B20 by 2015. These blends help reduce CO<sub>2</sub> emissions and displace the amount of harmful additives, such as benzene, found in petroleum-based fuels. Minnesota also has over 300 gas stations<sup>5</sup> selling E85, a blend containing 85% ethanol that can be used in flex-fuel vehicles. E85 is not sold in Edina, but it can be found at gas stations in neighboring Eden Prairie, Bloomington, Richfield and Minneapolis<sup>5</sup>.

Efforts by Edina's government, residents and businesses to reduce energy use and make the transition toward renewable energy sources can play a significant role in reducing the negative impact of our energy consumption.

The City of Edina currently does not have an energy and environment policy. The Energy and Environment Commission will study, develop, and recommend such policy to the City Council. It is important that Edina accelerates the use and generation of alternative energy sources, promotes energy efficiency, and finds avenues to reduce dependence on fossil fuel based energy for government, residences, and commercial establishments.

### **10.3.3 Trends and Challenges – Energy**

A variety of alternative energy sources are being implemented across the country and the globe. Solar, wind, geothermal, and biomass are the most popular and promising approaches for alternative energy. States like California and Arizona, due to abundant sun light throughout the year, are aggressively promoting adoption of solar power. States in the central US region, such as Texas and Minnesota, are good candidates for wind energy applications because of the high wind speed in this section of the nation. The Buffalo Ridge area in southern Minnesota is a leading region for wind power generation in the country. This region also hosts one of the major wind turbine blade manufacturers (Suzlon Rotor Corporation).

Minnesota is a major corn producer and there has been a large investment in ethanol based energy production in the State. Many other sources of energy are in the research stage, with the University of Minnesota taking a lead in biomass energy research.



For an overview of the above renewable energy sources and their comparison to conventional energy sources, please refer to the 2005 report on renewable energy by the League of Women Voters of Edina<sup>6</sup>. This report provides information on how the sources work, their cost and availability, their current level of use in Minnesota, related incentives provided by governments, and environmental impact, if any.

The primary challenge with most of the alternative energy sources is cost. For example, solar energy costs \$0.20-0.50/kW-hr and wind energy costs \$0.06/kW-hr compared to \$0.02/kW-hr for electricity from coal or gas<sup>7</sup>. The second challenge is transportation of energy. For example, new transmission lines are often required to transport wind-generated electricity from remote wind farms to urban areas. The ideal source of energy is one that can produce electricity cheaply, all year round, and be locally produced. This forces cities such as Edina to look at comprehensive approaches to energy, where more than one form of renewable energy could be combined to address the needs and goals of the City.

#### **10.3.4 Goals and Policies – Energy**

1. *Lead by example in conserving energy and developing renewable energy for city buildings, fleets, and operations.*
2. *Promote community and business energy conservation, including adopting ordinances and policies to provide incentives for energy efficiency, renewable energy, and reductions in greenhouse gases.*
3. *Adopt purchasing guidelines for the City of Edina that include renewable energy sources, Examples are purchasing wind energy for electrical consumption and purchasing blended fuels for the City fleet.*
4. *Promote educational programs to inform residents and businesses of the availability of renewable energy options in energy and fuel supply, and carbon-neutral actions.*
5. *Work with public and private institutions to obtain grants for adoption of renewable energy sources by the City and residents. Work with these institutions to make these projects economically self-sustaining.*

#### **10.3.5 Implementation – Energy**

Energy option programs approved by the City Council should include specific timetables for implementation and measurement for success.



Implementation of these goals will require a variety of resources from the commission, its working groups, City Hall, local businesses, local non-profit organizations, and potential support from state and federal governments.

The outcome of these actions will be, at a minimum, a reduction of greenhouse gas emissions by the percentages set in the Minnesota Global Warming Mitigation Act of 2007.

## **10.4 Solar Protection**

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### **10.4.1 Introduction - Solar Protection**

One of the most important contributions the City can make in the transition to renewable energy sources is to protect the access that individual residents, businesses and industry have to renewable sources of energy - most notably solar power. Active solar rooftop collectors and passive solar technologies require maximum exposure to sunlight, which can be reduced by the proximity of tall structures. To help ensure that sufficient exposure is available for all homeowners and businesses, the City already has ordinances for building setbacks, building height restrictions, and maximum lot coverage.

### **10.4.2 Current Conditions - Solar Protection**

The Minnesota Solar and Wind Access Law of 1978 (S.F. 145, Article 4, Section 15) provides for the creation of solar and wind easements for solar and wind-energy systems in the form of voluntary contracts. It also allows local zoning boards to restrict development for the purpose of protecting solar access.

The 1998 Comprehensive Plan stressed that protecting “the access that individual residents, businesses and industry have to renewable sources of energy – most notably solar power” was “one of the most direct contributions the City can make in the transition to renewable energy source”<sup>8</sup>. However, only two homes in Edina had solar power by 2004<sup>9</sup>. The high cost of solar installation is still a barrier to large scale adoption of solar energy. Payback for solar installation on existing single-family homes can be 15 year or more, even after rebates. However, excellent return on investment can be achieved in new constructions designed to optimize solar access. Increased property value and tax exemptions are two additional benefits of solar installation.



Combined actions by the City of Edina that protect solar access, facilitate financing mechanisms, and revise current building codes, can result in a wide adoption of solar energy in Edina.

### **10.4.3 Trends and Challenges - Solar Protection**

Installation of solar panels on City building has proven to be a good approach for increasing the visibility of solar energy, while providing clean energy for building use. Examples are the City of Chicago, which has installed a 2 MW system on museums, public schools, etc., and Cambridge, MA which has installed a 28 kW system providing 10 percent of the electrical needs of the City Hall Annex,

Rising energy costs and concerns about reducing carbon emissions should motivate more homeowners and businesses to invest in solar generated power. But cost, as well as a housing stock that is not constructed to facilitate solar power, continue to impede solar panel investment. Edina's commitment to ICLEI provides a well of resources for finding solar solutions that have been successfully implemented in other US cities. Establishing an environment in which builders design structures to be solar-panel friendly is a critical action. The City of Edina can devise new financing mechanisms, such as low interest rates financing through bond issues, to make solar energy use more economical than it is for individuals or businesses.

### **10.4.4 Goals and Policies - Solar Protection**

1. *Continue to enforce setback, building height, and lot coverage ordinances that can serve as protection to solar access*
2. *Consider access to solar protection when reviewing variance requests*
3. *Promote the use of active and passive solar energy for heating, lighting, and other aspects in design, construction, remodeling, and operation of City buildings.*
4. *Leverage the Solar and Wind Access Law to establish policies that restrict development for the purpose of protecting solar access to light*

### **10.4.5 - Implementation Solar Protection**

Solar Protection programs approved by the City Council should include specific timetables for implementation and measurement for success.



The combined outcome of these actions will be, at a minimum, a reduction of greenhouse gas emissions by the percentages set in the Minnesota Global Warming Mitigation Act of 2007.

## ***10.5 Residential Energy Consumption***

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### ***10.5.1 Introduction - Residential Energy Consumption***

Energy consumed by residents of Edina can be broken into three main categories - electricity, natural gas, and transportation fuels.

Residential electricity consumption was measured at 210 million KWh in 2007, or 4,420 kWh per household<sup>10</sup> – greater than the average Minnesota consumption of 4,252 kWh in 2005<sup>11</sup>.

Total natural gas consumption during 2007 was 1.8 billion cubic feet, or 124,000 cubic feet per residential customer in Edina<sup>12</sup>. This is compared to the state average of about 100,000 cubic feet per residential customer.

In the year 2000, the City of Edina recorded 527 million Vehicle Miles Traveled (VMT) on its local streets, collector roads and primary arterial roads. National estimates suggest that motor fuel consumption for the average vehicle has risen from 698 gallons per year to 732 gallons between 1994 and 1999, down to 697 gallons in 2006, a trend due to steady price increases<sup>13</sup>. In 2008, the price of gasoline reached \$4.00 per gallon resulting in a dramatic switch of consumers away from low gas mileage SUVs toward compact cars and hybrid vehicles.

### ***10.5.2 Current Conditions - Residential Energy Consumption***

The average Minnesota Household Energy bill consists of heating (60%), water heating (9%), lighting (7%), air conditioning (4%), and other household appliances and uses (20%). Heating and air-conditioning system problem areas leading to excessive energy use include:

- Equipment sizing: average unit is oversized 47% compared to design.
- Indoor coil air flow: 78% of units have low airflow.
- Refrigerant charge: 72% of units are incorrectly charged.
- Ductwork: over 80% of units have excessive duct leakage.<sup>14</sup>

A simple but effective way to save a large amount of energy would be investing in educational programs that teach how to properly maintain heating and air-



conditioning systems and the importance of replacing old and inefficient appliances, heating and air-conditioning systems.

ENERGY STAR qualified lighting uses about 75% less energy than standard lighting, produces 75 percent less heat, and lasts up to 10 times longer. If every American home replaced just one light bulb with an ENERGY STAR qualified bulb, we would save enough energy to light more than 3 million homes for a year, more than \$600 million in annual energy costs, and prevent greenhouse gases equivalent to the emissions of more than 800,000 cars.

The American Council for an Energy Efficient Economy (ACEEE) has a consumer guide with simple steps homeowners can take to reduce energy usage.

### ***10.5.3 Trends and Challenges - Residential Energy Consumption***

Energy costs are going nowhere but up, due to increased global demand and high sensitivity to global political conditions. Homeowners are feeling the effects of the rising energy costs but may not know how or what to do. They may lack the resources in time and money to employ the energy conservation measures available to them.

### ***10.5.4 Goals and Policies - Residential Energy Consumption***

- 1. Inform residents of the opportunities available to them to control and reduce their energy consumption.*
- 2. Create incentives in the form of tax rebates and low interest financing to reduce residential energy demand and promote renewable energy and low-carbon energy use.*
- 3. Promote the adoption by homeowners, builders and remodelers of Edina's and Minnesota State government energy guidelines, with the goal of meeting LEED certification standards for new constructions.*
- 4. Encourage the use of green materials (building materials and vegetation) to reduce the need for summer cooling and winter heating.*
- 5. Inform/educate new homebuilders and remodelers in Edina of energy efficient options.*



### ***10.5.5 Implementation - Residential Energy Consumption***

Energy conservation programs approved by the City Council should include specific timetables for implementation and measurement for success. The combined outcome of these actions will be, at a minimum, a reduction of greenhouse gas emissions by the percentages set in the Minnesota Global Warming Mitigation Act of 2007.

## ***10.6 Commercial and Industrial Energy Consumption***

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### ***10.6.1 - Introduction Commercial/Industrial Energy Consumption***

Commercial and industrial energy consumption is generally much more intensive than that of residential consumers. In 2007 for instance, commercial and industrial operations consumed about 413 million kWh of electricity (Xcel energy data) and over 1.2 billion cubic feet (approx. 873,000 cu. ft./account) of natural gas. Due to this intensive use, the potential for energy conservation is likely to be high and the City will encourage its businesses and industries to invest in energy conservation measures.

### ***10.6.2 Current Conditions - Commercial/Industrial Energy Consumption***

According to the EPA's ENERGY STAR Building program, energy costs for existing US commercial space, 78 billion square ft, total \$110 billion annually. They estimate improving energy efficiency could save \$25 billion. Further, worker productivity will increase in a more comfortable working environment.. In spite of this, energy conservation opportunities go unrealized, perhaps for lack of recognition, perceived resources or clear direction.

### ***10.6.3 Trends and Challenges - Commercial/Industrial Energy Consumption***

The cost of energy in the commercial and industrial sector will also go nowhere but up. A recent study by McKinsey & Company<sup>15</sup> concluded that significant energy savings opportunities exist with lighting and heating and cooling in



commercial and industrial buildings. However, landlords and building owners have traditionally made decisions based on low first cost rather than long-term energy costs. Energy costs and any savings are passed through to the tenant. In owner occupied buildings, some of the same opportunities exist. The high turnover of building ownership has also been a deterrent to making long-term investments in energy conservation. Rebate programs providing incentives are available but building owners may not be fully aware or know how to take advantage of them.

#### **10.6.4 Goals and Policies - Commercial/Industrial Energy Consumption**

It will be the goal of the City of Edina to help educate and inform the commercial and industrial sector about energy conservation opportunities. Providing tax incentives or rebates may help building owners take action on energy conservation opportunities. Efforts by the commercial and industrial sector to limit energy consumption during peak demand periods are critical to reducing the incentive for creating more centrally stationed power plants. The City will explore ways to partner with State and Federal programs to facilitate such action.

