

ROCHESTER

COMPREHENSIVE PLAN 2040

>> Existing Conditions Summary

May 2015



Hoisington Koegler Group Inc.
Planning • Landscape Architecture • Urban Design

Table of Contents

Rochester in Context >>	1-2
Midwest Region	1-2
Olmsted County	1-4
City of Rochester.....	1-4
Local Geographies	1-6
Settlement History	1-8
Public Administration >>	1-10
Governance.....	1-10
City Departments	1-12
Demographics >>	1-13
Population	1-14
Age and Gender.....	1-16
Race & Ethnicity.....	1-16
Employment.....	1-18
Households.....	1-20
Education.....	1-21
Land Use >>	1-22
Overview	1-22
Residential.....	1-24
Commercial.....	1-26
Industrial	1-26
Institutional / Civic.....	1-30
Park & Protected Open Space	1-30
Agriculture	1-30
Vacant	1-30
Other (Built)	1-30
Other (Non-Built).....	1-30
Economic Development >>	1-32
Overview	1-32
Economic Development Plans & Studies	1-33
Economic Development Programs & Entities.....	1-35
Housing >>	1-38
Housing Profile	1-38
Housing Programs & Entities.....	1-44

Parks & Open Space >>	1-46
Overview	1-46
Park Inventory & Access	1-48
Recreational Programs & Venues	1-50
Water Resources	1-52
Landform	1-54
Sensitive Natural Resources	1-55
Public Utilities >>	1-58
Sanitary Sewer Collection and Treatment System	1-58
Water Distribution System.....	1-59
Storm Water System	1-62
Electrical System	1-62
Geologic Implications.....	1-62
Flood Control	1-62
Adequate Public Service Standard	1-63

List of Figures

Figure 1.1: Regional Context	1-3
Figure 1.2: Rochester Area Landmarks & Attractions	1-5
Figure 1.3: Neighborhoods Identified in 1978 Land Use Plan for the Rochester Urban Suervice Area	1-7
Figure 1.4: Neighborhood Associations.....	1-7
Figure 1.5: City Council Wards	1-7
Figure 1.6: Rochester High School Attendance Areas.....	1-7
Figure 1.7: Historical Annexations & Orderly Annexation Agreements	1-9
Figure 1.8: Rate of Land Consumption* (average acres/year), City of Rochester	1-9
Figure 1.9: Historical Land Consumption* (acres/person), City of Rochester	1-9
Figure 1.10 Rochester City Government Organizational Chart	1-11
Figure 1.11: Rochester Law Enforcement Facility, Districts, and Subdistricts	1-13
Figure 1.12: Rochester Fire and Rescue Facilities, Districts, and Subdistricts	1-13
Figure 1.13: Population Density	1-14
Figure 1.14: Population Trends	1-15
Figure 1.15: Age & Gender Distribution, Rochester, 2010	1-16
Figure 1.16: Age and Gender Distribution, Olmsted County, 2015 & 2040 (projected)	1-16
Figure 1.17: Race, 2000 & 2010	1-17
Figure 1.18: Net Population Growth in Ethnic & Racial Minorities, 2000-2010	1-17
Figure 1.19: Net Population Growth in Ethnic & Racial Minorities, 2000-2010	1-17
Figure 1.20: Top Ten Industries in Which Rochester Residents Work*, 2002 & 2011	1-18
Figure 1.21: Inflow/Outflow of Workers, 2011	1-18
Figure 1.22: Employment by Industry (Working in Rochester), 2002-2011, (actual) & 2040 (projected).....	1-19
Figure 1.23: Family Income Distribution (in dollars), 2000 & 2013.....	1-20
Figure 1.24: Households Experiencing a Housing Burden in the Past 12 Months*, 2000 & 2013	1-21
Figure 1.25: Highest Educational Attainment (Population 25 years and over), 2000 & 2010	1-21
Figure 1.26: School Enrollment	1-21
Figure 1.27: Existing Land Use Distribution	1-22
Figure 1.28: Existing Land Use	1-23
Figure 1.29: Residential Density (units per acre)	1-25
Figure 1.30: Commercial & Industrial Uses.....	1-27
Figure 1.31: Commercial Corridors.....	1-28
Figure 1.32: Employment Corridors.....	1-29
Figure 1.33: Institutional and Civic Uses	1-31
Figure 1.34: Key Themes of the Journey to Growth Plan	1-34
Figure 1.35: Matrix of Preferred Housing Types by Household Size.....	1-39
Figure 1.36: Residential Development by Dwelling Type.....	1-40
Figure 1.37: Residential Development by Year Built	1-41
Figure 1.38: Park System Classification	1-47
Figure 1.39: Park System Access	1-49
Figure 1.40: Water Resources and Topography	1-53

Figure 1.41: Landform (Topography), Olmsted County	1-54
Figure 1.42: Sensitive Natural Features.....	1-56
Figure 1.43: Geologic Sensitivity.....	1-57
Figure 1.44: Northwest Territory Development Area.....	1-59
Figure 1.45: Sanitary Sewer Collection and Treatment System.....	1-60
Figure 1.46: Water Distribution System	1-61
Figure 1.47: Storm Water System.....	1-64
Figure 1.48: Electrical System.....	1-64

List of Tables

Table 1.1: Historical Population (1900-2010) and Projections to 2040	1-15
Table 1.2: Race & Ethnicity, 2000 & 2010	1-17
Table 1.3: Projected Labor Force Gap, Olmsted County	1-19
Table 1.4: Households by Type, 2000 & 2010	1-20
Table 1.5: Median Income (in 2013 dollars), 2000 & 2010	1-20
Table 1.6: Families and People Whose Income is Below the Poverty Line*, 2000 & 2013	1-20
Table 1.7: Median Monthly Housing Costs (in 2013 dollars), 2000 & 2013.....	1-21
Table 1.8: Existing Land Use (Total acres).....	1-22
Table 1.9: Housing Units in Structure, 2000 & 2010.....	1-39
Table 1.10: Year Structure Built, 2000 & 2010	1-39
Table 1.11: Projected Housing Demand (in housing units), City of Rochester, 2013-2030.....	1-42
Table 1.12: Parks & Open Space Acreage by Type.....	1-48
Table 1.13: Athletic Programs.....	1-51
Table 1.14: Water Reclamation Plant Capital Improvement projects	1-58

About this Report

This report examines existing conditions in the city of Rochester across of a range of topics and measures. While this report is primarily focused on the physical development and built form of the city, social, economic, and political considerations are by necessity, part of the discussion. Transportation-related analyses are captured in a series of memoranda under separate cover. See “supporting materials” below.

Understanding the current state of the land and people in Rochester is a critical component of the comprehensive planning process. Challenges and opportunities brought forward in this analysis serve as a baseline for future planning and inform the vision, priorities, and recommendations of the Comprehensive Plan.

The information and analysis presented here are drawn from a variety of sources, including U.S. Census data, field observations, past plans and studies, and geographic datasets - as well as local knowledge and input provided by City staff and through the stakeholder engagement process.

Interactive Document Format

To enhance usability, interactive hyperlinks are incorporated throughout this document to provide quick references to: Other sections of the document; external websites; and external documents (see “supporting materials” below).

Hyperlinks are highlighted in blue, for example: [Hyperlink](#)

Supporting Materials

Several memoranda have been developed that provide supporting detail for this existing conditions report. For additional information, refer to the following supporting materials (under separate cover):

- » [Background Documents Summary](#)
- » [Existing Conditions Map Book](#)
- » [Non-Motorized Transportation Analysis](#)
- » [Peer City Policy Review](#)
- » [Travel Patterns and Link Analysis](#)
- » [Transit System and Market Analysis](#)

Review of Existing Plans & Policies

The analysis in this report draws on a number of past plans, policies, and studies conducted for or by the City of Rochester, Olmsted County, and various small areas within the city (see list below). For a detailed summary of these documents, refer to the [Background Documents Summary](#) (under separate cover).

General Land Use Plans

- » Land Use Plan for the Rochester Urban Service Area – Amended January 2013
- » Olmsted County General Land Use Plan – 2011

Transportation Plans & Studies

- » Bicycle Master Plan – 2012
- » Bike Friendly Community Applications
- » Rochester Bike Share Feasibility Study and Business Plan – 2014
- » Public Bike Repair Stands Project – 2013
- » Complete Streets Policy – 2009
- » River Trails Wayfinding Signage Program – 2011
- » Rochester Truck Routes Map – 2007
- » ROCOG 2040 Long Range Transportation Plan (Regional Transportation Plan) – 2010
- » Safe Routes to School Plan and Toolkit – 2013
- » Southeastern Minnesota Freight Rail Capacity Study Alternatives Analysis – 2013
- » Walk Friendly Community Application – 2012
- » Destination Medical Center (DMC) Development Plan – 2015 DRAFT
- » Rochester Transit Development Plan (TDP) – 2006
- » Neighborhood Traffic Management Program (NTMP) Handbook
- » Broadway Avenue Signal Optimization Project – 2013

Small Area Plans

- » Envision UMR Master Plan – September 2014
- » Downtown Rochester – Master Plan – 2010
- » Rochester 2nd Street Corridor Framework Plan – 2009
- » Imagine Kutzky Plan – 2012
- » Imagine Slatterly Vision Plan – 2010
- » Mayo Clinic Five-Year Plan Update – 2011

Housing & Economic Development Studies

- » Comprehensive Housing Needs Assessment for Olmsted County – 2013
- » Destination Medical Center (DMC) Development Plan – 2015 DRAFT
- » Journey to Growth Plan – 2014 (Prepared by RAEDI and the Rochester Area Chamber of Commerce)
- » Olmsted County Market Area Housing Framework – 2015 DRAFT

Demographic / Community Profiles

- » Employment & Population Projections: Looking Ahead through 2040 – 2014
- » About You
- » Olmsted County, Minnesota Community Health Needs Assessment – 2013

Infrastructure Plans & Studies

- » Rate Band Analysis – Rochester Municipal Ramps – 2013
- » Rochester Infrastructure Master Plan – 2013
- » City of Rochester Parking Meter Locations – 2013
- » Parking Facility Reference – Rochester Municipal Ramps – 2014
- » Ramp Occupancy – Rochester Municipal Ramps – 2014
- » Parker Type – Rochester Municipal Ramps – 2014
- » Rochester Olmsted Council of Governments GIS Data – 2014
- » University of Minnesota Rochester (UMR) Master Plan – 2014
- » Kutzky Sanitary Sewer Pilot Study Area – 2010
- » PA 3 Sanitary Sewer Study Area – 2014-2018
- » RPU Downtown Water System Modeling – Ongoing
- » Soldiers Memorial Field Master Plan – In progress
- » Cascade Lake Park Master Plan – 2004
- » Olmsted County Capital Improvement Program (CIP)
- » Storm Water Management Plan (Rochester, MN) – 1997 (Revised December 1999)
- » 2013-2023 Olmsted County Water Management Plan

Public Administration

- » City of Rochester Emergency Operations Plan – 2013
- » City of Rochester Comprehensive Annual Financial Report – 2013



EXISTING CONDITIONS

This report examines existing conditions in the city of Rochester across a range of topics and measures. Understanding the current state of the land and people in Rochester is a critical component of the comprehensive planning process. Challenges and opportunities brought forward in this analysis serve as a baseline for future planning and inform the vision, priorities, and recommendations of the Comprehensive Plan.

The information and analysis presented here are drawn from a variety of sources, including U.S. Census data, field observations, past plans and studies, and geographic datasets – as well as local knowledge and input provided by City staff and through the stakeholder engagement process.

Topics include:

- Rochester in Context
- Existing Plans & Policies
- Public Administration
- Demographics
- Land use & Development Patterns
- Housing
- Economic Development
- Parks & Open Space
- Public Utilities
- Transportation (see [transportation memos](#) under separate cover)

Rochester in Context >>

This section examines the extent of Rochester’s geographic and economic reach and examines the role the city plays in its surrounding context, from the regional to local scale.