1. *Promote the adoption by local businesses of locally generated renewable energy to power part or all of their energy needs.*

#### **10.6.5 Implementation - Commercial/Industrial Energy Consumption**

Any programs approved by the City Council should include a timetable for implementation, as well as measurement of accomplishments. The outcome of these actions will be, at a minimum, a reduction of greenhouse gas emissions by the percentages set in the Minnesota Global Warming Mitigation Act of 2007.

## **10.7 City Energy Consumption**

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### **10.7.1 Introduction - City Energy Consumption**



The City itself is a consumer of energy and can play a strong leadership role in reducing energy use at its City-owned facilities, and in the areas of street lighting and traffic signals. It also operates a substantial fleet of motor vehicles. Energy costs associated with these facilities and vehicles have amounted to roughly 5 percent of the City's budget. Given the high consumption of energy by these City-owned properties and vehicles, steps taken to conserve energy can potentially have a significant effect on the demand for energy and the quality of the local environment. The City recognizes this and has taken many steps to improve the energy efficiency of the buildings and facilities that it owns, including energy audits and the installation of energy efficient equipment. As technologies improve and equipment replacement occurs, the City will continue to look for ways to improve its energy efficiency.

### **10.7.2 Current Conditions - City Energy Consumption**

As part of Milestone 1 of the ICLEI protocol, the Energy Commission collected data on energy use for the 2007 baseline year. The year 2007 was chosen because the Commission was able to collect a complete set of data from all sources for this year only. The Commission collected data from Xcel and Center Point utilities, from the City Engineering Department and from a survey of employee commuters. The data show a total consumption of 155,000 MMBtu (Million British Thermal Units) or the equivalent of 27,400 tons of CO<sub>2</sub> emitted. The breakdown in energy use was 56 percent from building, 33 percent from operation of water and sewage equipment, 5 percent from the City fleet, 2 percent from street lights and 4 percent from employee commute.

### **10.7.3 Trends and Challenges - City Energy Consumption**

As with the other sectors, energy costs in the public sector will continue to rise. The most significant challenge is in the allocation of limited resources that can be attributed to energy conservation opportunities.

### **10.7.4 Goals and Policies - City Energy Consumption**

1. *Create benchmarks of current energy use in all public facilities and set a goal to reduce energy use and costs according to the ICLEI milestones and the Minnesota Global Warming Mitigation Act of 2007.*
2. *Establish a policy that all public buildings report annually on the cost of operation, goals for further reduction.*



### **10.7.5. Implementation – City Energy Consumption**

Once approved by the City Council, programs should have a timeline for implementation and measurements for success.

The combined outcome of these actions will be, at a minimum, a reduction of greenhouse gas emissions by the percentages set in the Minnesota Global Warming Mitigation Act of 2007.

## **10.8 Waste**

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### **10.8.1 Introduction - Waste**

*History of Edina's Recycling Program* - The Edina Garden Council began operating the first recycling collection in Edina in 1970 with a drop off site for glass in the parking lot of the Southdale Red Owl. In 1972 the drop-off location was moved to the Edina Public Works Garage at 5121 Brookside Avenue. The drop-off site expanded to include paper, Goodwill items, cans and used oil. The Edina recycling drop-off center closed on November 1, 1993, although residential weekly collection had already begun in a pilot area in 1986. In 1989, the program expanded City wide, collecting cans, glass, newspaper and corrugated paper.

Edina was one of the first cities in Minnesota to create a commission dedicated to environmental issues when, in 1974, the City established the Recycling Commission, starting one of the first recycling programs in the State. In 1992, its name was changed to the Recycling and Solid Waste Commission. The Commission continued until 2007, when it was disbanded and its functions folded into the new Energy and Environment Commission.

Edina's 2007 residential recycling program is a weekly curbside collection of ten items collected in two categories, paper and rigids. The paper items include: newspaper, magazines, mail, boxboard, corrugated paper, magazines and phone books. The rigids include: cans, glass, and #1 and #2 plastic (bottles with necks). Recycling service in 2007 reached 14,183 single family and duplex homes and 382 multi-family dwellings of three to eight units. Over 90 percent of Edina's households participate in recycling. The annual weight of recyclables collected as of 2007 has been over 5,000 tons for the last five years.

The generation and management of solid waste has become an increasingly important and complex issue for both Edina and Hennepin County. The State of



Minnesota established a waste “hierarchy” in 1980 that emphasizes waste reduction, reuse, and recycling over landfilling. Waste-to-energy is preferred over landfilling, but is less desirable than reduction, reuse and recycling. Consistent with this hierarchy, the State legislature has banned yard wastes from landfills, established municipal recycling programs and established hazardous waste drop-off facilities. Waste reduction programs have been initiated in businesses, public facilities, and private residences. Waste incineration has also been started on a large scale because it significantly reduces the volume of waste that must be buried at landfills.

Further reductions in the amount of waste that cannot be reused or recycled can provide significant environmental and economic benefits to the residents and businesses within Edina. In addition to saving landfill space and reducing methane, a potent greenhouse gas, adhering to the “3 R’s” – reduce, reuse, and recycle – conserves natural resources, protects air and water quality, lowers disposal costs and reduces taxpayer money that must be used to build new waste management facilities. Finding creative and effective ways to reduce the amount of existing and emerging waste streams that are produced in Edina should reduce the economic, environmental and social costs of waste disposal now and in the future.

### **10.8.2 Current Conditions - Waste**

In Edina, recycling is an accepted part of everyday life that reduces the amount of waste that would have gone to landfills, avoids pollution and saves our natural resources. Despite our recycling success, the amount of waste continues to grow, threatening the quality of air, water, soil and human health. In ten (10) years the amount of municipal solid waste generated in Minnesota has increased more than 33 percent, rising from approximately 4,500,000 tons in 1995 to over 6,000,000 tons in 2006.<sup>16</sup>

Even as more waste is being diverted into recycling and hazardous waste facilities, waste incinerators, and compost sites, the overall amount of waste that must be managed is increasing. Minnesota Municipal Solid Waste (MSW) generation totaled 6,985,744 tons in 2005. Greater Minnesota accounted for 42 percent MSW generation and the seven county metro area accounted for 58 percent MSW generation. For 2004-2005 the amount of MSW generated in Minnesota increased by 1.8 percent while the population increased by 1.2 percent. That’s 2,338 lbs of waste and recyclable materials for every man, woman and child in the State<sup>17</sup>. This increased waste creation incurs significant costs, including the use of virgin resources to make the products, carbon dioxide emissions and packaging that produces the waste, transportation costs



associated with the transport of those resources and finished products and the money spent on constructing new waste management facilities.

Minnesota's 2005 recycling rate of 48.5 percent ranked second in the nation according to *BioCycle* magazine's annual survey. The state's base recycling rate, (which is the actual percentage of materials recycled and does not include the additional yard waste recycling and recycling reduction efforts) is 41 percent. In 2005, recycling programs in Minnesota collected 2.5 million tons of recyclable materials (paper, metal, glass, plastic, food, problem materials, etc), an increase of nearly 70,000 tons, or 3 percent from the previous year. Edina's residential recycling collection, however, remained static at 222 lbs per person.

The challenge for Edina and the rest of Hennepin County is to focus both on better management of existing waste and the prevention of the need to manage waste at all through the use of closed loop systems wherein all products are designed so that they are reusable, recyclable or compostable. Finding ways to prevent the creation of waste is often the most cost-effective management technique in the long run.

### **10.8.3 Trends and Challenges – Waste**

Challenges and opportunities exist in the areas of recycling #3-7 plastics, source separated organics, and toxic/electronic waste.

*Plastics* – The number on the bottom of a plastic container is a code representing the type of materials in the plastic. Edina's recycling program currently includes #1 and #2 plastics, which are basically necked bottles. Technology exists to recycle more than #1 and #2 plastics, but no after market as yet exists for them. Without demand, #3 - #7 cannot be recycled.

*Source Separated Organics (SSO)* - These include organic material other than yard waste. SSO can be composted or used to generate energy such as compressed natural gas (CNG). SSO includes, without being limited to, the following.

Compostable food waste including vegetables, fruits, coffee grounds, eggs and eggshells, meat, oil, bones, grease, and dairy products;

Non-recyclable but compostable paper such as coffee filters, paper tissues, paper napkins, paper towels, paper plates and paper cups; and



Waxy cardboard such as refrigerator/freezer packaging, egg cartons, and milk cartons.

Not included are yard waste (leaves, grass clippings, weeds, tree branches), recyclable paper, or any non-compostable product such as metal, ceramics, rubber, leather, glass, any plastic including plastic wrap, plastic bags, and plastic packaging. (Note: While yard waste is not SSO, the programs currently picking up and composting SSO do pick up and compost yard waste as well)

Taking SSO out of the waste stream makes it possible to compost SSO either: 1) in conventional aerobic piles, or 2) in anaerobic digesters where methane produced can be used generate energy. Removing SSO from the waste stream has many benefits as follows:

a. Hennepin County's incinerator is at processing capacity. Because garbage continues to increase, solid waste is sent to landfills both in state and out of state. Organic matter in landfills is a prime cause of emissions of methane into the atmosphere. Methane is 23 times worse as a greenhouse gas than carbon dioxide.

b. Incinerators operate more efficiently with wet material removed, and release less methane. As an analogy, try burning wet noodles on a campfire.

c. SSO collection may have the side effect of boosting the recycling rate. The city of Wayzata experienced a 23% increase in recycling after beginning an SSO collection program.<sup>18</sup>

d. Recycling SSO also reduces tipping fees (fee charged to haulers to leave materials at landfills or compost sites) at landfills. The tipping fee for organics is less than the tipping fee for solid waste - \$15 per ton vs about \$41.85 per ton. SSO is also exempt from the county solid waste fee of 14.5% and state solid waste tax of 17%.

e. Composting SSO provides an earth friendly end product. Instead of taking up space in a landfill or being burned in an incinerator, organics are recycled into a valuable resource that reduces the need for watering and weeding, replenish soils, reduces soil erosion, and prevents stormwater runoff from contaminating wetlands, lakes, and streams, plus captures carbon dioxide for climate protection through the plantings, which compost encourages.



f. Collected SSO can also be used as feedstock for future biodigesters. Biogasification in the biodigester process captures the energy, and yields a higher energy benefit than incineration or composting. Biodigesters are good applications for recycling SSO and capturing their methane byproduct, but none is currently available to any of the City of Edina's licensed solid waste haulers, or to the City's recycling hauler.

*Electronic Waste (E-waste)* - In addition to the challenges posted by the increasing volume of solid waste, the composition of the waste is also becoming more toxic. Electronic waste presents special environmental, health and economic challenges. "Monitors and televisions made with tubes (not flat panels) have between 4 and 8 pounds of lead in them. Most of the flat panel monitors and TV's contain less lead, but more mercury, from their mercury lamps. About 40% of the heavy metals, including lead, mercury and cadmium, in landfills come from electronic equipment discards. The health effects of lead are well known; just 1/70th of a teaspoon of mercury can contaminate 20 acres of a lake, making the fish unfit to eat."<sup>19</sup> "Rapid advances in technology mean that electronic products are becoming obsolete more quickly. This, coupled with explosive sales in consumer electronics, means that more products are being disposed of, finding their way into landfills and incinerators. To make matters worse, the FCC mandated transition to digital television (like HDTV), in February 2009, will only speed up the pace, as consumers will soon be dumping large numbers of old TVs that can't receive the new digital-only signals."<sup>20</sup>

Minnesota has banned the disposal of cathode ray tubes in municipal solid waste, and in 2007, the Minnesota legislature passed MN Stat 1115A.1310 - 1330 to establish a statewide collection and recycling system for managing electronic waste, which includes televisions, computer monitors, and other electronic products. By July 1 of each year, beginning in 2008, a retailer must report to a manufacturer the number of video display devices, by video display device model, labeled with the manufacturer's brand, sold to households during the previous program year. A retailer who sells new video display devices must provide information to households describing where and how they may recycle video display devices and advising them of opportunities and locations for the convenient collection of video display devices for the purpose of recycling.

#### **10.8.4 Goals and Policies – Waste**



1. *Continue to operate a household recycling program for single-family and multi-family housing, encouraging the 3 R's, reduction, reuse and recycling.*
2. *Encourage backyard home composting of organic wastes. This includes food scraps as well as yard waste.*
3. *Support City-wide co-collection of Source Separated Organics with yard waste.*
4. *Encourage local businesses to participate in the Minnesota Chamber of Commerce's WasteWise program. [www.MNWasteWise.org](http://www.MNWasteWise.org)*
5. *Encourage proper disposal of hazardous and other problem materials such as e-waste through public education about Hennepin Co hazardous waste collection sites as well as MN Stat. 115A.1310-1330.*
6. *Educate consumers to avoid purchasing products with harmful ingredients and instead buy "green".*
7. *Recommend changes to the City purchasing policy to encourage the use of materials that are re-usable, recycled, compostable, or which use minimal packaging. Incentivize City vendors to deliver products in reusable containers.*
8. *Expand the range of plastics that can be included in residential recycling from only #1 and #2 to include #3 through #7 as markets permit.*
9. *Encourage greater recycling among local businesses*
10. *Identify an Edina site that would produce renewable energy from City waste, such as an anaerobic digester, away from residential areas.*

### **10.8.5 Implementation - Waste**

The immediate implementation is to use a Request for Proposal (RFP) or contract bidding for the City's recycling contract, which expires on 12-31-08, to solicit greater recycling.

The long term implementation will be, at a minimum, a reduction of greenhouse gas emissions by the percentages set in the Minnesota Global Warming Mitigation Act of 2007.



## **10.10 Air**

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### **10.10.1 Introduction - Air**

The quality of the air in Edina is a significant determinant of the health and comfort of the City's residents. Pollutants in the air can cause anything from minor irritations or annoyances to serious respiratory health problems. In Edina, the outdoor air quality is generally very good; however there are certain sections of the City, which are at particular risk for degradation of air quality - mostly due to auto emissions during traffic congestion.

### **10.10.2 Current Conditions - Outdoor Air Quality**

As part of the Twin City metro area, Edina shares with its neighbors the two major causes of air quality degradation: pollutants from nearby coal plants and emissions from automobiles. In 2006, the Twin City area experienced 169 days of moderate quality and three days of unhealthy air quality due to ozone and particulate matter (as reported by the Minnesota Pollution Control Agency). Pollutants, such as high ozone levels due to automobile emissions, and particulate matter (soot) from nearby coal plants contribute to asthma attacks and other respiratory illnesses. It is important for Edina to seek ways to reduce the sources of air pollution. While local improvements may dwarf in comparison to the conditions in the larger Twin City metropolitan area, similar actions by neighboring cities can result in a net overall improvement in air quality. Such measures will also reduce carbon emissions, as described in the milestones set by the ICLEI membership.

The City of Edina can reduce the impact of coal burning on air quality by supporting the use of renewable energy for the production of the electricity and promoting energy conservation. The City should work with utility companies, such as Xcel energy, to reduce electrical consumption by City operations and enroll in utility-sponsored programs for the development of renewable electrical capacity, such as Windsorce by Xcel energy.

With the proximity of three principal roadways (TH 100, I-494, and TH 62/Crosstown) and the Southdale shopping area, traffic congestion in these areas creates localized threats to outdoor air quality. The solutions outlined in the Transportation Chapter (Chapter Seven) of this Comprehensive Plan will improve



air quality while reducing congestion and promoting walking, biking and use of public transportation.

Idling of passenger cars and commercial vehicles during the winter and summer months can contribute to indoor air degradation when such vehicles are parked near buildings, parks, and schools. Idling also imposes an economic cost and has a negative impact on quality of life (odor and noise nuisance). The City of Edina should design measures, such as a citywide ordinance, to restrict or eliminate idling of passenger cars and commercial vehicles. No-idling signs should be posted in front of public building, schools and parks, to warn drivers of the ordinance and its related penalties.

#### **10.10.2.1 Current Conditions - Indoor Air Quality**

Indoor air quality is also an issue of importance to those who live and work in Edina. In high enough concentrations, pollutants such as chemical vapors, mold spores, dust mites and many others can cause significant illness or discomfort for those in a building if it is not properly ventilated. The Environmental Protection Agency (EPA) has determined that the levels of pollutants inside buildings may be 2-5 times higher than they are outdoors - a serious problem considering that the typical person spends 90 percent of their time inside a building. Ironically, efforts to make buildings more energy efficient in recent years have aggravated this problem by sealing indoor air inside. These tightly sealed buildings, along with inadequate as well as poorly maintained and operated ventilation systems, synthetic building materials and furnishings, and chemical cleaning and personal care products are the most common causes of poor indoor air quality.

The MPCA does not currently maintain data on indoor air quality. Until such time as the data becomes available, the City will attempt to identify the areas, which are of concern for possible air quality problems and seek to minimize the sources of air pollution in that area.

Inadequate maintenance and operation of heating, ventilating and air-conditioning systems result in excessive energy use and also negatively affect air quality. Overheating, poor ventilation and lack of clean indoor air all are results.

### **10. 10.3 Trends and Challenges - Air**

There is increasing concern over air pollution caused by idling vehicles at locations such as schools, construction sites, delivery sites and drive-up

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windows. The air pollution from idling vehicles not only pollutes outdoor air, but it also finds its way indoors via doors, windows, and even ventilation systems. Greater education of motorists, signage at problematic sites, a City ordinance and lobbying for a State law banning idling all should be considered.

#### **10.10.4 Goals and Policies - Air**

1. *Cooperate with enforcement of the Clean Air Act and other laws and regulations relating to air quality including Minnesota's Freedom to Breathe Act*
2. *Encourage and consider requiring mechanical ventilation systems in new homes*
3. *Provide incentives for building practices that improve indoor air quality*
4. *Encourage property owners to plant trees along roadways where possible to help reduce traffic noise and absorb carbon dioxide*
5. *Enact an ordinance that prohibits vehicle idling in Edina and post 'No Idling' signs at all schools and public parking lots*
6. *Promote the use of renewable energy sources at the City and State level to reduce the amount of particulate matter generated by coal plants.*

#### **10.10.5 Implementation - Air**

Develop and implement a plan and process for educating the community on measures to improve indoor air quality.



## 10.11.1 References

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- <sup>2</sup> Will Steger letter, Global Warming 101 Expedition;  
<http://www.globalwarming101.com/content/view/396/88888961/>
- <sup>3</sup> US Energy Information Administration, updated Jan 10, 2008,  
[http://tonto.eia.doe.gov/state/state\\_energy\\_profiles.cfm?sid=MN#map](http://tonto.eia.doe.gov/state/state_energy_profiles.cfm?sid=MN#map).
- <sup>4</sup> US Department of Energy, *Primary Energy Consumed in Minnesota by Source, 1995*, Website:  
[www.eia.doe.gov](http://www.eia.doe.gov).
- <sup>5</sup> Clean Air Choice, American Lung Association of the Midwest ([www.cleanairchoice.org](http://www.cleanairchoice.org))
- <sup>6</sup> "A Study of Renewable Energy," The League of Women Voters of Edina, April 2005.
- <sup>7</sup> Nathan S. Lewis, "Powering the Planet," MRS Bulletin, vol. 32, October 2007, pp. 810
- <sup>8</sup> City of Edina 1998 Comprehensive Plan, Chapt. on Environmental Quality, Section 2.1.
- <sup>9</sup> League of Women Voters of Edina's *Study of Renewable Energy*, April 2005, p.13.
- <sup>10</sup> Phone conversation, Stu Fraser, Northern States Power, August 1998.
- <sup>11</sup> Energy Information Administration, Official Energy Statistics from the US government.  
[http://www.eia.doe.gov/emeu/states/\\_seds.html](http://www.eia.doe.gov/emeu/states/_seds.html)
- <sup>12</sup> Minnegasco records.
- <sup>13</sup> US Department of Energy, Energy Information Administration, *Household Vehicles Energy Consumption 1994*.
- <sup>14</sup> US Department of Energy, *Comprehensive National Energy Strategy*, p.4.
- <sup>15</sup> Curbing global energy demand growth: the energy productivity opportunity. McKinsey Global Institute, May 2007
- <sup>16</sup> Solid Waste Management Rept (discussion only) MN Pollution Control Agency, p. 12,  
<http://www.pca.state.mn.us/oea/policy/policy2007/071012roadmap.pdf>.
- <sup>17</sup> Minn. Pollution Control Agency's 2005 SCORE p. 3.
- <sup>18</sup> *Curbside Collection of SSO in the City of Wayzata MN Cost/Benefit Analysis Conclusions and Recommendations*, May 2005.
- <sup>19</sup> Computer Takeback Campaign, [http://www.computertakeback.com/the\\_problem/index.cfm](http://www.computertakeback.com/the_problem/index.cfm).
- <sup>20</sup> Computer Takeback Campaign, [http://www.computertakeback.com/the\\_problem/index.cfm](http://www.computertakeback.com/the_problem/index.cfm).



## Chapter 11: Community Services and Facilities

- 11.1 Introduction
- 11.2 Public Safety: Police Protection
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### 11.1 INTRODUCTION

Community Services and Facilities are the resources that help make lives safer, healthier, and more enjoyable, as well as enhance skills and abilities to enable residents to lead productive lives. Based upon the growth forecasts for the City, and upon the changing demographic profile which points to Edina having a much larger proportion of residents over the age of 65 than today, the demand for these resources will not only increase in the future, but will also alter in nature.

The purpose of this chapter is to inventory and examine existing services and facilities, identify future needs, and determine the requirements to maintain and enhance these services and facilities to meet Edina's growing and changing population.

This chapter addresses the following:

- Public Safety: Police Protection
- Public Safety: Fire Protection
- Environmental Health / Public Health
- Educational Facilities: Schools and Libraries
- Information Technology
- Communications and Marketing

### 11.2 PUBLIC SAFETY: POLICE PROTECTION

#### Introduction

The mission of the Edina Police Department is to protect and serve the community with the highest quality of law enforcement services, and to improve



the quality of life through eradication of criminal activity and conditions that have a detrimental impact on public safety.

### Current Conditions

The Edina Police Department consists of 67 full-time employees, part-time staff, and community service officers.

In 2004, the Police Department took a major step forward into the future with the completion of a new building for administrative and operational headquarters. After researching various options over several years, the City decided that the most cost effective and practical solution would be to build an entirely new building that would house the City Hall and Police Department, to be built on the same parcel of land as the existing building. The Police Department headquarters was increased from 5,000 square feet to 25,000 square feet. A state-of-the-art 911 communications center, utilizing an 800-megahertz radio system, was built. Before the move, Edina had been one of the last departments in the state that booked prisoners in a city jail without a secure transport garage. The new building has a full detention center with a two-car secure garage within the detention area.



### Trends and Challenges

The Police Department is called upon to perform many emergency and public service tasks. In 2006, the department responded to over 26,337 calls for service which involved medical emergencies, fires, accidents, thefts, damage to property, suspicious persons and vehicles, alarm responses, as well as public service and educational activities. Approximately 30 percent of these calls require multiple officer responses, which equals over 35,000 officer responses.



In 2006 the City reported 1,064 major Part I crimes such as burglary, robbery, assault, and theft, with an additional 873 Part II or lesser crimes. This was a four percent decrease compared to 2005. The crime statistics for 2006 show an upward trend of robberies, disorderly conduct, and assaults.

Police respond to emergency calls within five minutes and to non-emergency calls within ten minutes under normal conditions. The Edina Police Department operates a 24-hour Communications Center, which handles 911 calls and dispatches the appropriate Police, Fire, and Emergency Medical Services (EMS) units.

The Police Department is also responsible for educating the public in crime prevention techniques, as well as investigating all felony crimes against persons and, where warranted, other crimes as well. The Edina Police Department has full-time officers assigned to the Southwest Hennepin County Narcotics Task Force, the Minnesota Financial Crimes Task Force, and to Southdale Center.

Over 80 percent of the Police Department budget is directly or indirectly spent on labor.

The Police Department operates 1,095 shifts, seven days a week, 24 hours per day, and maintains an average patrol strength of 5.2 officers at any given time.

The Police Department also supervises a Reserve Program comprised of the Senior Police Reserve (7 members), Explorer Post 925 (20 members), and the Edina Police Reserve (19 volunteer members). Explorer Post 925 contributes approximately 700 hours of public services to various community events and programs. This is a result of career orientation and training provided by the Police Department. The Edina Police Reserve serves the community in excess of 4,500 hours annually. It performs work during special events and provide non-emergency services work and patrol.