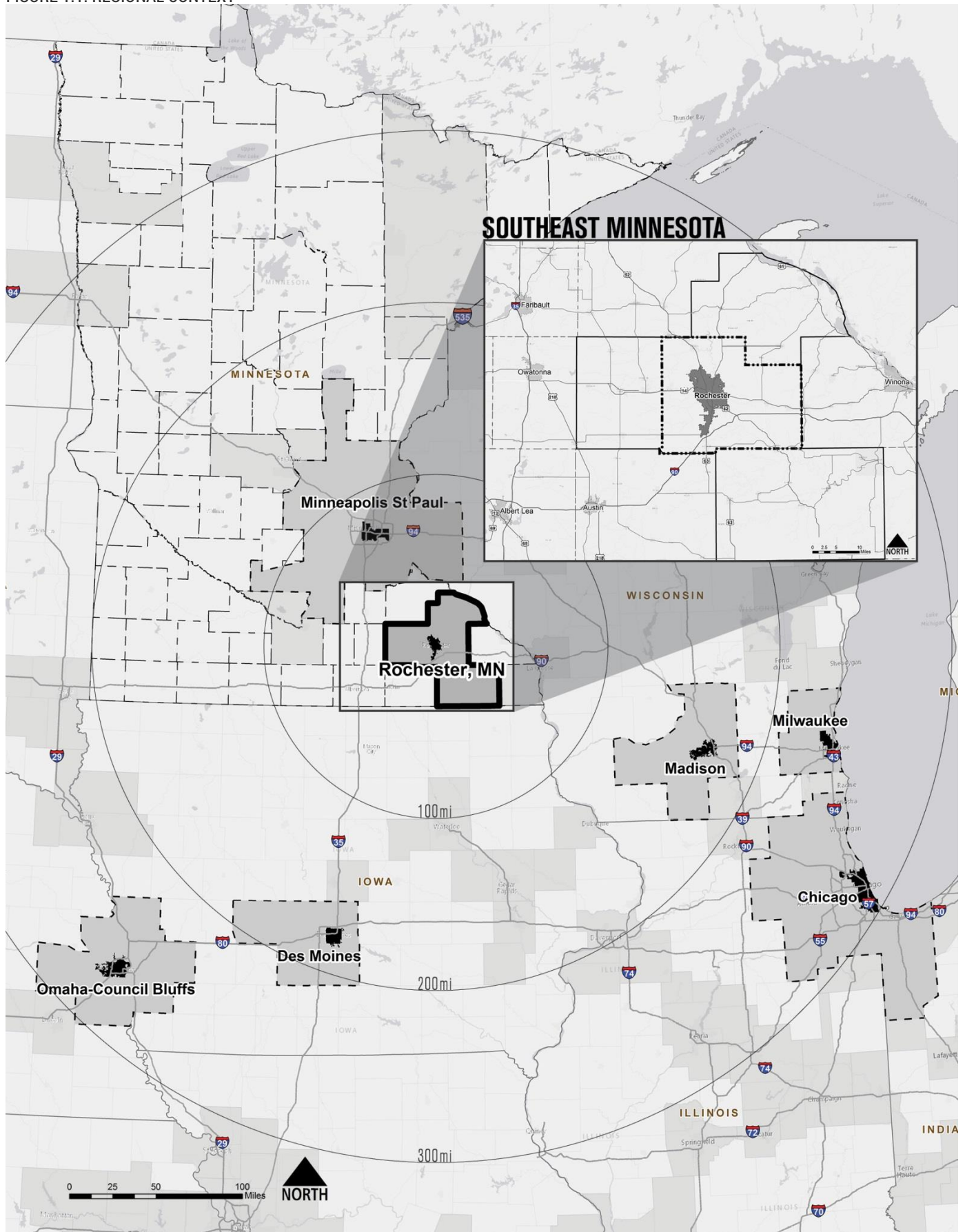
Midwest Region

The city of Rochester is the third largest city (and Metropolitan Statistical Area) in Minnesota. Anchored by major employers, including the Mayo Clinic (Minnesota’s largest private employer) and IBM-Rochester, the city has become a place of significance both regionally and nationally, known for its robust economy and reputation for business innovation.

With Minneapolis, St. Paul, Madison, and Des Moines all within 3 hours driving, and Omaha, Milwaukee, and Chicago within an hour’s plane-ride, Rochester benefits from strong connections to other cities in the Midwest region (see Figure 1.1). Residents and visitors enjoy convenient access to the amenities and attractions of other metropolitan areas, as well as those of Rochester itself. Workers in Rochester, drawn in by major employers like Mayo and IBM, hail from a large regional commuter-shed, with a significant number of Rochester employees commuting from surrounding “commuter counties” and other MSAs. In 2011, Rochester drew about 1,000 in-commuters from the Twin Cities alone.

Rochester also serves as an economic, transportation, and cultural hub for smaller cities in southeastern Minnesota, including Faribault, Owatonna, Albert Lee, Austin, and Winona (all located within 50 miles of Rochester). Major thoroughfares connecting Rochester to these regional destinations include Highway 14, I-35, I-90, US 63, and US 52.

FIGURE 1.1: REGIONAL CONTEXT



[View larger map](#)

Olmsted County

The City of Rochester is the main population center in Olmsted County, with approximately 72% of the countywide population. Rochester is surrounded by several smaller cities, including Pine Island, Oronoco, Byron, Stewartville, Eyota, Chatfield, and Dover (see Figure 1.2). Many Rochester employees reside in these neighboring cities, drawn, in some cases, by the rural character, schools, and lower property costs and taxes. Residents of these areas travel to Rochester via key roadways: Highway 14, US 52, US 63, and US 90.

The Rochester area features a unique natural environment, including rare [hydrologic and geologic features](#), cave systems, regionally significant trout streams, and a wealth of [parks and recreational opportunities](#). Olmsted County is also one of only four counties in Minnesota - “the land of 10,000 lakes” - with no *naturally occurring* lakes. This lack of naturally occurring lakes, caused by the underlying porous geology, places a premium on the six man-made lakes/reservoirs that currently exist in and around the Rochester area.

City of Rochester

Downtown Rochester

Downtown Rochester is the center of civic and cultural life and commercial activity in the city. Anchored by the Mayo Clinic and other employers, Downtown is also a destination for shopping, dining, culture, and entertainment, with institutions like the Mayo Civic Center and the Rochester Art Center, and important public spaces such as Peace Plaza and Soldiers Field Memorial Park. The Downtown district and adjacent areas are the focus of the forthcoming [DMC Development Plan](#), a major initiative which aims to transform this area, already rich with cultural assets and amenities, into a premier global healthcare destination.

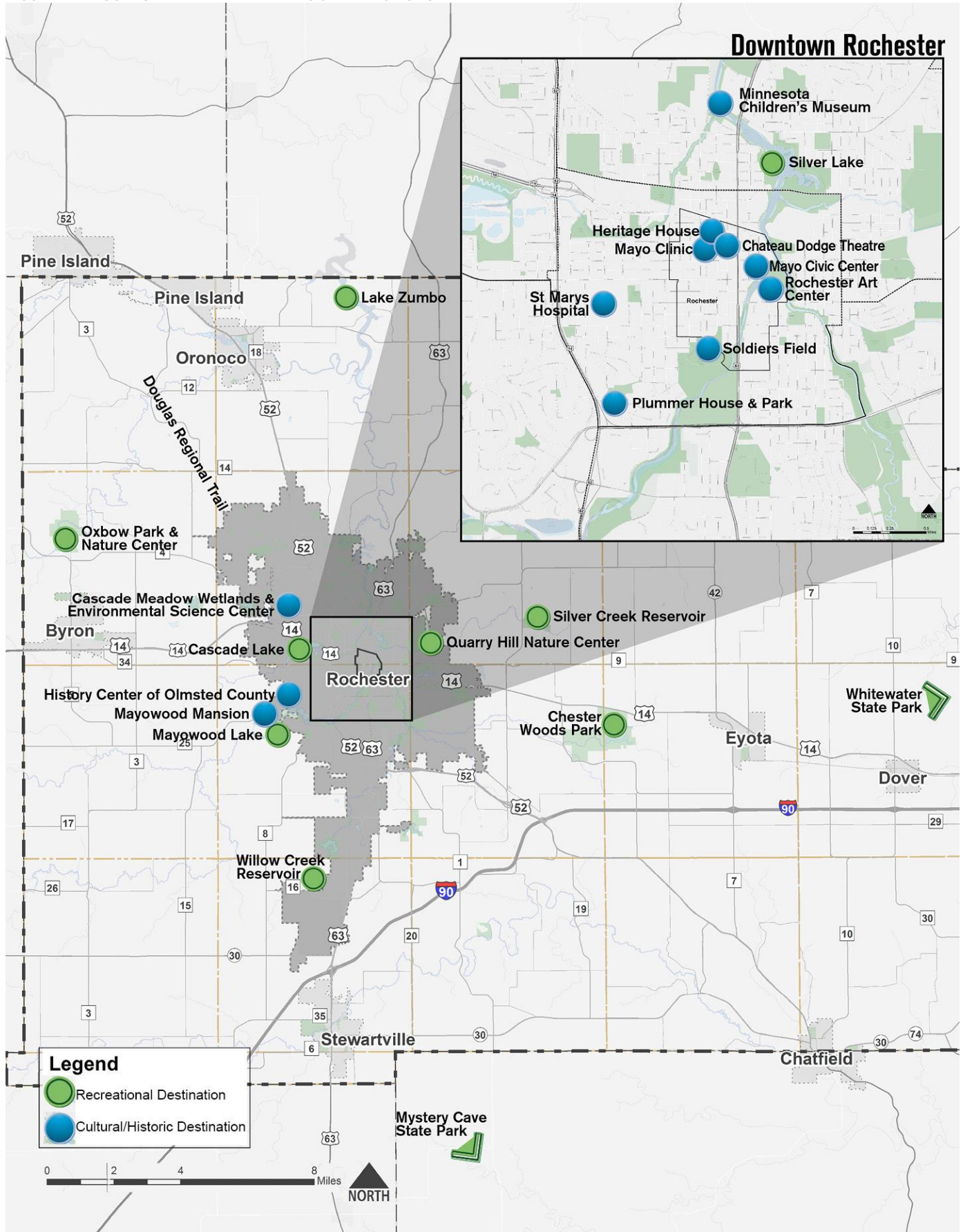
Area Landmarks & Attractions

Rochester features numerous cultural and historic buildings and landmarks (many of which are tied to the Mayo Clinic and the families integral to its formation), including Mayowood Mansion, Plummer House & Park, and St Mary’s Hospital.

National Register of Historic Places

- » Former Avalon Hotel (now Avalon Music) – 301 North Broadway
- » Chateau Dodge Theatre (Vacant-acquired by the City of Rochester) – 15 1st Street SW
- » Chicago Great Western Depot (now Dos Amigos Restaurant) – 20 4th Street SE
- » Mayo, Dr. William J., House (Mayo Foundation House)– 701 4th Street SW
- » Plummer Building, Mayo Clinic – 110 and 115 2nd Avenue SW
- » Plummer House and Garden – 1091 Plummer Lane SW
- » Pierce House – 426 2nd Avenue SW
- » Rochester Armory – 121 North Broadway
- » Rochester Public Library (now Mayo Medical School)– 226 2nd Street SW
- » Toogood Barns (now Stone Barn Dentistry) – 615 16th Street SW
- » Whiting, Timothy A. House – 225 1st Avenue, NW (Central Park)

FIGURE 1.2: ROCHESTER AREA LANDMARKS & ATTRACTIONS



[View larger map](#)

Local Geographies

Neighborhoods

The 1978 Land Use Plan for the Rochester Urban Service Area defined 18 neighborhood analysis areas (see Figure 1.3). These neighborhood designations generally reflect areas that share common land use and development characteristics.

Currently, Rochester has forty-three neighborhood associations (see Figure 1.4), with a large concentration of these associations surrounding the Downtown area. Neighborhood associations vary in their level of organization and activity. Only two neighborhoods, Kutzky and Slatterly Park, have created neighborhood small area plans (see [Background Documents Summary](#)), neither of which has been officially adopted by the city.

Jurisdictional Boundaries

City Council Wards

The City Council is comprised of seven elected officials: Six Council members elected by residents of the ward they represent (see Figure 1.5 Council Ward map), and the Council President who is elected by all residents in the City of Rochester.

Municipal Planning and Service Areas

See the [Public Administration](#) section on p. 1-10 for a discussion of the Rochester-Olmsted Council of Governments, planning entities, law enforcement, fire, and emergency service areas.

Rochester City School District

The Rochester Independent School District 535 serves the City of Rochester and much of the areas in the central part of Olmsted County. The District offers a range of school programs, including zoned schools and district-wide options. The school district boundaries include three high school districts, three middle school districts, four parochial school districts, and twelve elementary school districts (Figure 1.6 shows high school district boundaries).