Tornadoes, floods, blizzards, and other natural disasters can affect the City. In addition, major disasters such as train wrecks, plane crashes, explosions, and accidental releases of hazardous materials pose a potential threat to safety in Edina. The tragedy of September 11, 2001 and the anthrax outbreaks that followed called increased attention to the critical role of local agencies in Homeland Security. More recently the threat of pandemic flu has emerged.



The City has an Emergency Operation Plan which follows an all-hazards approach to preparing for and responding to large-scale emergencies. The purpose of the plan is to ensure the effective, coordinated use of its resources to maximize the protection of life and property, ensure the continuity of government, sustain survivors and repair essential facilities and utilities.

The Civil Defense Program prepares the community for disasters or emergencies, natural or man-made. This is accomplished by compliance with Federal, State and County guidelines for emergency preparedness planning.

The City of Edina also partners with the cities of Bloomington, Eden Prairie, and the Minneapolis-St. Paul Airport Police Department to operate the South Metro Public Safety Training Facility, which provides a variety of police and fire training opportunities in a two-building campus that opened in 2003. This facility is located in Braemar Park at 7525 Braemar Blvd. in Edina.

### **Goals and Policies**

1. Maintain or improve police service levels, in both response and prevention activities.

Projected increases in multiple occupancy housing and population, especially in the 65+ age category, are anticipated to result in an increase in calls for service and may affect the number of officers necessary to provide the highest quality law enforcement services. A senior population is associated with higher numbers of medical calls for service. All Edina patrol officers are certified as Emergency Medical Technicians and are first responders on medical emergencies. Seniors have increasingly become a target for criminal and financial exploitation. The department has assigned an officer to vulnerable adult investigations on a near full-time basis due to the increase in these types of crimes. If the trend continues additional resources may have to be devoted to this area. Policies and strategies for action include:

- Utilize new technology to analyze call patterns to plan for and allocate resources and maintain rapid response times.
- Expand crime prevention services to reach a larger resident base, with emphasis on the expanding senior population.

2. Promote traffic safety through enforcement and education.



Traffic enforcement is a top priority for the Edina Police Department. In addition to the traffic safety benefits of enforcement, it also serves as a crime prevention and interdiction tool. The majority of criminal activity is being committed by people coming into the City via our roadways. With projected population increases, three major highways running through the City and a lack of capacity on our roads, congestion and cut through traffic will continue to be problematic. Requests for increased traffic enforcement have consistently been the top request to the Police Department over the last 20+ years. A continued strong enforcement presence will be needed to keep Edina one of the safest areas in the metropolitan area. Policies and strategies include:

- Provide an unmistakable presence and visibility on the roadways
- Utilize educational tools such as the radar trailer and digital display signs to increase driver awareness.
- Take advantage of statewide partnerships, e.g. Safe & Sober Communities, to increase funding and education efforts.

### 3. Make cost-effective use of technology to meet public safety goals.

One of the more daunting challenges ahead is the use and attendant cost of technology. In 2007 the Edina Police Department made a significant investment in a new computer information system. It is difficult to project its expected life span due to the rate of change in computer technology. Although the previous system served for 16 years, the new system is estimated to have a ten-year life span. The Police Department will have to carefully monitor and plan for upgrades and eventual replacement. The complexity of new systems, along with the push for information sharing among all criminal justice agencies, places greater demands upon staff.

Law enforcement has greatly benefited from improving technology, but has also seen an explosion in the use of technology by the criminal element. Internet pornography and child exploitation, cyber stalking, “phishing” and identity theft are examples of crimes that have dramatically increased in the last five years. These types of crime create a need for officers who have the knowledge and state of the art equipment to properly investigate the digital crimes that are constantly evolving. Policies and strategies include:



- Monitor technological advances relating to law enforcement and evaluate applicability to our department.
  - Maintain workforce digital skills to address the rapidly changing challenges.
  - Participate in joint task forces or use consultants in areas that call for specialized or unique skills.
4. Ensure that the community is prepared to effectively mitigate and respond to disasters.

The importance of local level planning and response has been highlighted with concerns about terrorism, pandemic flu and recent disasters. Depending on the scale of the emergency, assistance from outside agencies may not be available for an extended time. Policies and strategies to prepare for a disaster include:

- Educate and involve the community in preparedness activities.
- Update the Emergency Operations Plan regularly to stay current with evolving threats or hazards.
- Build collaborative efforts with State and County agencies to maximize funding, training and information sharing opportunities.

The Edina Police Department has a strong tradition of planning for the future. The one thing we can plan on for the future is change. Our primary strategy to prepare for the future is to maintain a well trained, equipped, and highly motivated staff with the flexibility to address the challenges ahead.

## 11.3 PUBLIC SAFETY: FIRE PROTECTION

### Introduction

The mission of the Edina Fire Department is to serve the community by protecting lives, property and the environment in a safe, efficient, and professional manner.



The Edina Fire Department is responsible for extinguishing fires, providing paramedic advanced life support medical service, fire prevention, and the maintenance of firefighting equipment and fire department facilities. In addition, the Department enforces laws and ordinances pertaining to fire safety; it also provides public safety information.

### Current Conditions

The Edina Fire Department consists of 31 full-time firefighter/paramedics, one full-time administrative person, and half-time administrative person, and 10-15 (paid on-call) volunteers. The fire department operates out of two fire stations: fire station #1 is located at 6250 Tracy Avenue which is also the department headquarters; fire station #2 is located at 7335 York Avenue.



### Trends and Challenges

The primary purpose of fire suppression and special operations is to provide an immediate response to protect lives, property (\$8.7 billion), and the environment from exposure to natural, industrial and environmental hazards. Response should place a fire or emergency unit on the scene within eight minutes at least 90 percent of the time. Typical actions are search, rescue, and removal of



persons in immediate danger, interior fire attack to stop the fire development, exterior fire streams to prevent fire extension, fire extinguishment and control. Also necessary are actions and measures to minimize property damage by smoke, water, weather and release of hazardous or toxic materials. Equipment consists of three pumpers, one aerial tower, one heavy rescue and various support vehicles. In 2006, 963 fire responses included fires, rescues, hazardous conditions, and public service emergency calls. Our Special Operations Team (SOT) is also a State of Minnesota Structural Collapse Rescue Team and responds State-wide to structural collapse and other unusual rescues.

The purpose of Emergency Medical Services (EMS) is to provide immediate and advanced life support actions to meet the community's emergency medical needs. Response should place an ambulance on the scene within six minutes at least 90 percent of the time. Equipment consists of three Advanced Life Support (ALS) paramedic ambulances and one ALS equipped pumper. Services provide both immediate emergency care and transportation to metro-area hospitals. Paramedics are cross-trained as firefighters, and all firefighters are cross-trained to emergency medical technician level. Emergency medical services also include public information activities to prevent and best prepare citizens for emergency medical situations. In 2006, medical calls totaled 3,470. The fire department ambulance service generated revenues in excess of \$1.4 million in 2006. Edina's City-wide average response time to all emergencies is four minutes and 20 seconds.

### **Goals and Policies**

The goals of fire prevention activities are threefold:

1. Prevent fire ignition whenever possible.
2. When fires do occur, minimize fire impact on lives and property.
3. Perform pro-active information management, to allow the City to forecast needs in the areas of building fire protection systems, operational support and program development.

Policies and strategies for action include:

- fire detection, automatic suppression, structural compartmentalization, building access and site controls;



- prevention information to emphasize citizen survival by teaching proven fire safety techniques;
- public information programs (In 2006, the fire department visited over 100 classrooms and events to promote fire prevention and personal safety);
- smoke detector installation;
- building inspection activities (Fire inspectors typically make the specialized permit and approval inspections).

Meeting these goals and implementing these strategies will mean that the Emergency Medical Services (EMS) operations will expand. The fire department has seen a continuous upward trend in emergency medical call requests. From 1997 to 2007, there has been a 26 percent increase in the emergency call volume. Operations are expected to expand primarily out of fire station #2 which is located in the SE quadrant of the City. The SE quadrant has seen the largest increase in EMS call volume in the last 20 years; in 2006, the SE quadrant represented 59 percent of all EMS call volume.

The vision of the fire suppression operations is that the fire suppression activities should slowly be reduced due to fire prevention measures. It is projected that special rescue and operation activities will increase due to a state-wide increase in call volume and an increase in awareness that the special operations team exists.

Fire prevention and education undertakings will increase due to the cost effectiveness and the dramatic reduction in loss of life, injuries, and property which is directly related to fire prevention measures.

To accommodate expanded fire department operation, fire station #1 has been rebuilt and enlarged to accommodate the increase in equipment and staffing needed for current and future operations. Fire station #1 is centrally located in the City. In addition, fire station #2 may need future remodeling and renovation to meet the EMS operational demands of the SE quadrant (26 percent increase in the last ten years). If a third fire station were built in the future, based on current projections, it is recommended that it be built in the area of 50<sup>th</sup> Street and TH 100. That area has good access to primary routes and would improve response times in that area of the City.

Future staffing of the fire department will continue to develop and expand as EMS operations continue to grow to meet the increase in demand for services.



## 11.4 ENVIRONMENTAL HEALTH / PUBLIC HEALTH

### Introduction

The mission of the Edina Health Department is to protect the health and promote the general well being and welfare of the City's residents, and prevent disease and illness in the community. On July 5, 2006, Edina adopted Resolution 2006-70 affirming activity-friendly communities and applied for the Governor's "Fit City" Program designation. On July 11, 2006, the application was approved.

### Current Conditions

Environmental health services consist of 2.75 full-time employees, and part-time help. The Health Department contracts with the City of Bloomington for community and public health services (public health nursing, public health emergency preparedness).

The Health Department holds a delegation agreement with the Minnesota Department of Health to license and inspect food, beverage and lodging establishments, institutions such as schools and day cares, and public swimming pools. The Health Department also participates in special community events, such as the Edina Art Fair, and community walks and runs, to provide health education. Responsibilities also include the investigation of food complaints, reports of food and waterborne illnesses, and planned response to disasters such as fires and floods, and other environmental health emergencies. The Department completes food establishment plan reviews and construction inspections to assure compliance with codes. In addition, the Health Department responds to general complaints, public health nuisance complaints and housing code violations, and acts as a resource for private wells and a variety of health issues such as mold, radon, noise, asbestos and second-hand smoke (Minnesota Clean Indoor Air Act). The Department takes necessary enforcement actions to resolve code violations and health problems within the community.

In 2006, the Department conducted over 300 food establishment inspections, 45 special event food inspections, six lodging inspections, nearly 350 swimming pool inspections and 31 carbon monoxide inspections. Twenty reports of food-borne illness were investigated in addition to 17 general food complaints. Plan reviews for 21 food establishments and 12 private swimming pools were completed. In addition, hundreds of recycling inquiries and approximately 230



complaints including general nuisances, public health nuisances and housing issues were addressed.

The Department contracts for community health services such as health education and promotion, communicable disease programs, public health nursing services, and health assessments. The public health nursing contract provides maternal and child health services, women, infant, and child nutritional services, child and youth clinic services, disease prevention and control services, and health promotion services. A contract is also awarded for public health emergency preparedness and Cities Readiness Initiative in response to bioterrorism, infectious diseases, and threats to public health. Special planning and staff training is underway for community awareness and response to pandemic influenza.

Health Department staff provides support for the Edina Community Health Committee and the Energy and Environment Commission. It administers the refuse collection and recycling contracts for the City, and serves as a resource for occupational health and safety for City employees.

### **Private Health Services and Facilities**

#### Fairview Southdale Hospital

Located at 6401 France Avenue South (just south of the France Avenue – TH 62 interchange), Fairview Southdale Hospital opened in 1965. Fairview Southdale Hospital serves the Edina community, as well as the communities of Bloomington, Richfield, Southwest Minneapolis, Minnetonka, Eden Prairie and more.

Fairview Southdale Hospital is a full-service, 390-bed acute care center, specializing in maternal and newborn care, cardiac care, oncology, mental health treatment, eye care, vascular, spine, neurology, neurosurgery, urology and orthopedic surgery and joint replacement.

Fairview Southdale also provides complete outpatient care with a comprehensive 24-hour emergency department, urgent care for evenings and weekends, diagnostic radiology and imaging, and a same day surgery center. Fairview Southdale also offers a wide selection of health education and wellness programs.



The hospital's emergency room serves more than 40,000 patients per year. Annually, more than 3,200 children are born in Fairview's maternity ward.

Fairview Southdale Hospital has a staff of 1,000 physicians, 2,200 health professionals, and 500 volunteers.

### **Trends and Challenges**

There is increasing evidence that to effectively combat current health problems The City must not only focus on changing individual behavior. Broader health determinants that affect groups and the larger population must also be addressed. The City needs community health programs that focus on improving living and working conditions across the lifespan, so that healthy and active lifestyles are more attractive and more easily achieved.

### **Goals and Policies**

#### 1. Ensure an Effective Local Government Public Health System.

Government is responsible for certain core functions of public health. These core functions are assessment, policy development, and assurance. The following essential services define local government contributions:

- Monitor health status to identify and solve community health problems
- Diagnose and investigate health problems and health hazards in the community
- Inform, educate and empower people about health issues
- Mobilize community partnerships and action to identify and solve health problems
- Develop policies and plans that support individual and community health efforts
- Enforce laws and regulations that protect health and ensure safety
- Link people to needed personal health services and ensure the provision of health care when otherwise unavailable
- Ensure a competent public health and personal health care workforce
- Evaluate effectiveness, accessibility and quality of personal and population-based health services



- Research for new insights into health issues and for innovative solutions to health problems.

2. Reduce Behavioral Risks that are Primary Contributors to Morbidity/Mortality.

Behavioral risks that contribute to morbidity and mortality include tobacco use, alcohol and other drug use, physical activity/inactivity, nutrition, and weight management. A strategy for reducing these behavioral risk factors is:

- Health education and promotion of health lifestyles and healthy living.

3. Promote Health for All Children, Adolescents, and their Families

Behavioral and social factors influence health. Strategies for health promotion activities for children and adolescents focus on:

- Healthy growth and development;
- The importance of parents and care givers in the healthy development of children and adolescents;
- Early identification of health risks;
- Early intervention to address health risks before serious health problems occur.
- Work with the Park and Recreation Department to implement the requirements of the "Fit City" program.

4. Promote Well-Being of the Elderly, Those with Disability, Disease or Chronic Illness.

Strategies to accomplish successful promotion of healthful aging and to support the well-being of the elderly in Minnesota include:

- Fostering healthful behaviors such as good nutrition, physical exercise, medications management, obtaining flu shots, efforts to reduce isolation and promote mental health;
- Designing a continuum of long-term care options which are conducive to preserving independence and dignity;
- Preventing falls which are major contributors to injury and death among the elderly;



- Supporting active participation in one's community through meaningful activity; and
- Providing a full continuum of care to an aging population by increasing community capacity to support people as they age and promoting meaningful integration of the aging population into all aspects of community life.

#### 5. Reduce Exposure to Environmental Health Hazards.

Environmental health hazards include biological, physical, chemical, and radiological agents and substances, both human-made and naturally occurring. Exposures to these hazards may occur in the workplace, home or natural environment or in a public facility. Environmental health services protect Minnesotans from environmental hazards by ensuring that they have clean drinking water, safe food, sanitary housing and lodging, and protection from hazardous materials and disastrous situations in their environment. These services are delivered through a variety of regulatory, consultative, informational and educational programs. Key strategies to ensure service provision include:

- Enforcing federal, state, and local standards by inspections and investigations;
- Evaluating potential health-threatening environmental conditions;
- Minimizing and controlling risks from exposure to environmental health hazards;
- Providing and promoting environmental health education.

#### 6. Develop a Public Health Emergency Preparedness Plan

All levels of government, the private sector, and non-governmental organizations must work together to prepare for, prevent, respond to, and recover from major events including terrorist attacks, natural disasters, pandemic influenza, and other emergencies that exceed the capabilities of any single entity. Strategies for public health emergency preparedness include:

- Developing, maintaining, and exercising a public health emergency preparedness plan, including a continuity of operations plan;
- Stockpiling personal protective equipment;
- Training employees on National Incident Management System (NIMS);



- Promoting family and business emergency preparedness Plan for distribution of Strategic National Stockpile (SNS).

## 11.5 Educational Facilities: Schools

Edina is served primarily by Independent School District 273; portions of Edina are included in five other public school districts. There are several private schools located in Edina.

The main purpose of this section of the Community Services and Facilities chapter is to provide an overview of ISD 273, identify and comment on issues and challenges facing the District over the next 10 years, and outline goals, objectives, and strategies adopted by ISD 273 to provide it with the policy framework to accomplish its mission. This chapter also identifies the other public school districts whose jurisdiction covers small portions of Edina, mainly on its borders with other municipalities, and provides some basic statistics regarding the educational offerings of the private schools in the City.

### Edina Public Schools (ISD 273)

#### Introduction

The mission of the Edina Public Schools, working in partnership with the family and the community, is to educate all individuals to be responsible, lifelong learners who possess the skills, knowledge, creativity, sense of self-worth, and ethical values necessary to thrive in a rapidly changing, culturally diverse, global society.

#### Current Conditions

In District 273 there are approximately 7,700 students, K-12, served by 1153 teachers and support staff in six elementary schools (Grades K-5), two middle schools (Grades 6-9) and one senior high school (Grades 10-12). Also, there is Special Education-Non-Public School (Grades K-8) which has five students. Community Education Services provides learning opportunities for all ages.

#### School Choices

Parents have three elementary (K-5) program choices:

- Neighborhood Program which serves 70 percent of students.
- Continuous Progress in which teachers work with students more than one year in multiage groups.



- French Immersion which students enter in kindergarten.

The elementary schools are:

- Concord Elementary School, 5900 Concord Avenue S. (605 students)
- Cornelia Elementary School, 7000 Cornelia Drive (517 students)
- Countryside Elementary School, 5701 Benton Avenue S. (524 students)
- Creek Valley Elementary School, 6401 Gleason Road (550 students)
- Normandale Elementary School, 5701 Normandale Road (605 students)
- Highlands Elementary School, 5505 Doncaster Way, (500 students)

There are two middle schools (6-9) serving students based on geographical boundaries:

- South View Middle School, 4725 South View Lane (1124 students)
- Valley View Middle School, 6750 Valley View Road (1175 students)

There is one high school:

- Edina Senior High School, 6754 Valley View Road (1658 students)



### **Enrollment**

Edina Public Schools has had a steady 1% to 2% increase in enrollment over the past five years. The 2007-2008 K-12 enrollment in September 2007 was 7,660 students. This pattern of enrollment growth is projected to continue based on the demographic study completed by Hazel Reinhardt in 2002. The district will be



updating the demographic study in late 2007 and early 2008. The enrollment projections are as follows:

School Year	K-12 Growth
2007-2008 to 2008-2009	158
2008-2009 to 2009-2010	118
2009-2010 to 2010-2011	198
2011-2012 to 2011-2012	112

The school district's enrollment has benefited from open enrollment students entering the district. The district open enrollment at each level is as follows:

	2005-2006	2006-2007	2007-2008
Elementary	449	462	521
Middle School	332	332	389
High School	278	296	283
Total	1059	1090	1193

The students enter the district from over 25 school districts, with the majority coming from Minneapolis, Hopkins and Richfield. Open enrollment access is based on available classroom space and school capacity.

The school district has resident students attending other schools. Annually, approximately 1100 students attend nonpublic schools, approximately 150 students attend other public schools and approximately 15 attend charter schools.

**Class Size**

Edina Public Schools seeks to maintain low student-to-teacher class size ratios while providing extensive course and program options for students at all grade levels. The district has historically maintained average class sizes of:

Kindergarten: 18-21      Grades 4-5: 24-27      Grades 10-12: 29-32  
 Grades 1-3: 21-24      Grades 6-9: 25-28

**Graduates**

Ninety-seven percent of seniors go to college. Eighty-six percent finish in five years. A recent survey conducted ten years after graduation showed that 45 percent of Edina graduates completed graduate school degrees or were pursuing graduate degrees.



### **Arts**

A full range of art learning opportunities is offered in both courses and co-curricular activities. Theatre productions, and fine arts events and courses are offered each year. There is a rich tradition of excellence in the arts; opportunities include the high school literary magazine (*Images*), the student newspaper (*Zephyrus*), the student yearbook (*Windigo*), high school concert choir, the concert band, and a music education program that brought Edina High School recognition as a GRAMMY Foundation Signature School in 2004-05.

### **Special Programs**

Special Education. Ten and half percent of students are served each year by Special Education in the areas of learning disabilities, mental handicaps, physical impairment, hearing and vision impairments, emotional/behavioral disorders, communication disorders, and autism spectrum disorders.

English as a Second Language. The English as a Second Language Program is growing and serves students speaking 39 languages.

Gifted Education. Gifted Education provides a comprehensive K-12 program for gifted students, offering support in classroom activities and the additional support needed to keep high achievers and extraordinary students challenged.

### **Values and Service**

2006 marked the 17<sup>th</sup> anniversary of the district's Ethical Values Program which focuses on six values: Integrity, Courage, Commitment, Compassion, Appreciation of Diversity, and Responsibility. The values were selected by the community and are incorporated into the learning program. All schools do service projects helping people locally and globally. High school students are expected to complete at least 10 hours of community service by graduation.

### **Athletics and Extracurricular**

Athletes. Edina athletes have won a total of 122 state championships, making Edina Schools number one among the 500 members of the Minnesota State High School League. There are 12 sports for boys and 17 for girls offered at the high school level, with 10 sports offered in the middle schools.

Extracurricular. Edina Public Schools offers 41 non-athletic, extracurricular activities in fine arts, academics and social service. Ninety percent of high school students participate in one or more extracurricular activities, winning local, state and national recognition for their work and commitment



### ***Community Education***

The goal of Edina Community Education Services is to support lifelong learning to meet the needs of the community. It has seven program areas:

- Adult Enrichment provides a wide variety of quality day, evening, and weekend classes.
- Learning Exchange offers a wide variety of customized classes for adults with disabilities.
- Youth Development/Youth Services actively engages youth and adult members of the community to work together in a variety of projects.
- Edina KIDS Club offers childcare and enrichment programs before and after school, and during the summer for K-8 students.
- “K-Plus” (All Day Kindergarten) provides a full-day experience aligned with current classroom curriculum for kindergarten.
- Edina Family Center offers Early Childhood Family Education (ECFE), parenting classes, resources, and preschool classes.
- Curricular Resources and Programs provides curriculum enrichment programs upon teacher request.
- Edina Resource Center connects people to community services and resources.
- Business/Education Partnership promotes the exchange of resources between business and education for mutual benefit.

### ***Facilities***

Edina Public Schools completed a major remodeling and renovation of the district’s facilities, supported by a \$85.8 million bond referendum. The improvements included:

- Twelve new science and technology lab classrooms
- New theaters at the high school and middle schools
- Remodeled elementary auditorium space at Normandale Elementary School
- Remodeled world language classrooms and labs
- Weight and fitness rooms at the high school
- Two extended-use athletic fields
- Upgrades to comply with current building codes
- Improvements for handicap accessibility in restrooms and throughout the buildings
- Paving repairs, additional parking, and better separation of vehicles and pedestrians from buses



A facility study will be completed in late 2007 and early 2008 to address the future needs of the district. The study will address future classroom needs as well as program growth areas in early childhood education, kindergarten and technology.

**Finances**

Edina Public Schools has received the Minnesota Department of Education’s School Finance Award for the past five years. The district’s bond rating is the highest in the state. The district’s 2007-2008 budget breakdown is as follows:

Area	Total
General	\$70,220,000
Capital	\$ 4,185,000
Community Services	\$ 6,540,000
Food Service	\$ 2,860,000
Debt Service	\$ 9,570,000
TOTAL	\$93,375,000

The district’s general fund revenue sources are 2.6% federal, 74.6% state and 22.8% local. The general fund expenditure breakdown is 85% salaries and benefits, 5.1% utilities/maintenance, 6.4% purchased services and 3.5% supplies/other. The school district seeks to maintain an ongoing fund balance between 6-12%.

**Trends and Challenges**

Demographic changes in Edina are projected to have dramatic effects on future school enrollment. While the total number of Edina residents will not change much in the next 20 years, the change in the age of Edina residents may be substantial. The 65+ age group is projected to increase by 102.5 percent, while the under-20 age group may only increase by 1.3 percent. The housing market for single-family homes and for family-centered multi-family developments may continue to work against housing affordability for families with children. Unless measures are taken to create more affordable units, school enrollment may decrease as young families are priced out of the housing market. This issue is discussed in more depth in the Housing chapter.



## Goals and Policies

These strategic directions are the identified focus areas shaping the yearly improvement goals and guiding the district's educational programs, services and applied resources.

1. We will maximize the achievement of all students by developing and implementing coordinated plans for personalized learning for each student.