High Schools (Grades 9-12):

- » Century High School
- » John Marshall High School
- » Mayo High School

Alternative Schools:

- » Rochester Alternative Learning Center (Grades 7-12)*

Middle Schools (Grades 6-8):

- » Friedell District-Wide Middle School*
- » John Adams Middle School
- » Kellogg Middle School
- » Lincoln K-8 District-Wide School
- » Willow Creek Middle School

Elementary Schools (K-Grade 5):

- » Bamber Valley Elementary
- » Bishop Elementary
- » Churchill | Hoover Elementary Schools
- » Elton Hills Elementary
- » Folwell Elementary
- » Franklin Elementary
- » Montessori at Franklin*
- » Gage Elementary
- » Gage Elementary District-Wide Dual Emersion Program*
- » Gibbs Elementary
- » Jefferson Elementary
- » Lincoln K-8 District-Wide School*
- » Longfellow 45-15 District-Wide Elementary School*
- » Pinewood Elementary
- » Riverside Central Elementary
- » Sunset Terrace Elementary
- » Washington District-Wide Elementary School*

* District-Wide Schools

FIGURE 1.3: NEIGHBORHOODS IDENTIFIED IN 1978 LAND USE PLAN FOR THE ROCHESTER URBAN SERVICE AREA

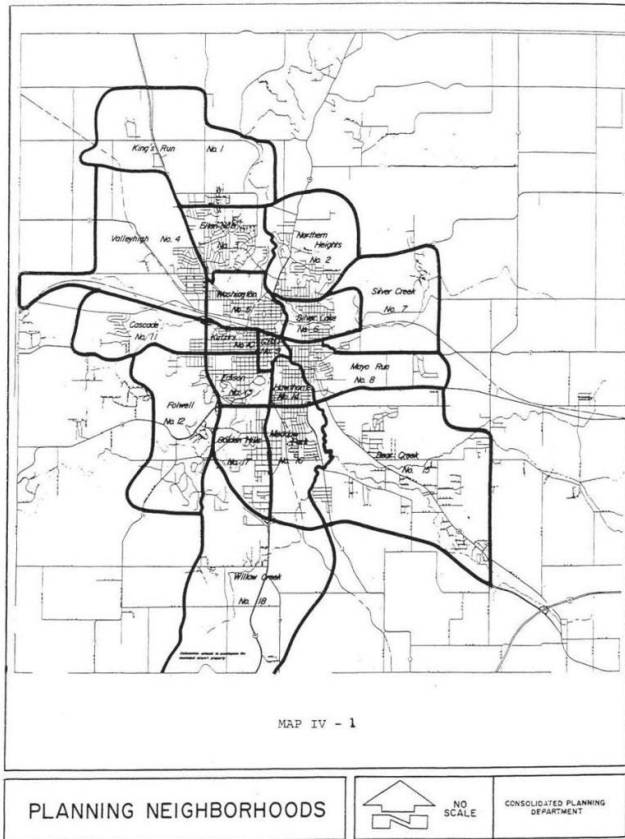


FIGURE 1.4: NEIGHBORHOOD ASSOCIATIONS

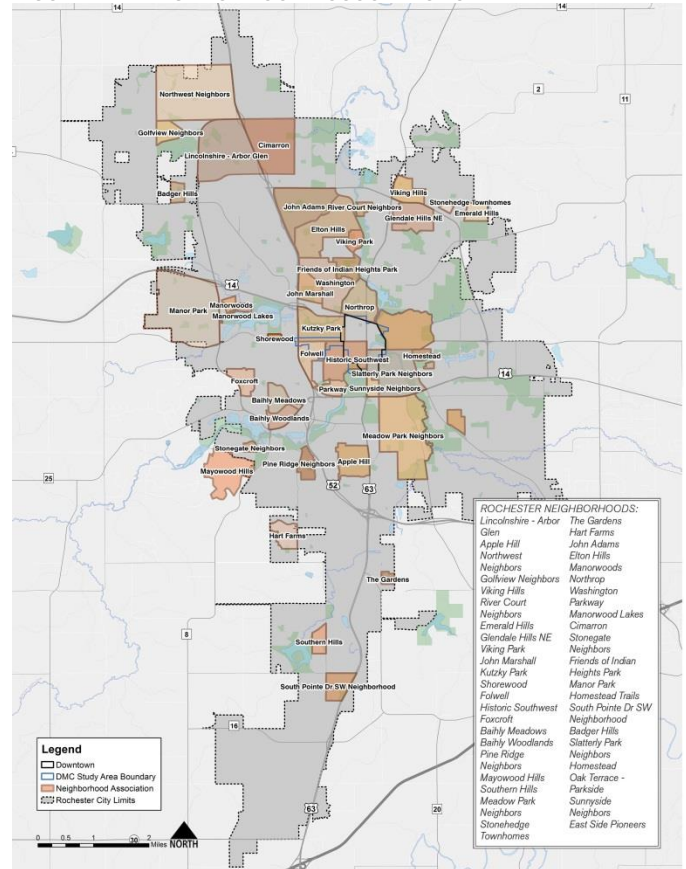


FIGURE 1.5: CITY COUNCIL WARDS

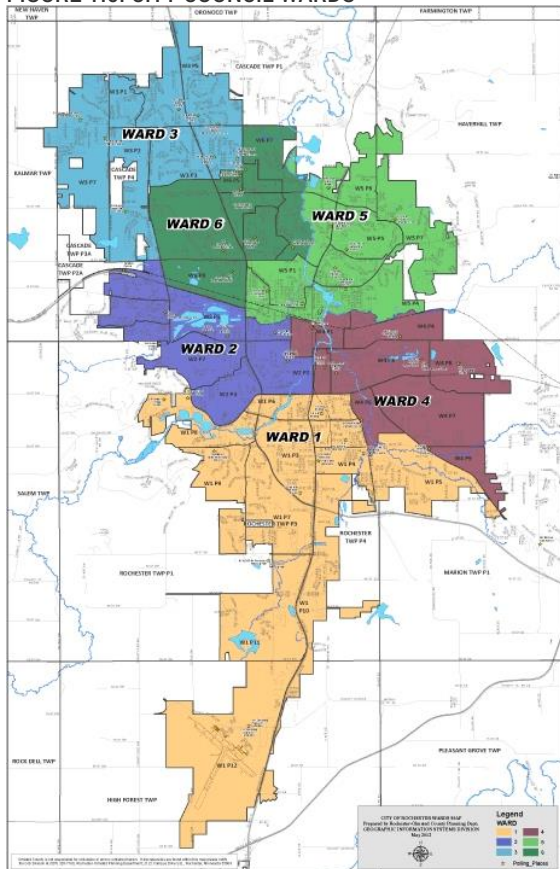
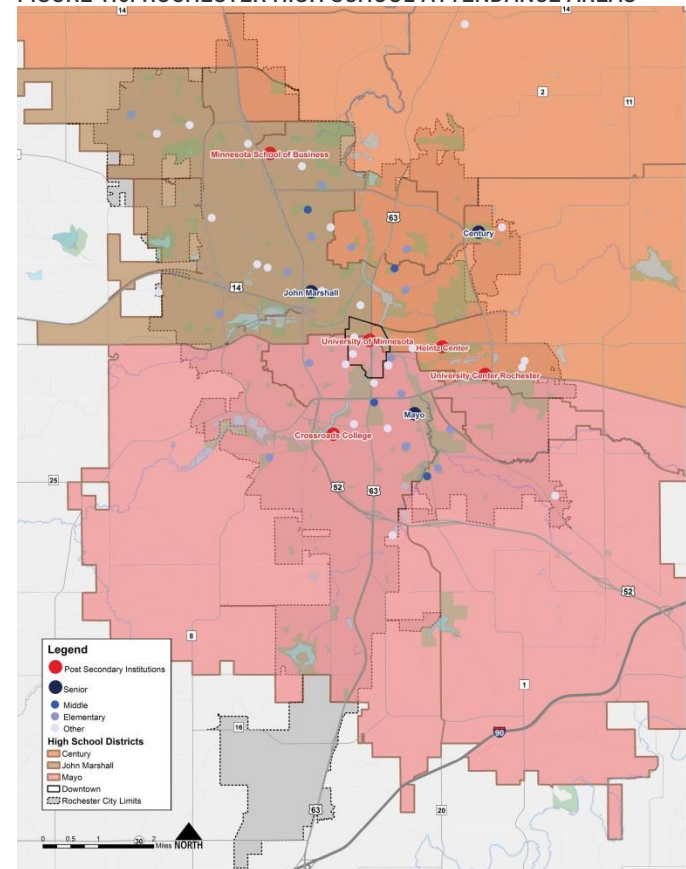


FIGURE 1.6: ROCHESTER HIGH SCHOOL ATTENDANCE AREAS



[View larger maps](#), including other school enrollment boundaries

Settlement History

Rochester developed as a stop along the Dubuque trail, a stagecoach line between St Paul and Dubuque, Iowa. Located at a crossroads near the Zumbro River, travelers would stop in this area to camp and water their animals. In 1854, George Head and his family arrived in Rochester, becoming its first settlers. Head named the city after his hometown of Rochester, NY. In 1855, the territorial legislature created Olmsted County, and Rochester was declared the county seat. Drawn to the region by its cheap and fertile farm land, other settlers soon followed in Head's footsteps, and within six years of his arrival, the town's population had growth to more than 1,400 residents.

The late nineteenth century brought sweeping changes to the town of Rochester. In 1864, Rochester became a stop on the Winona & St. Peter Railroad. Three years later, the line was sold to the Chicago & Northwestern Transportation Company, providing area farmers and businesses with the ability to bring their goods to a national market. In the summer of 1883, a thunderstorm swept across the rolling plains bringing with it a tornado that laid waste to much of the town's north side. The violent storm would catalyze two of Rochester's residents, Sister Mary Alfred, a Franciscan sister, and Dr. William Mayo, then the county doctor, to establish a hospital that would lay the framework for St. Mary's Hospital and eventually the Mayo Clinic. Their efforts would set in motion the development of what has become one of the world's foremost centers of medical care.

Growth and innovation would continue in Rochester into the 20th century. Practitioners at the Mayo Clinic gained renown for pioneering new medical practices and technologies, and over the years, continued to expand their clinic operations, and research and educational facilities. In the 1950s, International Business Machine (IBM) established what would become a major manufacturing and research facility in the city, employing thousands of new technology workers. The IBM Rochester facility bolstered Rochester's reputation as a center for innovation, and continues to operate today as a one of the city's largest employers.



Chicago and North Western Railroad



1883 Tornado Damage



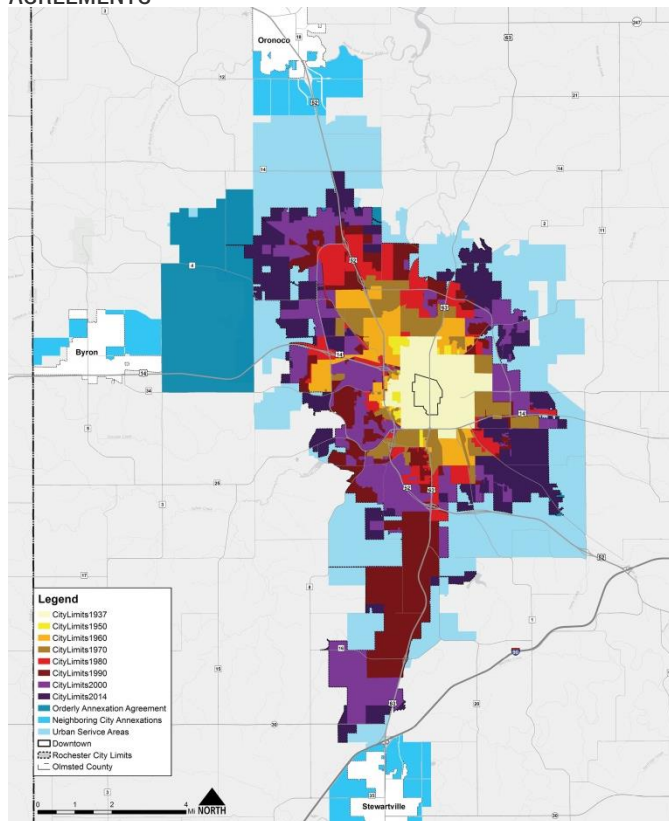
St Marys 1918

Historical Annexations

Rochester’s resources, residents, and business community have allowed the city to sustain a healthy rate of economic and population growth over the past century. Since the early 1900s, the city’s population has grown steadily, with the rate of increase slowing only slightly in recent years. As the population has grown, the city has undertaken periodic annexations to accommodate new growth. The 1978 General Land Use Plan for Olmsted County and subsequent orderly annexation agreements with adjacent townships established and protected a future urban service area for developed and undeveloped lands abutting the city. This protection has enabled continued growth in land area. Existing annexation agreements could allow the city to annex up to 7,900 additional acres.