The district is committed to improving student achievement by providing a personalized approach to learning for all students. The district will enhance the academic, social, emotional and guidance resources for all students through program initiatives, use of educational data and staff training.

2. We will work in partnership with the community to create a safe, inspiring and welcoming learning environment.

The district places high value on ensuring that schools are safe and positive places to learn and work. The district will work with the community to implement initiatives expanding school security, easing transitions between the schools for families, and improving the learning culture within the school community.

3. We will work in partnership with the community to develop all students as responsible citizens and leaders.

The district recognizes the importance of developing student skills through service learning and leadership. The district will work with the community to increase student service learning options, student leadership training and student activities to enhance their ability to be successful citizens for today and tomorrow.

4. We will work in partnership with the community to provide learning opportunities beyond the classroom through innovation and creativity.

The district finds value in creating learning opportunities outside the regular classroom and school day. The district will expand educational program opportunities through technology, mentorship, and other innovative approaches to learning.



5. We will expand leadership expectations for all members of the school district.

The district sees the power of teamwork – community, families, staff and students – and the importance of everyone working for a common educational purpose. The district will implement policies and provide training that encourages and defines leadership expectations for everyone.

6. We will expand and maximize the district's resources of time, talent, and finances.

The district realizes that the resources of time, talent, and finances must be aligned to the mission and strategic directions of the district. The district will implement practices and procedures that seek to maximize each of these resources.

### **Other Public School Districts Serving Edina**

Bloomington School District ISD 271  
Hopkins School District ISD 270  
Eden Prairie School District ISD 272  
Richfield School District ISD 280  
St. Louis Park School District ISD 283

### **Private Schools**

Edina is served by seven private schools:

Calvin Christian School, 4015 Inglewood Avenue S. (Grades K-8, 555 students)  
Edina Montessori School, 6133 Kellogg Avenue (Grades PK-K, 30 students)  
Golden Years Montessori, 4100 West 42<sup>nd</sup> Street (Grades PK-3, 80 students)  
Our Lady of Grace School, 5051 Eden Avenue (Grades K-8, 666 students)  
St. Peter Lutheran School, 5421 France Avenue (Grades PK-8, 219 students)  
Sobriety High School, 5250 West 73<sup>rd</sup> Street, Ste A (Grades 9-12, 38 students)  
Step By Step Montessori, 6519 Barrie Road (Grades PK-K, 143 students)

## **11.6 Educational Facilities: Libraries**

Edina is served by two libraries in the Hennepin County Library System:



**Edina Library**, 5280 Grandview Square, which has assistive technology, 28 computer workstations, 6 word processing workstations, a meeting room with a capacity of 75, and language collections.

**Southdale Library**, 7001 York Avenue South, which has assistive technology, a computer lab and 127 workstations, 38 word processing workstations, a meeting room with a capacity of 200, government documents, and language collections.



## 11.7 Information Technology

### Introduction

The primary objective of the City of Edina's Information Technology Department is to provide the highest level of service in implementing, supporting, and maintaining the City's information technology infrastructure. This includes computer hardware, software, servers, networking equipment, phone systems, and connectivity to external agencies and organizations.

The City of Edina Information Technology Department consists of three full-time employees.

### Trends and Challenges

With information technology becoming a prevalent and critical resource in all aspects of the City's operations and services, it is imperative that the information technology systems which our staff and citizens rely on experience the highest level of "system uptime", as well as the ability to embrace, adapt to, and improve with the continuous advancement of technology.



The City's I.T. department supports and maintains the technology used by city staff, public safety officials, and by our citizens and visitors in numerous enterprise facilities, which include municipal golf courses, liquor stores, and parks.

As the Information Technology industry advances, so must Edina. One of the primary focuses of the city's I.T. department is to stay informed of and proficient in the latest advancements in technology, and to assess and implement ways for the City and its citizens to benefit from such advancements. The City's information technology systems also need to stay consistent with these advancements in order to maintain efficient collaboration and communication with other external organizations.

Many cities are exploring various approaches to bringing high-speed internet service City-wide, including fiber-optic cable and wireless fidelity (wi-fi).

As data security and privacy is becoming an increasing global concern, the city's I.T. staff must remain ever vigilant in protecting such data from exploitation, while ensuring that individuals who require information have readily-available access to it.

### **Goals and Policies**

1. Continue the expansion of Edina's fiber-optic network infrastructure, in order to increase data and voice communication speed and reliability throughout the City and its various facilities, as well as with other government organizations.
2. Monitor other cities' efforts to install City-wide internet infrastructure, and explore the creation of a citywide fiber-optic network infrastructure for Edina, or a wi-fi system, that is widely-available, fast, reliable, flexible, durable, and cost-effective. Explore possible public-private partnerships.
3. Keep Edina's information technology systems on par with technology industry standards to ensure the greatest level of compatibility and efficiency in the services provided.



## 11.8 Communications and Marketing

### Introduction

While communications has always been an integral part of local government, the City of Edina's Communications & Marketing Department was formally established in 2006. The department consists of a full-time Communications & Marketing Director, full-time Communications Coordinator, part-time Communications Intern and eight part-time Cable Production Assistants. Anticipated in 2008 is the addition of a full-time Cable Coordinator.

It's the job of the Communications & Marketing Department to help other City departments and facilities identify what information and messages need to be conveyed to Edina's diverse audiences and make sure that this is done in the most effective manner possible. It is also the department's responsibility to find opportunities to promote what makes Edina the great community that it is and the successes of City government.

### Current Conditions

In addition to media and public relations, the Communications & Marketing Department is responsible for publication of the City's internal and external newsletters and magazines, maintaining the website, administering Edina Community Channel 16 (EDINA 16), and marketing the City and its enterprise facilities through customer analysis and advertising.

Newsletters and magazines currently published include *About Town*, *City Slick*, *Council Connection* and *Park & Recreation Insider*.

The City's website, [www.CityofEdina.com](http://www.CityofEdina.com), supports 11 distinct sub-sites, including those for enterprise facilities and the Police and Fire departments. In addition, maintenance is provided for web pages created for the Edina Historical Society and July 4 Parade.

Programming on EDINA 16 currently includes a video bulletin board, meetings of the City Council, Park Board, Planning Commission and Transportation Commission; a monthly half-hour talk show, "In Edina," public service announcements; and coverage of special events and community forums. In addition, all programming is streamed over the internet.



## Trends & Challenges

Over the past several years, the Communications & Marketing Department has witnessed a significant shift in the way residents and businesses prefer to receive their communication from the government. More and more people prefer to receive information electronically, via the website or e-mail in particular. A decade ago, the only way to learn about what happened at a City Council meeting was to attend the meeting, read about part of it in the following week's issue of the *Sun-Current* or wait until meeting minutes were approved. Now, in addition, the City Council has its own newsletter, meetings are broadcast on cable and streamed over the internet, and people who have signed up for a free "City Extra" e-mail subscription receive regular updates. As information technology advances, so must the way the City delivers information to its residents and businesses. Edina must continually examine communication tools in order to reach the broadest audience.

EDINA 16 was established in 2004, in conjunction with the construction of City Hall. Broadcasting meetings of City Council and some advisory boards and commissions has made the government process even more transparent and there is high viewership on the government-access channel. High viewership has led to increased demands for programming both of meetings and community events.

Print media is becoming less of a norm. *AboutBusiness*, a publication for Edina's business community, was discontinued in the fall of 2007. Fewer copies of the City's employee newsletter, *City Slick*, will be printed in 2008. Instead, the publication will be distributed via email with a limited number of printed copies made available for those who prefer to read it on paper.

## Goals & Policies

1. Match communications initiatives to needs and desires of residents and businesses.

The Communications & Marketing Department must work to match its communications initiatives with the needs and desires of residents and businesses for both the type of information delivered and the way in which it is delivered.



2. Redesign City's website every five years.

The City's website and its sub-sites will continue to be redesigned approximately every five years. (The last redesigns were completed in 2001 and 2006.) More interactive offerings and multi-media presentations will be incorporated into the sites.

3. Develop a plan for programming on EDINA 16.

The department will work to develop a plan for increasing programming on EDINA 16. Such a plan could include the televising of community concerts at Centennial Lakes and Edinborough parks. If the school district or local athletic associations are interested, the Communications & Marketing Department could outsource its services for televising sporting events and other extra-curricular activities.

4. Expand neighborhood block captain program.

The department's neighborhood block captain program will be expanded to allow for more and improved two-way communication between the City and residents.

5. Enhance Edina's community vision.

As always, the Communications & Marketing Department will work to enhance Edina's community vision as "the premier place for living, learning, raising families and doing business."



## Chapter 12: Implementation

### 12.1 Introduction

### 12.2 Portfolio of Implementation Tools

### 12.3 Key Implementation Ordinances and Regulations

### 12.2 Summary of Implementation Actions

## 12.1 INTRODUCTION

Plans are typically judged not only by their quality but by the extent to which they are implemented. The City of Edina undertook this plan update with the intention that it would provide a community vision of the future and be used by staff and elected or appointed officials on a regular basis to guide decisions. Some plans are approved but are rarely referenced, or gradually lose relevance because they are not updated. To keep the Comprehensive Plan relevant, its role in City decision-making needs to be affirmed.

Another planning axiom is that a community plan is most worthwhile if it influences how a city writes its regulations or spends its money. Leadership and encouragement, while critical, are not sufficient alone to effect changes. Therefore, the plan should provide guidance in both of those topics.

## 12.2 Portfolio of Implementation Tools

The City has a number of tools at its disposal to shape development patterns, protect natural and human infrastructure, and protect the quality of life for residents. Implementation strategies can be separated into several distinct 'tool' categories. Each tool has distinct characteristics that make it suitable for specific goals and circumstances. The tools available to the City comprise the City's implementation portfolio. These tools include:

***Education and Promotion*** – Formal programs or informal efforts undertaken by the City or in conjunction with the City to encourage voluntary actions by individuals or businesses that help fulfill the City's desired future as described in the Comprehensive Plan.



***Incentives and Incentive Regulation*** – Inducements offered by the City alone or in conjunction with other partners to elicit actions by individuals or businesses that move the City toward its desired future. The inducements or incentives can include:

- Direct financial assistance such as cost sharing
- Indirect financial assistance such as assistance in applying for grants, or with infrastructure improvements
- Regulatory incentives such as flexible regulations and guidelines
- Professional assistance incentives such as technical assistance in façade or infrastructure design, integration of historic elements, or meeting State or Federal regulatory standards

***City Ordinances and Other Regulation*** – City ordinances, including zoning, subdivision, environmental, and other standards, as well as the administrative approvals process. Regulation includes:

- Threshold standards such as minimum or maximum lot sizes and height requirements
- Performance standards that regulate development impacts such as traffic or sewer capacity
- Administrative standards such as information or analyses required for a development
- Application and the order and timing of approvals by regulating authorities

***Managing Public Processes and Resources*** – Public investments and management decisions for infrastructure, public services, public lands, and public processes. Such investment or decisions can include:

- Programming of public improvements through the Capital Improvements Plan
- Water, wastewater, and transportation investments made by the City or ultimately managed by the City
- Land acquisition, sale, or exchange for the purpose of preservation or development
- Management decisions and expenditures for public resources such as streets, parks, and deployment of public services
- Conducting studies and making decisions on enhancing or modifying the Comprehensive Plan or supporting documents

Rarely will a single tool or category of tools be sufficient to achieve Comprehensive Plan goals. Most policies, and most of the preferred mix of land uses shown on the future land use map, require the use of several tools from different categories in order to be realized and sustained. The City must take a



'portfolio' approach in its implementation choices, recognizing that each category of tools has unique strengths and weaknesses.

## 12.3 Key Implementation Ordinances and Regulations

This section focuses on the key implementation ordinances and regulations that are the official controls that the City will use to implement the City's Comprehensive Plan Update.

### Zoning Ordinance

Zoning is the primary means of land use control. Minnesota State Statutes (MS § 462.357) provides the authority for municipalities to enact zoning ordinances.