Figure 1.7 illustrates the historical growth of the city’s footprint as it has expanded over the years through annexation. The average rate of land consumption (acres annexed/per year) has generally increased since the mid-20th century, but seen a decline in the past 10 years (see Figure 1.8). Similarly, the ratio of land area to population has increased steadily since 1940, but increased by a smaller margin in the past decade (see Figure 1.9). This may be a reflection of depressed land demand in the wake of the 2007 financial crisis.

FIGURE 1.7: HISTORICAL ANNEXATIONS & ORDERLY ANNEXATION AGREEMENTS



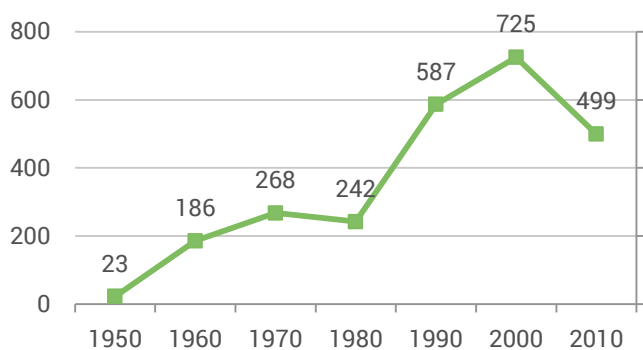
Source: Rochester-Olmsted Planning Department

[View larger map](#)

KEY TERMINOLOGY

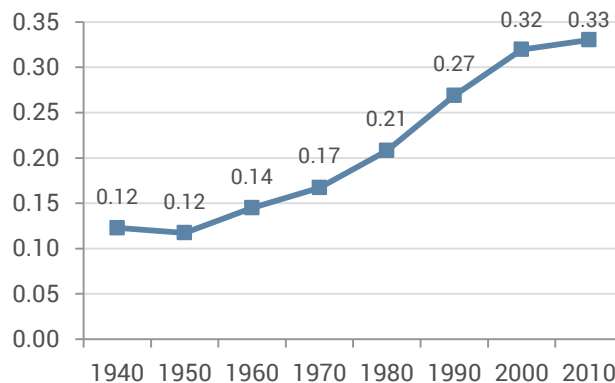
» **Urban service areas** include developed and undeveloped areas identified to accommodate future development over the next 25 to 50 years. Centralized sanitary sewer and water systems, storm sewer systems, transportation systems, public parks, and school sites should ultimately be provided in these areas.

FIGURE 1.8: RATE OF LAND CONSUMPTION* (AVERAGE ACRES/YEAR), CITY OF ROCHESTER



Source: Rochester-Olmsted Planning Department (historical annexation data), U.S. Census

FIGURE 1.9: HISTORICAL LAND CONSUMPTION* (ACRES/PERSON), CITY OF ROCHESTER



* Total city land area in acres over population

Source: Rochester-Olmsted Planning Department (historical annexation data), U.S. Census

Public Administration >>

This section provides an overview of Rochester’s governmental structure, departments, and agencies responsible for planning, administrative and public services, and public facilities in the city.

Governance

Rochester-Olmsted Council of Governments (ROCOG)

The Rochester-Olmsted Council of Governments (ROCOG) was established in November 1971 to provide comprehensive planning services to members of local government units. It was organized to comply with the Federal Aid Highway Act, which requires that all urbanized areas with a population of more than 50,000 have an organization designated by the Governor of the state that is responsible for implementation and maintenance of a regional transportation planning program. That program includes preparation of a Long Range Transportation Plan (LRTP) and an annual Transportation Improvement Program (TIP), which identifies a list of transportation improvements supported by federal funding.

ROCOG maintains a cooperative relationship with the City of Rochester; the Rochester-Olmsted Planning Department; and Olmsted County, utilizing their staff as necessary to fulfill its transportation planning responsibilities. The Rochester-Olmsted Planning Department (see description below) does limited transportation planning – primarily studies and other special reports – prepared with or for the City of Rochester, Olmsted County, and the Minnesota Department of Transportation (MnDOT).

The ROCOG Policy Board is comprised of sixteen individuals, representing the local units of government within Olmsted County, as well as two citizen members. The planning area for ROCOG includes all of Olmsted County along with the incorporated areas of Pine Island and Chatfield.

Rochester City Government

Policy-making and legislative authority are vested in a governing council consisting of the mayor, the council president and six council members. The Governing Council is responsible for passing ordinances, adopting the budget, appointing committees, and hiring both the City's administrator and attorney. The City Administrator is responsible for carrying out the policies and ordinances of the governing council, for overseeing the day-to-day operations of the City, and for appointing the heads of the various departments. See Figure 1.10 for the City's organizational chart.

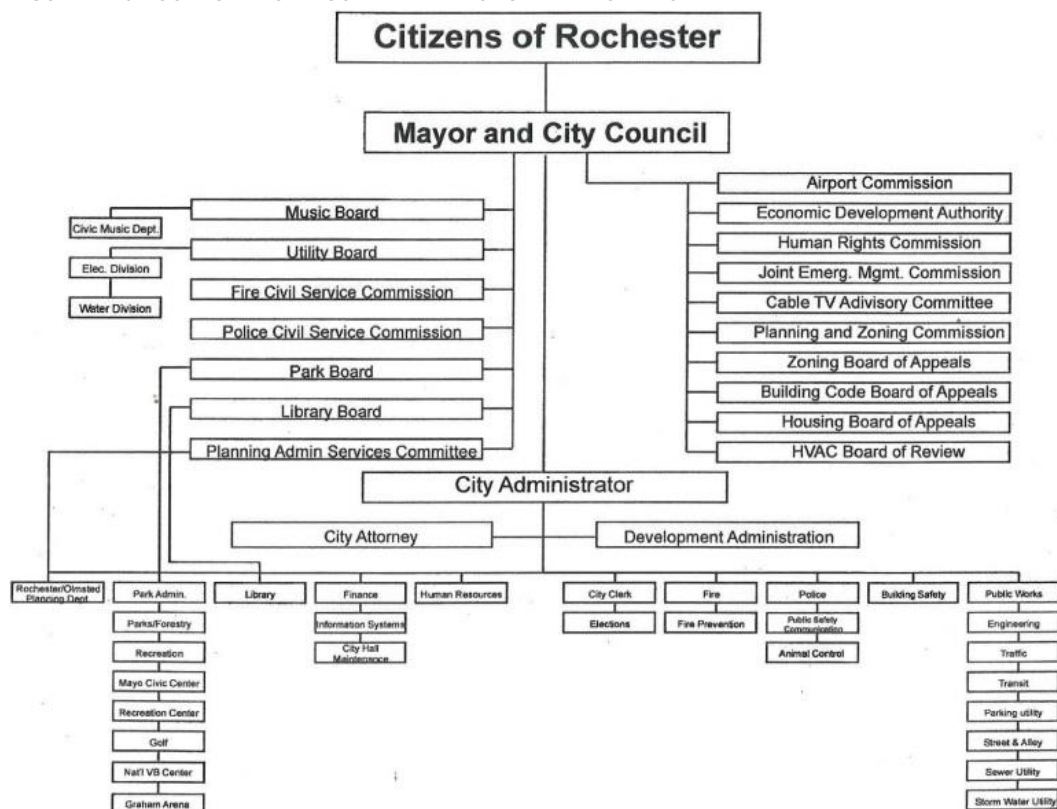
The council is elected on a non-partisan basis. Council members, the president, and the mayor all serve four-year staggered terms, with four of these positions elected every two years. Six of the council members are elected by ward. The mayor and council president are elected at large.

Rochester-Olmsted Planning Department

The Rochester-Olmsted Planning Department was formed in 1975 through the merger of the Olmsted County Department of Development and the Rochester Planning Department. The combined department provides planning and related services under the administrative direction of the Planning Administrative Services Committee (PASC), which has charge of setting the department's budget and work program within the constraints established by the County's levy for the department. The PASC is made up of representatives from the City of Rochester, Olmsted County, the smaller cities in Olmsted County, and the townships.

By forming a joint planning agency, the community created a geographically integrated planning system with a comprehensive approach to all phases of the planning and community development process. Planning can be carried out on a community-wide basis without regard to jurisdictional boundaries. Particularly in planning for the overall settlement pattern of the County, the cities, townships, and County have the potential to work with one planning system to create the growth management system necessary for orderly development.

FIGURE 1.10 ROCHESTER CITY GOVERNMENT ORGANIZATIONAL CHART



Source: City of Rochester 2013 Comprehensive Annual Financial Report

City Departments

The City of Rochester provides a full range of services including police and fire protection; construction and maintenance of streets and infrastructure; recreational facilities, library and cultural events; water, sewer, electric, storm water management, public parking, mass transit and airport services. These functions are planned, managed, and carried out by a system of departments and administrators identified in the organizational chart in Figure 1.10.

Rochester Public Utilities (RPU)

RPU, a division of the City of Rochester, MN, is the largest municipal utility in the state of Minnesota. RPU serves 50,000 electric customers and 38,000 water customers. As a municipal utility, RPU returns funds back to the city of Rochester each year in the form of "in lieu of tax payments."

Rochester Public Works (RPW)

The City of Rochester Public Works Department is responsible for planning, programming, design, construction, and maintenance of public works facilities. This includes street infrastructure, street lighting, traffic control, sanitary and storm water, watermain, and waste water treatment facilities, as well as on-street and off-street parking, and coordination of mass transit modes.

Rochester Police

The city's police department is one of the primary agencies responsible for public health, safety and welfare. The department is based out of a centralized law enforcement center, which includes detention and court facilities, located east of downtown. The department serves four primary response districts and eighteen sub-districts (see Figure 1.11).

A recent memorandum prepared by Rochester Police, regarding staffing levels and budget allocation, suggests that anticipated population growth and increased density stand to significantly accelerate demand for police service in the future. The report cites increasing response times for both priority 1 and priority 2 calls, as well as various staffing burdens. The memorandum further states that the pattern of incremental budget increases seen in recent years for police service have been minimally impactful, and if sustained, will not support the desired levels of police service.

Rochester Fire and Rescue

The city's Fire and Rescue department is one of the primary agencies responsible for public health, safety and welfare. The provision of fire and Basic Life Support (BLS) emergency medical service (EMS) response are two of the primary missions of the Rochester Fire Department. The department provides several public services including:

- » Fire and Rescue
- » Emergency Medical Services
- » Hazardous Materials
- » Code Enforcement
- » Fire Investigation
- » Public Safety Education

Currently the city has five fire stations servicing thirty three fire response districts throughout the city (see Figure 1.12).

A recent analysis of staffing levels, conducted by the Fire Department, states that, at present, Rochester Fire is lightly staffed in comparison to national averages (.85 firefighters per 1,000 population in Rochester versus the national average for career departments, 1.67 firefighters per 1,000 population).

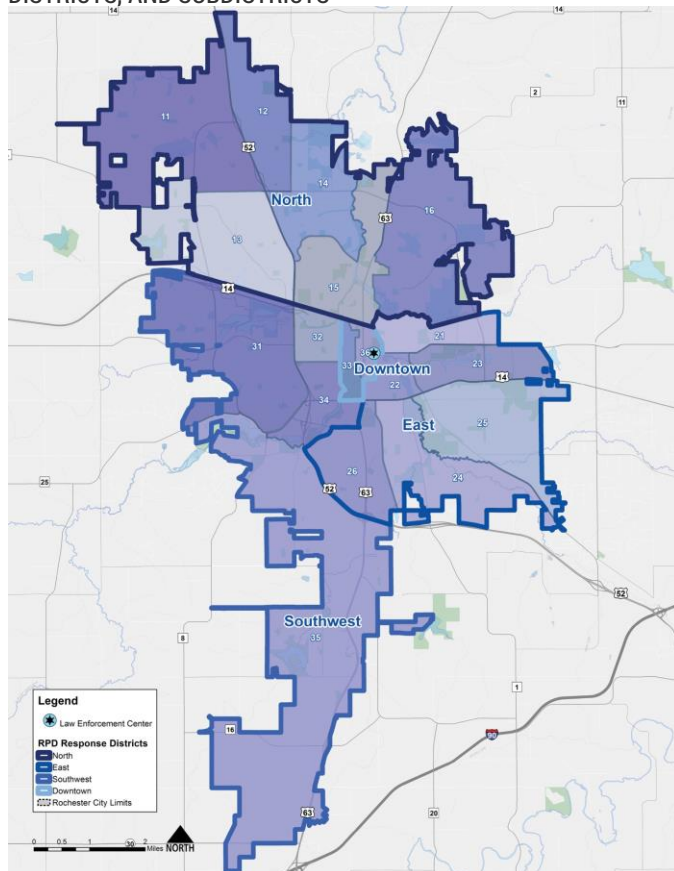
Anticipated population growth and increased density stand to impact the Fire Department's ability to maintain response time standards and adequate coverage. The department recommends increasing staffing to meet a ratio of 1.0 to 1.2 firefighters per 1,000 population to keep pace with projected increases in demand for service. Additional recommendations include developing a plan to link staffing to growth in population and call volumes, and acquiring property at strategic locations to ensure adequate facilities to maintain response standards.

Emergency Operations Plan

The City's Emergency Operations Plan coordinates all City emergency management functions with the comparable functions of the federal government, state and local governments, and private agencies. The Emergency operations plan:

- » Describes how the City will respond to disasters
- » Outlines actions to prevent, prepare, and recover from disasters
- » Uses Emergency Support Functions (ESF), annexes, and implementation instructions to convert this plan into action steps
- » Allows the City to be eligible for Emergency Management Program Grant (EMPG) assistance and other non-disaster funding

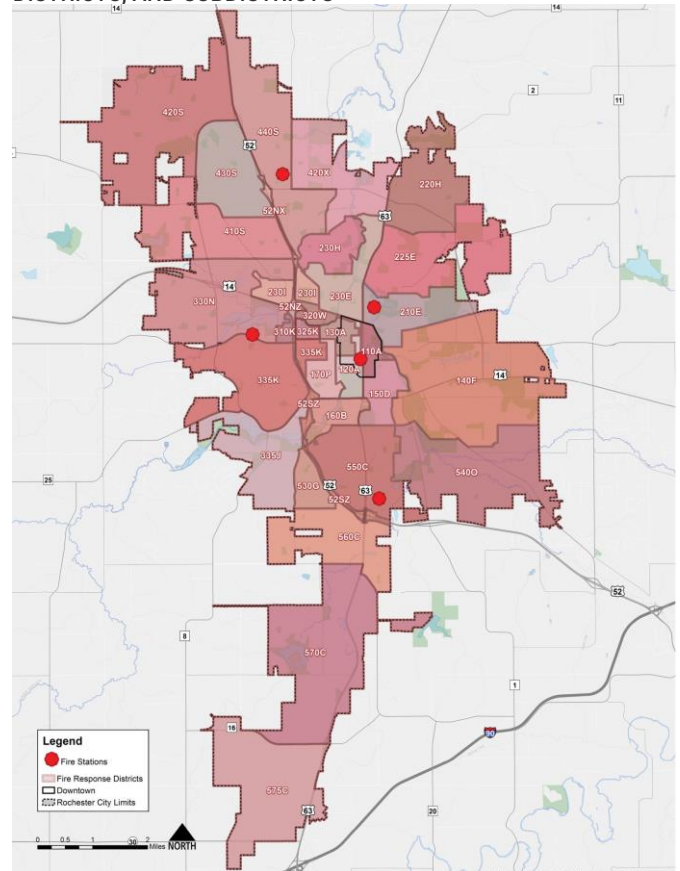
FIGURE 1.11: ROCHESTER LAW ENFORCEMENT FACILITY, DISTRICTS, AND SUBDISTRICTS



Source: Rochester-Olmsted Planning Department

[View larger maps](#)

FIGURE 1.12: ROCHESTER FIRE AND RESCUE FACILITIES, DISTRICTS, AND SUBDISTRICTS



Source: Rochester-Olmsted Planning Department

Demographics >>

Demographic data can provide not only a snapshot of the current community, but can tell the story of how people and places are changing over time, revealing key dynamics and trends that will shape future growth.

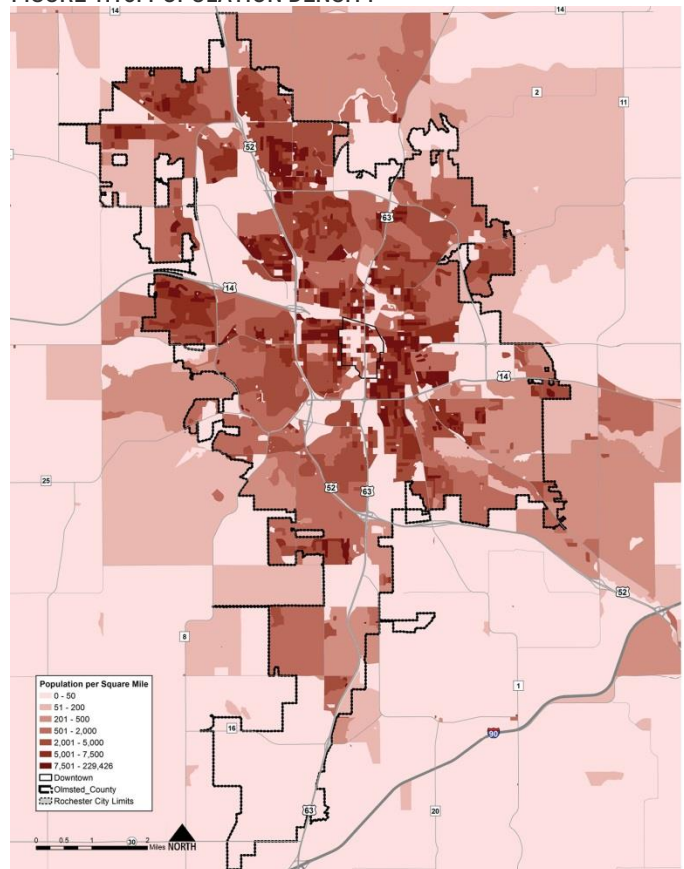
Population

Unless otherwise indicated, all demographic data shown in this section are tabulated for the city of Rochester. Where city-level data was not available, county-level data is utilized as a relative measure of city trends and projections.

As shown in Table 1.1 and Figure 1.14, Rochester's population has been increasing steadily over the past century. ROCOG projects continued growth in the next 25 years, with the city's population projected to exceed 160,000 residents by 2040.

Rochester has captured an increasing share of metropolitan area growth over the last several decades, which is a rare occurrence among central cities in the Midwest. The 2040 projections assume a continuation of this trend.

FIGURE 1.13: POPULATION DENSITY



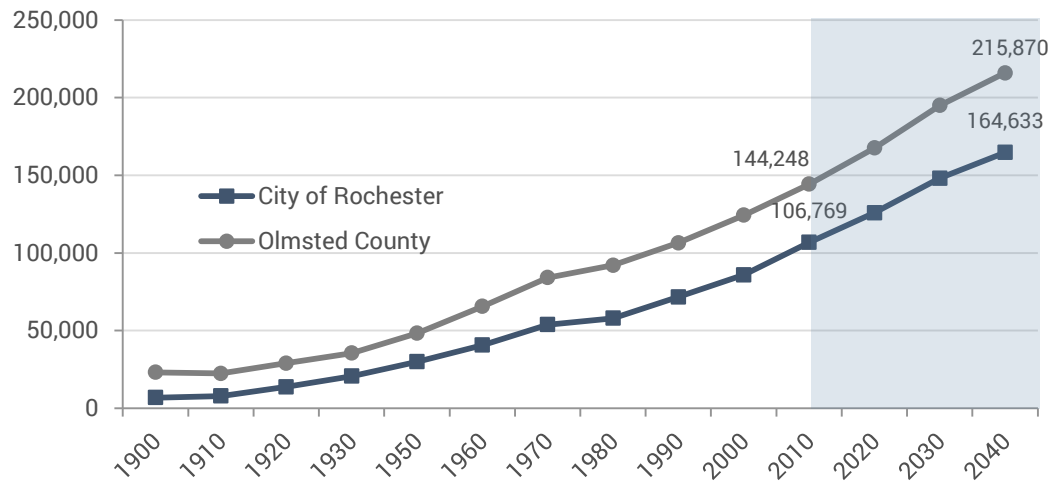
[View larger map](#)

TABLE 1.1: HISTORICAL POPULATION (1900-2010) AND PROJECTIONS TO 2040

	City of Rochester	Rochester % Change	Olmsted County	Olmsted County % Change	Rochester Share of County
1900	6,843	-	23,119	-	29.6%
1910	7,844	14.6%	22,397	-3.1%	35.0%
1920	13,722	74.9%	29,014	29.5%	47.3%
1930	20,621	50.3%	35,426	22.1%	58.2%
1950	29,885	44.9%	48,228	36.1%	62.0%
1960	40,663	36.1%	65,532	35.9%	62.1%
1970	53,766	32.2%	84,104	28.3%	63.9%
1980	57,890	7.7%	92,006	9.4%	62.9%
1990	71,590	23.7%	106,470	15.7%	67.2%
2000	85,806	19.9%	124,277	16.7%	69.0%
2010	106,769	24.4%	144,248	16.1%	74.0%
2020	125,776	17.8%	167,500	16.1%	75.1%
2030	148,046	17.7%	194,900	16.4%	76.0%
2040	164,633	11.2%	215,870	10.8%	76.3%

Source: U.S. Decennial Census and Rochester-Olmsted Planning Department projections

FIGURE 1.14: POPULATION TRENDS

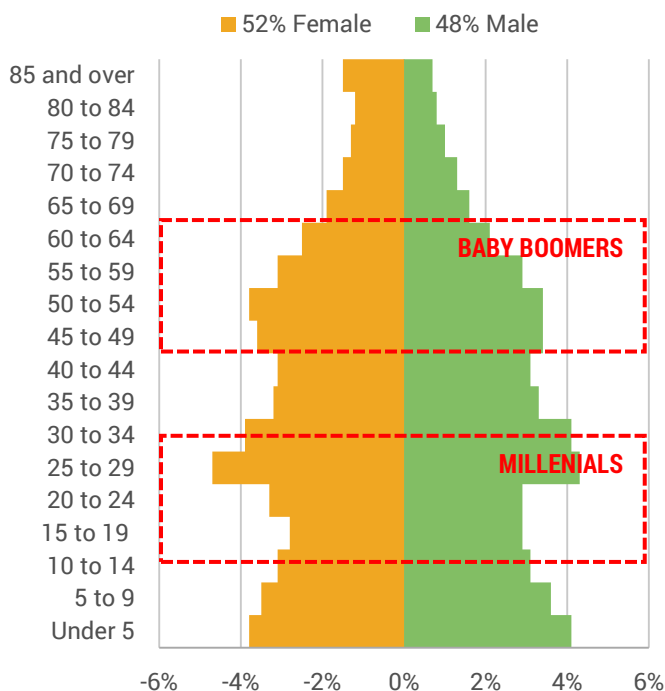


Source: U.S. Decennial Census and Rochester-Olmsted Planning Department projections

Age and Gender

- » The age distribution shown in Figure 1.15 reflects high-birth rate generations, namely baby boomers and millennials.
- » As more baby boomers move into retirement age over the next 25 years, the proportion of residents outside the labor force is likely to increase. The Minnesota Demographic Center projects that by 2040, Olmsted County will see a significant increase in residents 60 and over, as well as increases in the 20 to 35 cohort (see Figure 1.16).
- » As the proportion of the population in the labor force declines, employers will face the challenge of finding workers to replace retirees and fill new jobs that will be created.
- » The growth in the 20 to 35 age cohorts and aging up of millennials has implications for planning. Millennials have demonstrated a preference for higher density housing and urban living, walking and biking, and deferred marriage and child bearing, which (if these trends persist) will shape future housing demand, transportation needs, and lifestyle preferences.