Section 850 of the Edina City Code (see Chapter 8 – Land Use, Plats, and Zoning) contains the Zoning Ordinance. The Findings, Purpose and Objectives of that Section (850.01) state:

*The Council finds that Edina has emerged from an era exemplified by unparalleled growth and development and has entered a period of stability, reuse, and redevelopment; that some of the standards and regulations which guided initial development of the City are not appropriate for guiding future development and redevelopment ; and that standards and regulations for guiding future development and redevelopment should be based upon the stated goals, objectives, and policies of the Comprehensive Plan of this City, as from time to time amended, which constitutes the City's statement of philosophy concerning the use of land within its jurisdiction. Through enactment of this Section, the Council intends to implement this statement of philosophy so as to provide for the orderly and planned development and redevelopment of lands and waters in Edina, to maintain an attractive living and working environment in Edina, to preserve and enhance the high quality residential character of Edina and to promote the public health, safety and general welfare.*

Among the objectives cited are:

*Maintain, protect and enhance single family detached dwelling neighborhoods as the dominant land use.*



*Encourage orderly development of multi-family housing that offers a wide range of housing choice, density and location while maintaining the overall high quality of residential development.*

*Encourage orderly development, use and maintenance of office, commercial and industrial uses which are compatible with the residential character of the City.*

*This Section divides the City into districts and establishes minimum requirements for these districts as to the location, height, parking, landscaping, bulk, mass, building coverage, density and setbacks of buildings and structures and the use of buildings, structures, and properties for residences, retailing, offices, industry, recreation, institutions and other uses. This Section also provides procedures for the transfer of property to another district, procedures for the issuance of conditional use permits, establishes the Zoning Board of Appeals, provides for the administration of this Section, and establishes penalties and remedies for violations. This Section also establishes overlay districts designed to preserve buildings, lands, areas and districts of historic or architectural significance and to protect surface and ground water supplies and minimize the possibility of periodic flooding resulting in the loss of life and property, health and safety hazards and related adverse effects.*

Minnesota State Law also requires consistency between a community's zoning ordinance and its Comprehensive Plan. The City's Zoning Ordinance will be reviewed to ensure consistency with the Comprehensive Plan Update 2008.

### **Historic Preservation Ordinance**

Minnesota State Statutes (MS § 471.193) sets forth the enabling legislation that provides for municipalities to engage in a comprehensive program of historic preservation, and to promote the use and conservation of historic properties for the education, inspiration, pleasure, and enrichment of the citizens of Minnesota. This Statute also provides for a municipality to establish a Heritage Preservation Commission and to delegate or assign powers to enable it to carry out a program of historic preservation activities.

Section 801 of the Edina City Code (see Chapter 8 – Land Use, Plats, and Zoning) contains the Historic Preservation Ordinance which establishes the Heritage Preservation Board and includes its duties and responsibilities.

### **Subdivision Ordinance**



Minnesota State Statutes (MS § 462.358) sets forth the enabling legislation that provides municipalities the authority to enact subdivision regulations and dedication requirements associated with subdividing land.

Section 810 of the Edina City Code (see Chapter 8 – Land Use, Plats, and Zoning) contains the “Subdivision Ordinance: Plats and Subdivisions.” This Section establishes physical standards, design requirements and procedures for plats and subdivisions of land to allow flexibility in the design of plats and subdivisions, to develop a consistency with and to help implement the zoning, building, and other applicable sections and provisions of the City Code, and to support and further the City’s Comprehensive Plan. This nexus between the Subdivision Ordinance and Zoning Ordinance is intended to provide for the establishment of uniform procedures and regulations for plats and subdivisions to preserve and enhance the value and viable economic use of property, to protect the character and symmetry of neighborhoods in the City, and to protect and further, and not frustrate, legitimate investment-backed expectations of property owners.

The City will review, and update, the Subdivision Ordinance following Zoning Ordinance updates that will be needed to implement the Comprehensive Plan.

### **Housing Plan**

The City will implement its Housing Plan through the goals, policies and action steps identified in Chapter 5: Housing. The City will continue to implement the adopted Livable Communities Act (LCA) Goals Agreement.

### **Transportation Plan**

The implementation of the Transportation Plan will occur through many different avenues ranging from policy decisions to specific roadway improvements. Chapter 7: Transportation describes implementation strategies

### **Utilities and Infrastructure**

Minnesota State Statutes (MS § 429) confers the authority to cities to charge special assessments and user charges, as well as establish utilities, to pay for utilities and infrastructure.

## **12.2 SUMMARY OF IMPLEMENTATION ACTIONS**



### Summary of Implementation Actions

The following table lists the major actions needed to implement the policy recommendations in each element of the plan. It briefly describes each action, designates its relative time frame (Short-term: 1-5 years, Medium-term: 6-10 years, and Long-term: 11+ years), and indicates which departments, agencies or interest groups should be involved, both in primary (bold) and secondary or advisory roles.

**Table 12.1: Summary of Major Implementation Actions**

Phasing	LAND USE AND COMMUNITY DESIGN Actions	Lead and Coordinating Agencies
Short-term	<p><b>Zoning Ordinance Revisions</b></p> <p>The City will initiate revisions to its zoning ordinance. Amendments could include revisions to permitted densities building height standards, building setbacks/build-to lines, required parking standards, additional standards and design guidelines for mixed use development, and urban forest protection and improvement. The City Council and Planning Commission are monitoring the massing/scale issues re single-family zoned areas and may be making further changes to the Zoning Ordinance.</p> <p>Consideration will be given to revision of the Conditional Use provisions and to creating the option for Planned Unit Developments (PUD), to incorporate mechanisms to use design guidelines in the development review and approval process.</p> <p><b>Subdivision Ordinance Revisions</b></p> <p>The City may consider changes to its</p>	<p><b>Planning Dept.</b>  <b>Planning Comm.</b>  <b>City Council</b>                  Public Works Dept.                  Park and Rec. Dept.                  Other City                  Departments</p>



	street standards in mixed-use areas to encourage interconnected streets, sidewalks and walkways that are conducive to pedestrian movement.	
<b>Short-term</b>	<p><b>The Development Review Process</b></p> <p>The City will evaluate and update its development review process to encourage submittal of conceptual plans for preliminary review and comment by the Planning Department, Planning Commission, and community, including residents and neighborhood groups. Formal review and approval of final development plans by the Planning Commission, Zoning Board of Appeals and/or City Council will be based upon submission of fully engineered, not conceptual, plans.</p>	
<b>Medium - term (ongoing)</b>	<p><b>Small Area Plans</b></p> <p>The City Council may authorize the initiation of Small Area Plans within the areas identified as “Potential Areas of Change” (and may also identify other areas in need of further study).</p> <p><b>Solar Access Protection</b></p> <p>When the Energy and Environment Commission completes the development of an Energy and Environment Plan, it may recommend proposed standards to protect solar access that may require amendments to the Zoning Ordinance.</p>	<p><b>Planning Dept.</b>  <b>Planning Comm.</b>  <b>City Council</b>                  Other City Departments</p> <p><b>Planning Dept.</b>  <b>Planning Comm.</b>  <b>City Council</b></p>
<b>Phasing</b>	<b>HOUSING Actions</b>	<b>Lead and Coordinating Agencies</b>
<b>Short-term</b>	<b>Adopt the Comprehensive Plan:</b> The	<b>Planning Comm.</b>



	<p>City will adopt the Housing Chapter of the Comprehensive Plan and use the adopted Plan to guide zoning ordinance revisions and policy decisions related to the provision of housing choices.</p> <p><b>Assign responsibility for implementing housing plan policies, including the 212-unit goal for affordable housing.</b></p> <p><b>Create a financing plan for implementing housing plan policies.</b></p>	<p><b>City Council</b>                  Planning Dept.                  Public Works Dept.                  Parks and Rec. Dept.                  Other City Departments</p>
<b>Short-term</b>	<p><b>Housing Survey:</b> Update the 1998 survey of housing conditions.</p> <p><b>Create a mortgage assistance program to target income-eligible workers employed within the City.</b></p> <p>Expand educational outreach to community about programs that foster affordability and maintenance.</p>	<p><b>Planning Comm.</b>  <b>City Council</b>                  Planning Dept.                  Other City Departments</p>
<b>Medium – term (ongoing)</b>	<p><b>Develop Policies that Accommodate Housing Needs of Residents:</b> The City will offer resources to seniors to assist them to either age in place or transition to housing that matches their needs; enact zoning code revisions to protect and maintain residential neighborhoods that contain lifecycle housing and assist those neighborhoods in retaining their attractiveness to young families; and adopt policies and contribute resources to help income-eligible homeowners maintain and improve their homes.</p> <p><b>Invite Edina Housing Foundation, the West Hennepin Affordable Housing</b></p>	<p><b>Planning Comm.</b>  <b>City Council</b>                  Planning Dept.                  Other City Commissions</p>



	<p><b>Land Trust, and the Greater Metropolitan Housing Corporation to partner with the City in development of affordable housing programs with benchmarks targeted to families and seniors.</b></p>	
<p><b>Long-term</b></p>	<p><b>Develop Long-term Affordable Housing Strategies:</b> The City will continue to fund and expand its financial and technical support to organizations that assist in the maintenance and development of affordable housing in the city.</p>	<p><b>Planning Dept. City Council</b> Non-profit public and private housing agencies Housing developers</p>
<p><b>Phasing</b></p>	<p><b>HERITAGE PRESERVATION Actions</b></p>	<p><b>Lead and Coordinating Agencies</b></p>
<p><b>Ongoing</b></p>	<p><b>Carry out comprehensive city-wide survey.</b></p> <p><b>Amend the Zoning Ordinance to increase protection of historic resources.</b> Rezone historically, architecturally, archaeologically, and culturally significant properties as Edina Heritage Landmarks and Landmark Districts.</p> <p><b>Increase the use of partnerships with other agencies, organizations, and individual property owners.</b></p>	<p><b>Heritage Preservation Board</b> Planning Dept.</p>
<p><b>Short-term</b></p>	<p><b>Update the heritage resources inventory; convert to electronic format; adapt for GIS users.</b></p> <p><b>Redirect the resources of the Heritage Preservation Board toward an increased emphasis on education and technical assistance programs.</b></p> <p><b>Use existing planning tools more</b></p>	<p><b>Heritage Preservation Board</b> Planning Dept.</p> <p>Public Works Dept.</p>



	<p><b>effectively and create a better “tool box” to address emerging heritage preservation challenges.</b></p> <p><b>Establish and allocate resources to development of a heritage resources disaster management plan.</b></p> <p><b>Provide better public access to heritage preservation information through the media, outreach, and the Internet.</b></p>	
<b>Medium-term (ongoing)</b>	<p><b>Develop an array of economic incentives for the preservation, rehabilitation, restoration, and reconstruction of significant, privately-owned heritage resources.</b></p> <p><b>Develop innovative demonstration projects and disseminate information on the importance of heritage preservation in developing sustainable urban environments.</b></p>	<b>Heritage Preservation Board City Council Planning Dept.</b>
<b>Phasing</b>	<b>TRANSPORTATION Actions</b>	<b>Lead and Coordinating Agencies</b>
<b>Short-term</b>	Work in conjunction with infrastructure improvement projects to identify and implement sidewalk and bikeway networks within the City.	<b>Public Works Dept. Transportation Commission</b>
<b>Medium-term</b>	<p>Diversify types of transportation methods within the City.</p> <p>Continue to improve the aging transportation infrastructure of the City.</p>	<b>Public Works Dept. Transportation Commission</b>
<b>Long-term</b>	Continue to investigate the viability of the East-West Connector Roadway,	<b>Public Works Dept. Transportation</b>



	circulator bus service, and Park-and-Ride Facilities within the City.	<b>Commission</b>
<b>Phasing</b>	<b>WASTEWATER AND SEWER PLAN Actions</b>	<b>Lead and Coordinating Agencies</b>
<b>Short-term</b>	<p><b>Infiltration and Inflow (I &amp; I) Reduction</b></p> <p>Continue I &amp; I reduction program which includes modifications to current City sanitary sewer ordinances, system modeling, collaboration with residents and business owners, inspections and I&amp;I related infrastructure improvements</p>	<p><b>Public Works Dept.</b>  <b>City Council</b>                  Planning Dept.                  Planning Comm.</p>
<b>Medium-term (ongoing)</b>	<p><b>Sewer Line Maintenance</b></p> <p>Continue standard jet cleaning program for all lateral collection piping televises trunk lines and laterals to help determine areas in need of cleaning and improvements.</p> <p><b>Infiltration and Inflow Reduction</b></p> <p>Continue the I and I program to undertake projects to reduce and eliminate infiltration and inflow to minimize MCES surcharges.</p>	<p><b>Public Works Dept.</b>  <b>City Council</b>                  Planning Dept.                  Planning Comm.</p>
<b>Phasing</b>	<b>SURFACE WATER MANAGEMENT PLAN Actions</b>	<b>Lead and Coordinating Agencies</b>
<b>Short-term</b>	<p><b>Work with Developments to Reduce Run-off and Pollutants</b></p> <ul style="list-style-type: none"> <li>▪ Require developments to reduce runoff and treat storm sewer prior to leaving the site</li> </ul> <p><b>Education</b></p> <ul style="list-style-type: none"> <li>▪ Educate the public about their impacts on local wetlands</li> </ul>	<p><b>Public Works Dept.</b>  <b>City Council</b>                  Planning Dept.</p>



<b>Long-term</b>	<b>Work with Watershed Districts to Comply with Water Quality Management Rules</b>	<b>Public Works Dept.</b>
<b>Phasing</b>	<b>WATER SUPPLY PLAN Actions</b>	<b>Lead and Coordinating Agencies</b>
<b>Short-term</b>	<b>Invest in Water System Infrastructure</b> <ul style="list-style-type: none"> <li>• Bring two additional filter plants online</li> <li>• Continue projects to reduce concentrations of iron and manganese in water supply</li> </ul>	<b>Public Works Dept. City Council</b>
<b>Long-term</b>	<b>Ensure Adequate Future Water Supply</b>  Add additional wells to the system to meet the proposed future maximum day demands for ultimate buildout.	<b>Public Works Dept. City Council Planning Dept. Planning Comm.</b>
<b>Phasing</b>	<b>PARKS, OPEN SPACE, AND NATURAL RESOURCES Actions</b>	<b>Lead and Coordinating Agencies</b>
<b>Short-term</b>	<b>Maintain and Improve Park Facilities</b>  Renovate and rehabilitate playing fields, playground and athletic facilities, park lighting; construct pathways.	<b>Park and Rec. Dept. City Council Public Works Dept. Park Board</b>
<b>Medium-term</b>	<b>Maintain and Improve Park Facilities</b>  Construct a dog park and initiate major investments in community parks (athletic field at Pamela Park; Van Valkenburg Park)	<b>Park and Rec. Dept. City Council Public Works Dept.</b>
<b>Phasing</b>	<b>ENERGY AND ENVIRONMENT Actions</b>	<b>Lead and Coordinating Agencies</b>
<b>Short-term</b>	<b>Energy and Environment Commission</b>  Develop strategic plan for implementation of ICLEI Milestones	<b>EEC Planning Commission Park Board</b>



Phasing	<b>COMMUNITY SERVICES AND FACILITIES Actions</b>	<b>Lead and Coordinating Agencies</b>
	<p>Police and Fire Protection, Environmental Health / Public Health, Information Technology, and Communications and Marketing are staff functions that provide ongoing service, with upgrading as technology improvements permit.</p> <p>Public schools and libraries are owned and operated by separate governmental jurisdictions, which have their respective planning and budgeting processes.</p>	



## Definitions

***Note: These definitions are intended to help explain or clarify terms used in this Comprehensive Plan, and do not replace or substitute for definitions in the Edina City Code.***

### **Affordable Housing**

Housing for sale or rent, often created by a non-profit development corporation, housing association, a community land trust, or public redevelopment authority, to meet the needs of persons and households who cannot afford accommodation through the open market. Using federal Department of Housing and Urban Development criteria, the Twin Cities Metropolitan Council defines affordability for housing units for purchase or rent. According to the Livable Communities Act Housing Ownership and Rent Affordability Limits (released in May 2007), a home was considered affordable for purchase by a household whose income was 80 percent of area median income if the house was priced at \$206,800 or below. A rental unit was considered affordable for a household earning 50 percent of area median income if the cost of a two-bedroom apartment, including tenant-paid utilities, was \$883 or less per month.

### **Aging Population**

This term refers to the unique demographic trend in Edina. Since 1960, the percentage of Edina residents over the age of 65 has increased from roughly five percent to almost 23 percent in 2000. By 2030, the 65+ age bracket is projected to be about 35 percent.

### **Bicycle Facilities**

A general term referring to improvements that accommodate or encourage bicycling, including bike parking facilities, bike racks, and bike route development.

### **Capital Improvement Program (CIP)**

A five-year financing plan created by a municipality to fund infrastructure such as roads, utilities, parks, and community buildings.

### **Cohousing Community**

Cohousing is a type of collaborative housing in which residents actively participate in the design and operation of their own development. The development usually consists of 20-40 single-family or attached homes. Because cohousing residents are consciously committed to living as a



community, the site plan design encourages both social contact and individual space. Usually the development design includes facilities that are shared in common, such as open space and courtyards, a playground, and a “common house” which includes a common kitchen, dining area, sitting area, children’s playroom, laundry, workshop, and library.

**Community Land Trust**

Community land trusts provide affordable housing by separating the value of the land from the value of the buildings. Households pay for only the building or dwelling unit. The community land trust retains ownership of the land in the form of shared equity. When the household sells, the community land trust typically has the right to repurchase the unit at a price determined by a formula based on the value of improvements made by the household, the change in local housing prices, and the duration of the tenancy. The community land trust then resells the building or unit to another low- or moderate-income household, and continues to own the land. This chain of sales ensures that the unit provides affordable housing services on a sustainable basis.

**Conditional Use**

A use which, though generally not suitable in a particular zoning district, may, under some circumstances, and subject to conditions, be suitable in a particular district.

**Conservation Overlay Zone**

See definition of Overlay District or Zone.

**Development**

Any manmade change to improved or unimproved property, including but not limited to buildings or other structures, altering the landscape by mining, dredging, filling, grading, paving, excavation, or drilling operations.

**Duplex**

A duplex refers to a building used for residential purposes and consisting of two living units sharing a common wall.



### **Easement**

A right granted by the owner of land (the grantor) to another party (the grantee) to use the land in a specified manner without transferring ownership of the land. The grantee can be a private party or a public agency.

### **Edina Heritage Landmark/Heritage Preservation Resource or Historic Building**

Any building, site, structure, or object that has been so designated by the Heritage Preservation Board on the basis of its historic associations or historic architectural qualities which add to the significance of the district as a whole. Heritage preservation resources may lack individual distinction but must possess historic significance and integrity of those features necessary to convey their heritage preservation value.

### **Floor Area Ratio (FAR)**

The ratio of a building's floor area to the size of its lot (the gross floor area divided by lot area). For example, a maximum FAR of 1.0 could allow for a two-story building covering 50% of the lot, a three-story building covering one-third of the lot, and so on.

### **Green Building**

Green or sustainable building is the practice of creating healthier and more resource-efficient models of construction, renovation, operation, maintenance, and demolition.

### **Greenway**

A linear open space established along either a natural corridor, such as a stream, or overland along a road. It can be any natural or landscaped course for pedestrian and/or bicycle passage.

### **Height of a Building**

The vertical distance measured from the average proposed ground elevation adjoining the building at the front building line to the top of the cornice of a flat roof, to the deck line of a mansard roof, to a point on the roof directly above the highest wall of a shed roof, to the uppermost point on a round or other arch-type roof, or to the average distance of the highest gable on a pitched or hip roof. Height can be expressed in numbers of stories, as well.



### **Historic Preservation**

The act or process of applying measures to sustain the existing form, structure, integrity, and material of a heritage resource.

### **Housing Cooperative**

A form of housing ownership in which a group of individuals own a share in a corporation that owns or controls land and building(s). The share ownership entitles that individual and family to occupy a unit and participate in corporate activities in managing the development.

### **Infill**

The development of new housing, commercial, or other uses and buildings on scattered vacant sites within existing substantially built-up areas. Infill could also refer to the development of housing or other buildings on a site already containing existing buildings, some or all of which are retained.

### **Infrastructure**

Permanent resources serving a community's needs, commonly including roads, sewers and other water resource management facilities, railways, and communications networks.

### **Lifecycle Housing**

According to the Met Council, lifecycle housing entails a range of housing options that meet people's preferences and circumstances at all of life's stages. It ranges from housing for young adults establishing new households to homes for growing families with children, and housing for seniors in their retirement years. In particular, the Livable Communities Act expects options beyond the predominant larger-lot, detached, single-family home.

### **Mixed-Use Development**

Development comprising two or more uses as part of the same scheme. These uses could be in separate buildings on a lot, or could be combined vertically within the same building. Traditionally, in a "Main Street" situation, retail and/or service uses were located on the first floor, and office or residential uses were located on upper floors, served by streetcar or minimal parking in the rear of the lot. Suburban mixed-use development tended to take the form of different uses in separate buildings on the same lot, with shared surface parking. More recently, vertical mixed-use development has been occurring both in the central city and in first- and second-ring suburbs.



### **Multi-Family Dwelling**

A building or portion thereof which contains three or more dwelling units for permanent occupancy, regardless of the method of ownership or type of tenure. Included in the use type would be garden apartments, low and high rise apartments, apartments for elderly housing and condominiums.

### **Non-motorized Transportation**

Infrastructure that provides facilities for walking and bicycling, such as sidewalks, bicycle lanes, pedestrian and bike trails, and paths.

### **Open Space**

Lands containing creeks, greenways, forest, habitat areas, sensitive natural areas, and areas with unique characteristics that make them unsuitable for development. **Public Open Space** usually refers to a parcel of land or water essentially unimproved and set aside, dedicated, designated, or reserved for public use or enjoyment. **Common Open Space** usually refers to land within or related to a private development, not individually owned or dedicated for public use, which is intended for the common use or enjoyment of the residents or commercial tenants of the development, and may include complementary structures such as swimming pools, tennis and basketball courts, and similar facilities.

### **Park (Public)**

Publicly owned and operated parks, picnic areas, playgrounds, indoor/outdoor athletic or recreation facilities, indoor/outdoor shelters, amphitheater, open spaces, and other similar uses.

### **Park and Ride Facility**

A parking lot or structure (ramp) that enables motorists to park their vehicles and travel into a downtown or other employment center by public transportation, shuttle buses or car- or van pools.

### **Pedestrian-friendly Design**

Site planning and building design of entrances/exits and circulation within the development that promotes walking.

### **Planned Unit Development (PUD)**

A PUD is a zoning category that allows and facilitates innovation and flexibility in a development by suspension of standard zoning requirements to be replaced by negotiated agreements. A PUD allows for a mix of uses, densities, lot dimensions, size and location of open spaces, and possibly roadways that would otherwise be prohibited or would otherwise be too cumbersome with the given



site size and/or context if the specificity of the rules and regulations of a standard zoning district or category were followed.

### **Planning Commission**

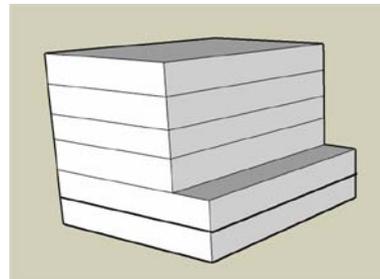
The entity charged with land use planning, and the review of proposed planned development, changes to zoning laws, and other large land use plans. The **Edina Planning Commission** consists of nine residents appointed by the Mayor and the City Council. In addition to the nine members, one member of the Commission may be a high school student. Staff services are provided and coordinated by the Planning Department.

### **Public Realm**

Outdoor areas accessible to the public, including roadways, public rights-of-way, parks and other public open space. On an individual building site, public realm may include those areas that are semi-public that act as transitions between the private use and the public right-of-way.

### **Step Down (a building façade)**

An architectural/urban design term to prescribe that, above the first two or three stories, the upper floors of taller buildings should “step down” to the street or rear façade/alley, to permit sunlight access and air.



### **Story**

That portion of a building, other than the basement, included between the surface of the floor and the floor next above it. If there is no floor above it, story includes the space between the floor and the ceiling next above it. In the Edina Zoning Code, a basement with more than 50 percent of its exterior wall area located entirely below the proposed ground elevation adjoining the basement shall not be counted as a story.

### **Streetscape**

The space between the buildings on either of a street that defines its character, including building facades (awnings, signs, lighting), landscaping (trees, yards, plantings), sidewalks, street paving, street furniture such as benches, trash receptacles, and street lighting.

### **Sustainable Development**

Development which meets the needs of the present without compromising the ability of future generations to meet their own needs, with respect to social equity, economic prosperity, and ecological integrity.



### **Transit-Oriented Design**

Dense mixed-use development (housing, retail, and employment) with an average 2,000-foot walking distance to a transit stop and other public use.

### **Zoning Requirements**

Zoning is the public regulation of land use and development. A zoning ordinance or code divides a community into districts or zones which specify permitted uses and development standards such development densities, building heights, minimum usable open space, and layout of buildings on a site.