FIGURE 1.15: AGE & GENDER DISTRIBUTION, ROCHESTER, 2010

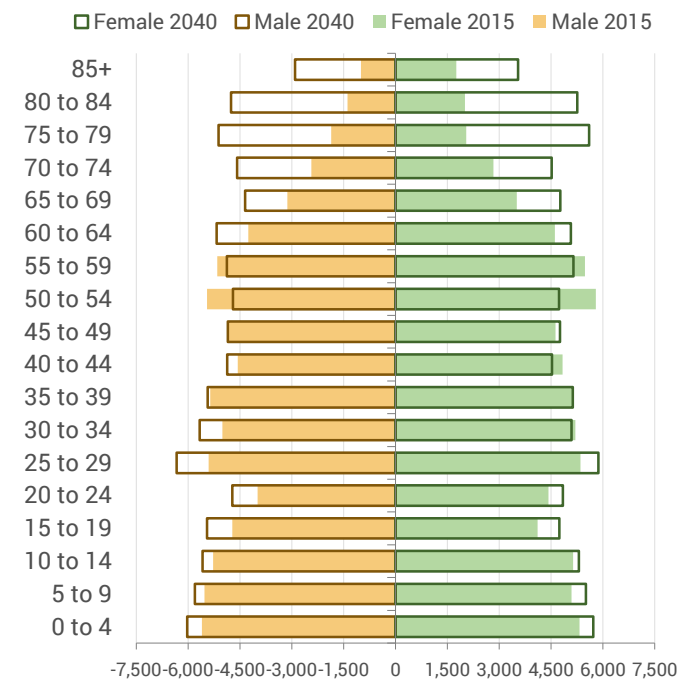


Source: U.S. Decennial Census

Race & Ethnicity

- » Racial and ethnic diversity is increasing at both the city and county levels. In Rochester, racial and ethnic minorities have grown from 14% of the population in 2000 to 21% in 2010 (see Table 1.2 and Figure 1.17).
- » 48% of net population growth in Rochester since 2000 has been among racial and ethnic minorities (non-white and/or Hispanic). The vast majority of this growth in the minority population is the result of international rather than domestic migration. In general, population growth in Rochester since 2000 has been largely the product of natural increase (births and deaths) and secondarily, international migration (see Figure 1.18 and Figure 1.19).
- » 81 Languages are spoken in the homes of Olmsted County K-12 students. In approximately 18% of households, a language other than English is the primary language spoken.

FIGURE 1.16: AGE AND GENDER DISTRIBUTION, OLMSTED COUNTY, 2015 & 2040 (PROJECTED)



Source: Minnesota Demographic Center

TABLE 1.2: RACE & ETHNICITY, 2000 & 2010

Race	2000	2010	% change
Total Population	85,806	106,769	24%
White	75,088	87,500	17%
Black or African American	3,064	6,703	119%
American Indian and Alaska Native	258	303	17%
Asian	4,830	7,246	50%
Native Hawaiian and Pacific Islander	33	39	18%
Some Other Race	996	2,188	120%
Two or More Races	1,537	2,790	82%
Ethnicity	2000	2010	% change
Hispanic or Latino (of any race)	2,565	5,508	82%

FIGURE 1.18: NET POPULATION GROWTH IN ETHNIC & RACIAL MINORITIES, 2000-2010

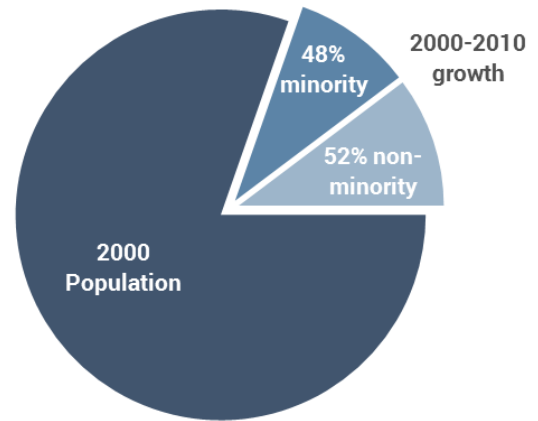
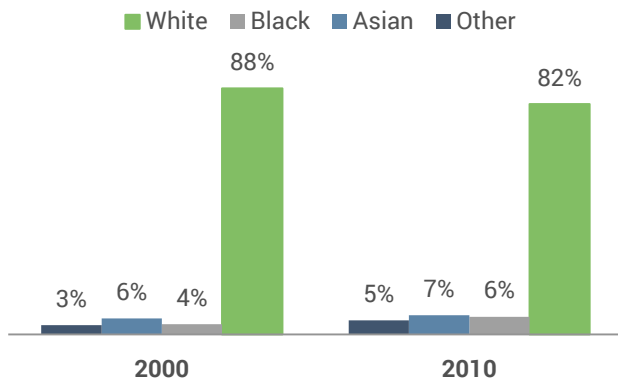


FIGURE 1.17: RACE, 2000 & 2010



Source (all on this page): U.S. Decennial Census

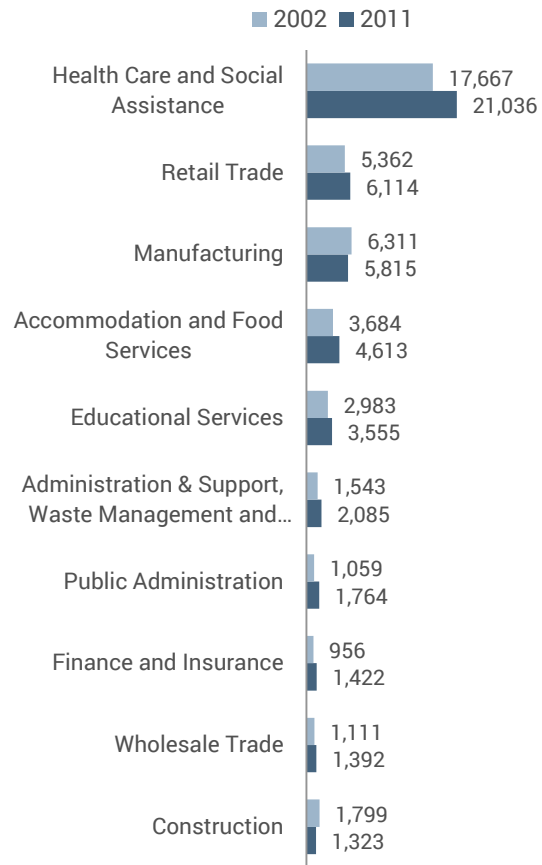
FIGURE 1.19: NET POPULATION GROWTH IN ETHNIC & RACIAL MINORITIES, 2000-2010

Race & Ethnicity	2010	2000	% change
Total Population	106,769	85,806	24%
White Alone, Non-Hispanic or Latino	84,608	73,656	15%
White Alone, Hispanic or Latino	2,892	1,432	102%
Race other than White, Non-Hispanic or Latino	16,653	9,585	74%
Race other than White, Hispanic or Latino	2,616	1,133	131%
# Minority	22,161	12,150	82%
% Minority	20.8%	14.2%	-
% Minority of Total Growth 2000-2010	47.8%	-	-

Employment

- » In 2013, forty percent of the Rochester labor force (that is, individuals working in Rochester) were employed in the health care and social assistance sector. The next four largest sectors were: Finance and insurance; retail trade; manufacturing; and accommodations/food services (see Figure 1.22).
- » In 2013, thirty-eight percent of Rochester residents were employed in the health care/social assistance sector. The next four largest sectors were: Retail trade; manufacturing; accommodations and food services; and educational services (see Figure 1.20).
- » Since 2002, the total number of jobs in Rochester has increased, with health care jobs contributing to the bulk of new job growth- followed by finance and insurance, and accommodations and food services. During this same period, jobs in manufacturing; construction; and professional, scientific, and technical services, declined.
- » **Labor Force Gap:** ROCOG projects growth of over 50,000 net jobs in Olmsted County, the vast majority of which (more than 90%) will be located in Rochester. Assuming a roughly constant labor force participation rate in future years, the County labor force growth will be roughly 24,000 workers less than County employment growth (see Table 1.3). Current unemployment rates are relatively low (4.6% across the MSA) and the labor force participation is high (84%). This suggests that growing demand for workers will contribute to a tight labor market.
- » Closing the labor force gap will require:
 - **Growth in the internal labor force** (population growth). ROCOG estimates that net migration will need to increase by two- to three-times above historic level to meet labor force needs.
 - **Increase in labor force participation rates** particularly among seniors. Recent trends show increased labor force participation among seniors as people are remaining healthy longer and social security eligibility rules change.
 - **Increase in net commuting.** Currently a large proportion of Rochester workers commute from outside the city, both from surrounding counties and from other cities in the region (see Figure 1.21). In 2011, over 1,000 workers commuted to Rochester from Minneapolis and St. Paul. Growing the commuting population will have implications for future transportation and transit needs and capacity.

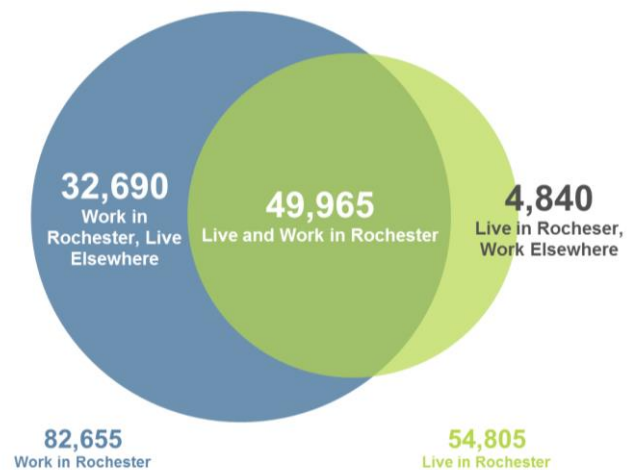
FIGURE 1.20: TOP TEN INDUSTRIES IN WHICH ROCHESTER RESIDENTS WORK*, 2002 & 2011



* Only the top ten industries for employment are shown above. These industries account for about 90% of workers in the city.

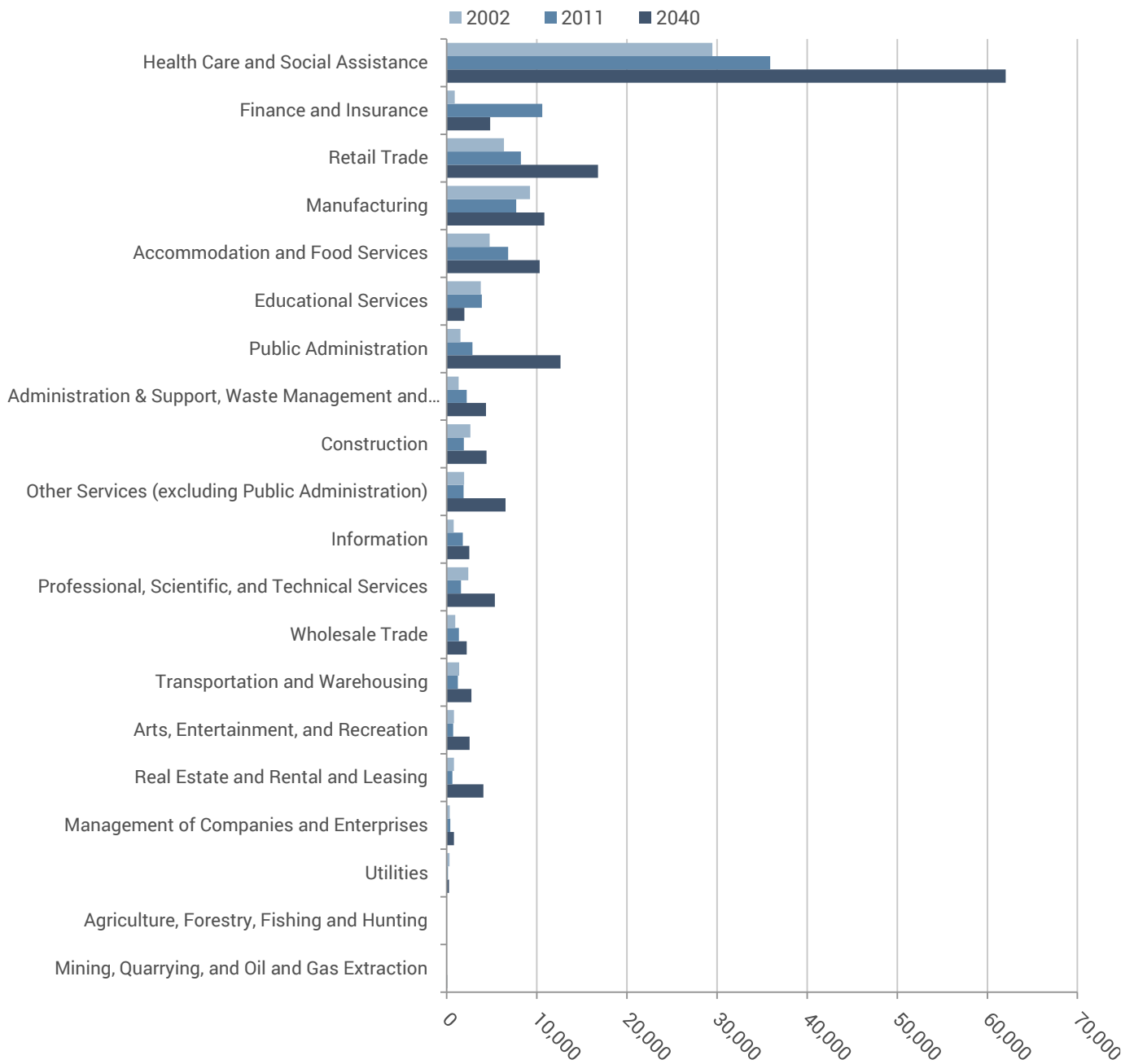
Source: US. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics

FIGURE 1.21: INFLOW/OUTFLOW OF WORKERS, 2011



Source: Census Transportation Planning Package, 2010

FIGURE 1.22: EMPLOYMENT BY INDUSTRY (WORKING IN ROCHESTER), 2002-2011, (ACTUAL) & 2040 (PROJECTED)



Source (2002-2011 data): US Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics

TABLE 1.3: PROJECTED LABOR FORCE GAP, OLMSTED COUNTY

Age Group	2010 Population	2040 Population (Projected)	Population Growth	Labor Force Participation Rate (LFPR)	Labor Force Growth
0 to 19	39,508	53,706	14,198	10%	1,420
20 to 59	79,703	98,086	18,383	90%	16,540
60+	25,037	63,408	38,371	25%	9,590
Total	144,248	215,200	70,952	-	27,550
Labor Force Growth Need:					51,700
Labor Force Gap:					24,150

Source: Rochester-Olmsted Planning Department

Households

Household Type

- » Between 2000 and 2010, Rochester added around 9,000 new households, increasing counts across all household types and shifting the household distribution.
- » Married couple families still account for about half of all households, but the share of married households with children dropped from 25% to 22%.
- » Married couple families without children increased by over 2,800 households, increasing its share of total households by one point to 28%.
- » The number and proportion of households headed by single householders increased, with single parents increasing in share from 6 to 8 percent (an increase of a little over 1,600 families).
- » The proportion of households with individuals over 65 also increased from 19% to 21%

Income

- » Median household income, adjusted for inflation, has decreased by 9 percent since 2000. Median family income decreased by 5 percent (see Table 1.5). The proportion of family households earning over \$100,000 per year has increased significantly since 2000 (see Figure 1.23), which may account for the smaller decrease in median family income.
- » In general, Rochester's income skews toward higher wage earners, with 27% of all households and 35% of all family households making over \$100,000.

TABLE 1.5: MEDIAN INCOME (IN 2013 DOLLARS), 2000 & 2010

Category	2000	2013	% change
Median household income (dollars)	\$68,643	\$63,215	-9%
Median family income (dollars)	\$84,952	\$80,485	-5%

FIGURE 1.23: FAMILY INCOME DISTRIBUTION (IN DOLLARS), 2000 & 2013

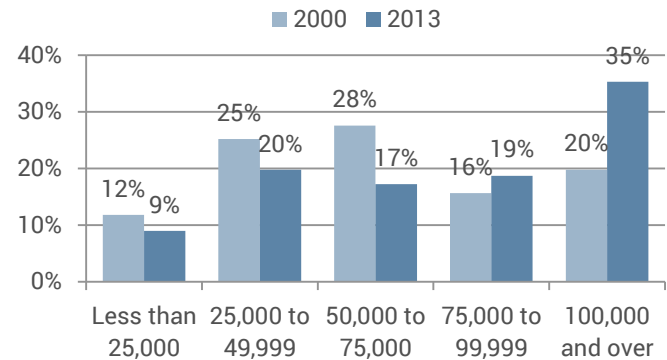


TABLE 1.6: FAMILIES AND PEOPLE WHOSE INCOME IS BELOW THE POVERTY LINE*, 2000 & 2013

Category	2000	2013
All families	5%	5%
Families with children under 18 years	8%	8%
Married couple families	2%	2%
With related children under 18 years	4%	5%
Families with female householder, no husband present	18%	18%
With related children under 18 years	22%	19%
All people	8%	9%
People under 18 years	7%	9%

Source (all above): 2013 American Community Survey, 2000 U.S. Decennial Census

TABLE 1.4: HOUSEHOLDS BY TYPE, 2000 & 2010

Family Households	2000	%	2010	%	(diff.) #	(diff.) %
All Family Households	21,478	63%	26,853	62%	5,375	-1%
Husband-wife family, no children	9,029	26%	11,877	28%	2,848	1%
Husband-wife family, with own children under 18	8643	25%	9,376	22%	733	-4%
Single householder, no children	937	3%	2,016	5%	1,079	2%
Single householder, with own children under 18	1946	6%	3,584	8%	1,638	3%
Non Family Households	2000	%	2010	%	(diff.) #	(diff.) %
All Non Family Households	12,638	37%	16,172	38%	3,534	1%
Householder living alone	10,126	30%	12,931	30%	2,805	0%
Multiple unrelated residents	2,512	7%	3,241	8%	729	0%

Source: U.S. Decennial Census

Poverty

- » Poverty rates have been fairly stable since 2000, and well below the national poverty rate (15.9%). See Table 1.6.
- » The poverty rate for families with unmarried female householders is significantly higher than other household types – 18% as compared to 2% for married couple families.

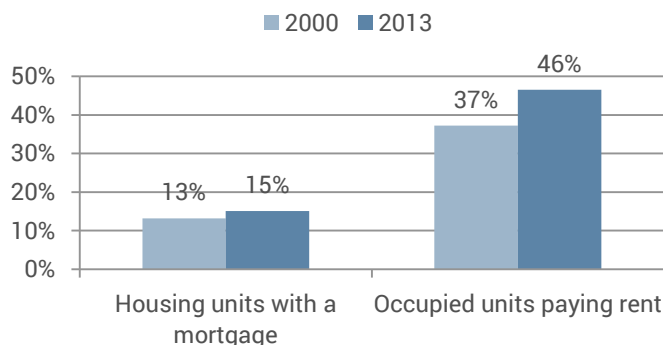
Housing Costs

- » Fifteen percent of homeowners (with a mortgage) and 46% of renters experience a housing burden (pay more than 30% of income for housing).
- » **Housing stress has greatest impact on those making the least.** 53% of owner households making less than \$50,000/year experience a housing burden, and 75% of renter households making less than \$35,000/year experience a housing burden (source: Comprehensive Housing Needs Assessment, Maxfield Research for Olmsted County, 2014)

TABLE 1.7: MEDIAN MONTHLY HOUSING COSTS (IN 2013 DOLLARS), 2000 & 2013

Category	2000	2013	% change
Median select housing costs for owners with a mortgage	\$949	\$1,283	35%
Median select housing costs for owners without a mortgage	\$413	\$450	9%
Median monthly rent	\$633	\$795	26%

FIGURE 1.24: HOUSEHOLDS EXPERIENCING A HOUSING BURDEN IN THE PAST 12 MONTHS*, 2000 & 2013



* According to the U.S. Department of Housing and Urban Development, households that pay more than 30 percent of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care.

Source (all on this page): 2013 American Community Survey, 2000 U.S. Decennial Census

Education

- » Rochester residents are generally well-educated, exhibiting high rates of college and post-secondary attainment. Forty-three percent of residents over 25 years of age hold a bachelor's degree to higher.
- » Improved educational attainment since 2000 can be attributed to the in-migration of highly educated residents. In the Rochester area, 48% of in-migrants between 2007 and 2011 held a bachelor's degree or higher, and 31% held a graduate degree or higher.¹
- » School enrollment in Rochester has increased across almost all grade levels since 2000.

FIGURE 1.25: HIGHEST EDUCATIONAL ATTAINMENT (POPULATION 25 YEARS AND OVER), 2000 & 2010

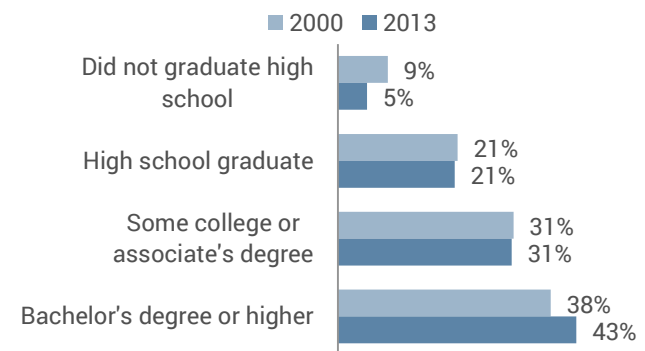
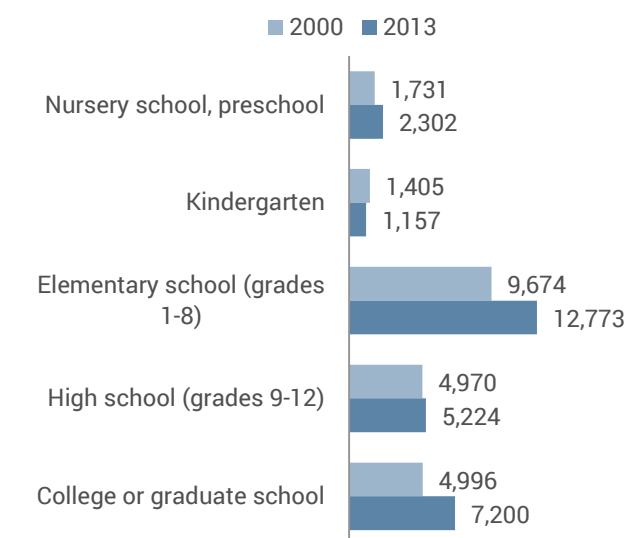


FIGURE 1.26: SCHOOL ENROLLMENT



¹ RAEDI. Community Programmatic Analysis (2013). 16.

Land Use >>

Observation of existing land use patterns provides a baseline understanding of how lands are being used in the city- that is, the type and intensity of use- as of a given point in time. The following discussion identifies overall land use distribution as well as salient patterns, concentrations, and known issues.

Overview

The existing land use designations discussed in this section are based on available information as of Fall 2014 and were derived through an analysis of current tax classification, parcel data (classified by County Property Records), ownership data, and limited visual inventory of parcels. See the existing land use map in Figure 1.28.

TABLE 1.8: EXISTING LAND USE (TOTAL ACRES)

Land Use	Acres	%
Retail/Service/Hospitality	1,239	4%
Office	575	2%
Industrial	1,129	4%
Urban Multifamily Residential (10+ units/acre)	937	3%
Mixed Single-Family/Multifamily Residential (2-10 units/acre)	6,337	21%
Large Lot Single-Family Residential (0-2 units/acre)	3,085	10%
Agriculture	2,883	10%
Institutional and Civic	3,958	13%
Vacant	246	1%
Other Built	427	1%
Other Non-Built	6,145	21%
Parks and Protected Open Space	2,747	9%
Grand Total	29,707	-

FIGURE 1.27: EXISTING LAND USE DISTRIBUTION

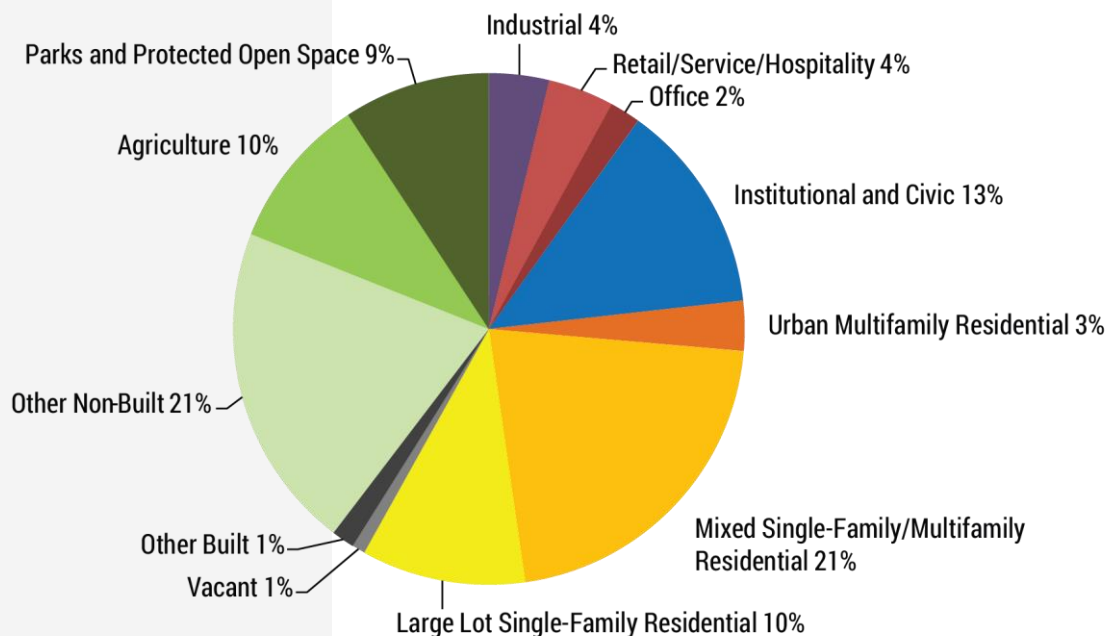
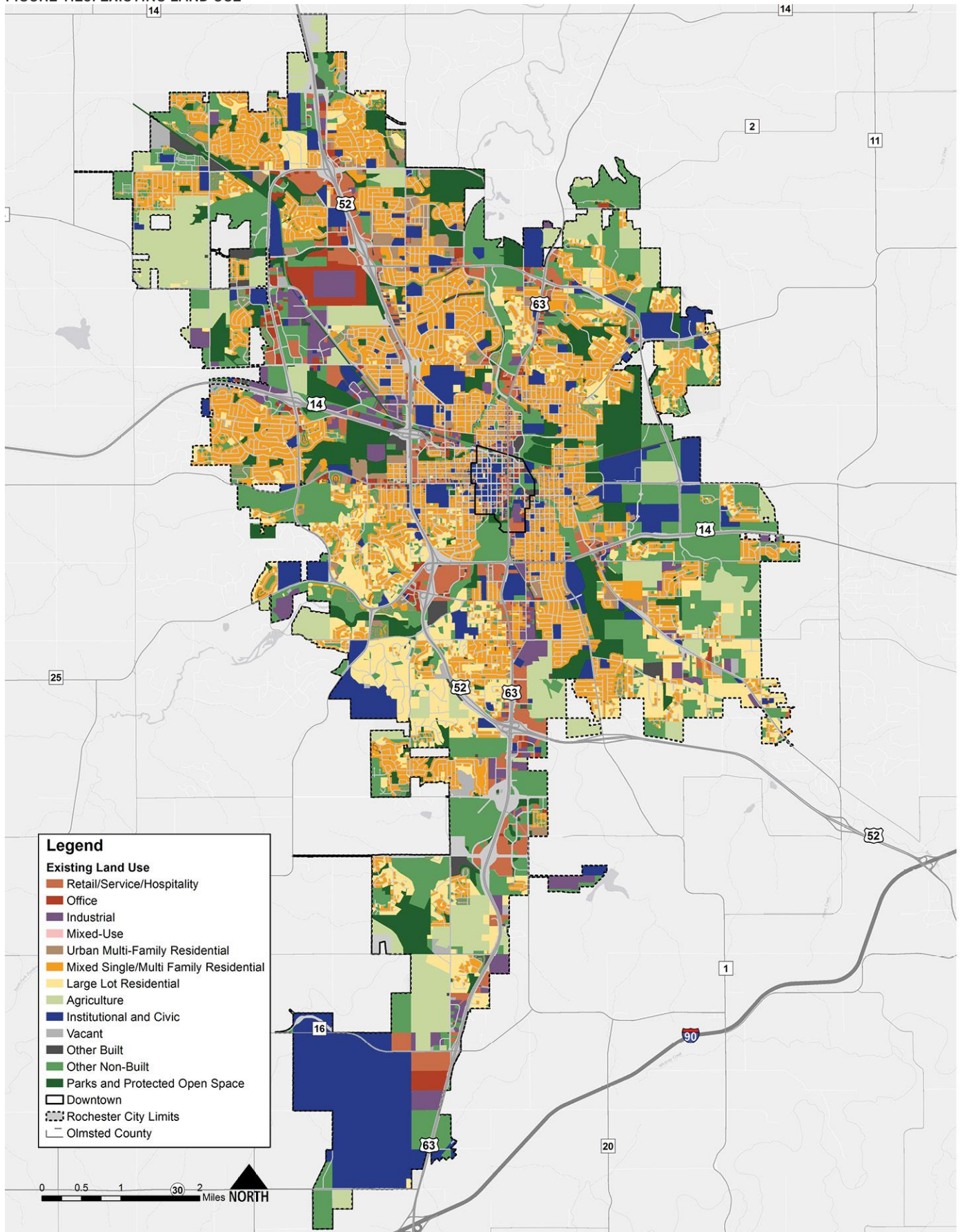


FIGURE 1.28: EXISTING LAND USE



[View larger map](#)

Residential

Residential development is the predominant land use in the city, accounting for 34 percent of the total land area. Residential uses are classified into low, medium, and high density categories, which include the following general housing types and densities.

Large Lot Single-Family Residential (0-2 units/acre)

Large Lot Single-Family Residential development includes predominantly single-family development and some multifamily development of densities **less than two units per acre**, with an average density of .12 units per acre. Over 90 percent of these properties are single family dwellings. This land use accounts for 10 percent of total land area in the city (3,085 acres) and 30 percent of residential land area. Large Lot Single-Family Residential development is concentrated in neighborhoods on the perimeter of the city furthest from the Downtown district, and generally interspersed with areas of more intense residential development. Some of these low density properties, at the time of construction, were located outside the city limits and have become part of the city under subsequent annexations.

Mixed Single-Family/Multifamily Residential (2-10 units/acre)

Mixed Single-Family/Multifamily Residential development includes single-family (attached and detached) and some multifamily development, with densities ranging from **two to 10 units per acre** and an average density of 4.8 units per acre. Over 90 percent of these properties are single family dwellings. This land use accounts for 21 percent of total land area in the city (6,337 acres) and 61 percent of residential land area.

Mixed Single-Family/Multifamily Residential development is the predominant classification for residential uses across the city. In older, Downtown-adjacent neighborhoods, residential development of this density follows a regular pattern of 45-60 foot wide residential lots platted along a rectilinear street grid, with scattered apartments or multifamily housing incorporated within the neighborhood fabric (including both medium and high density multifamily).

Outside of downtown-adjacent neighborhoods, Mixed Single-Family/Multifamily Residential development is built on a more typical suburb pattern, featuring residential lots platted along curvilinear streets and culs-de-sac. Lot widths are more variable, and often larger, within these areas.

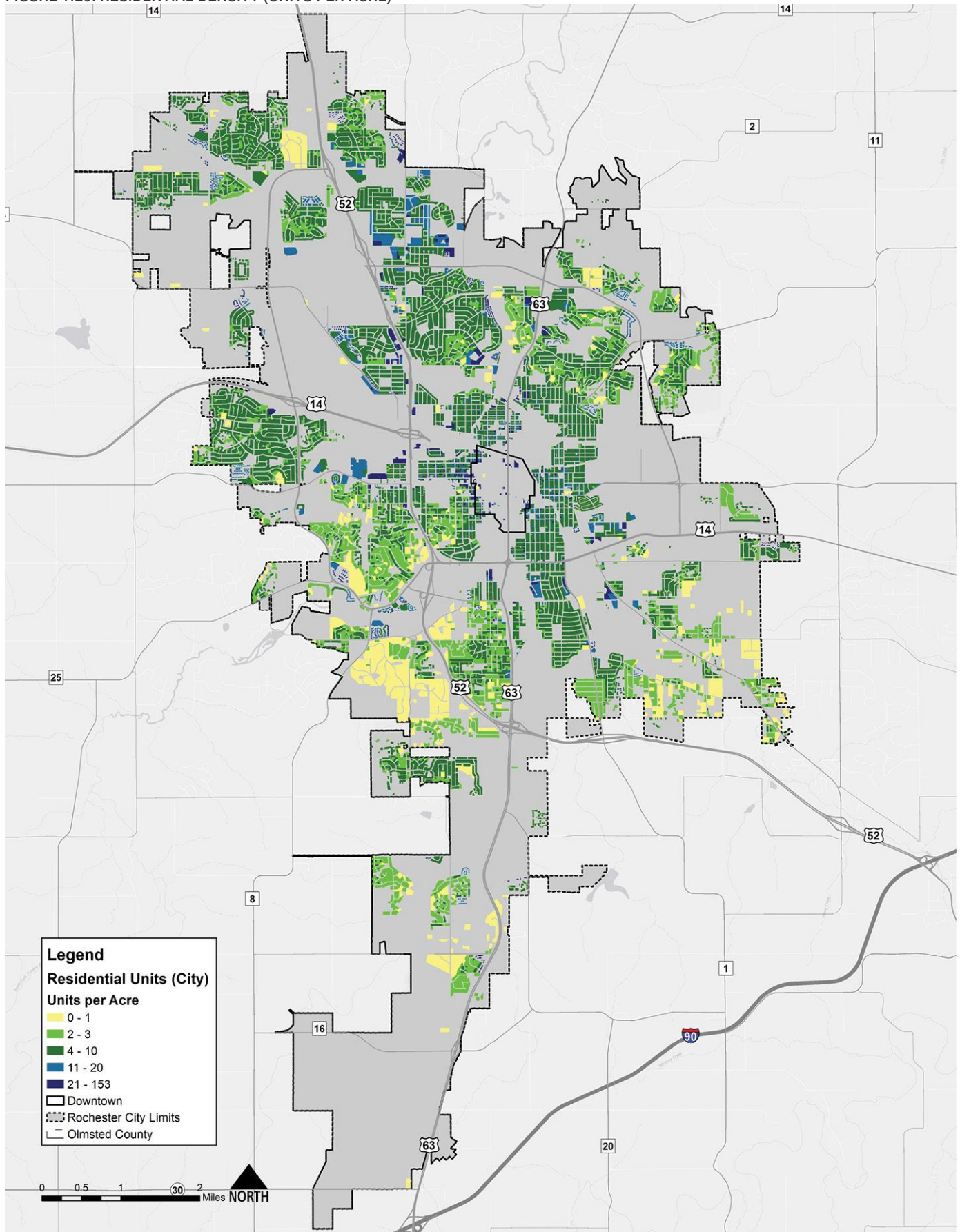
Urban Multifamily Residential (10+ units/acre)

Urban Multifamily Residential development includes multifamily development (apartments, townhomes, duplexes, triplexes, etc.) with housing densities **over 10 units per acre** and an average density of 16.4 units per acre. This land use accounts for 3 percent of total land area in the city (936.6 acres) and 9 percent of residential land area.

Urban Multifamily Residential development is concentrated on the perimeter of Downtown and in Downtown-adjacent neighborhoods. In these areas, high density housing is integrated into the urban fabric with multifamily interspersed with single family housing.

Outside of downtown-adjacent neighborhoods, Urban Multifamily Residential development is interspersed among lower density housing within a suburban street pattern. In many cases, Urban Multifamily Residential is located along or closer to major roadways and/or proximate to commercial/employment areas.

FIGURE 1.29: RESIDENTIAL DENSITY (UNITS PER ACRE)



[View larger map](#)

Commercial

Commercial land uses include retail, service, and hospitality locations, as well as office uses. In general, these land uses are located proximate to major road corridors or within Downtown Rochester.

Retail / Service / Hospitality

This land use category includes retail, services (e.g. restaurants, walk-in banks, repair shops), and hotels. This land use accounts for 4 percent of total land area in the city (1,239 acres). Retail, service, and hospitality sites are characterized by proximity to and in some cases visibility to and from major road corridors or location in key districts such as Downtown Rochester. As shown in Figure 1.30 and Figure 1.31, these uses are clustered around major road corridors, including US 52, Broadway Avenue, 12th Street, 2nd Street, and Civic Center Drive.

Within the Downtown area, where multi-story street-fronted buildings are more prevalent, shopfronts and buildings typically face directly onto public streets and are accessible by sidewalks. Outside of downtown, retail and services are concentrated in auto-oriented shopping centers anchored by chain retail destinations and box stores- or located in freestanding commercial buildings along major roadways. Limited neighborhood-serving retail and services (specialty food/retail, gas stations, etc.) can be found in residential areas as standalone commercial sites.

Office

Office uses include commercial sites that are not typically accessed by non-employees. This may include office uses with a small retail or other use components. This land use accounts for 2 percent of total land area in the city (575 acres). Like commercial retail and services, the location of office uses outside of Downtown is characterized by access to major roadways with concentrations of office adjacent to or integrated with retail, service, or industrial uses.

Office uses in these areas are typically housed in single-story buildings with surface parking. Higher density office uses can be found in the core areas of Downtown, where multi-story and mixed use buildings are more prevalent.

Health and medical-related office and services owned by the Mayo Clinic are categorized as institutional/civic uses.

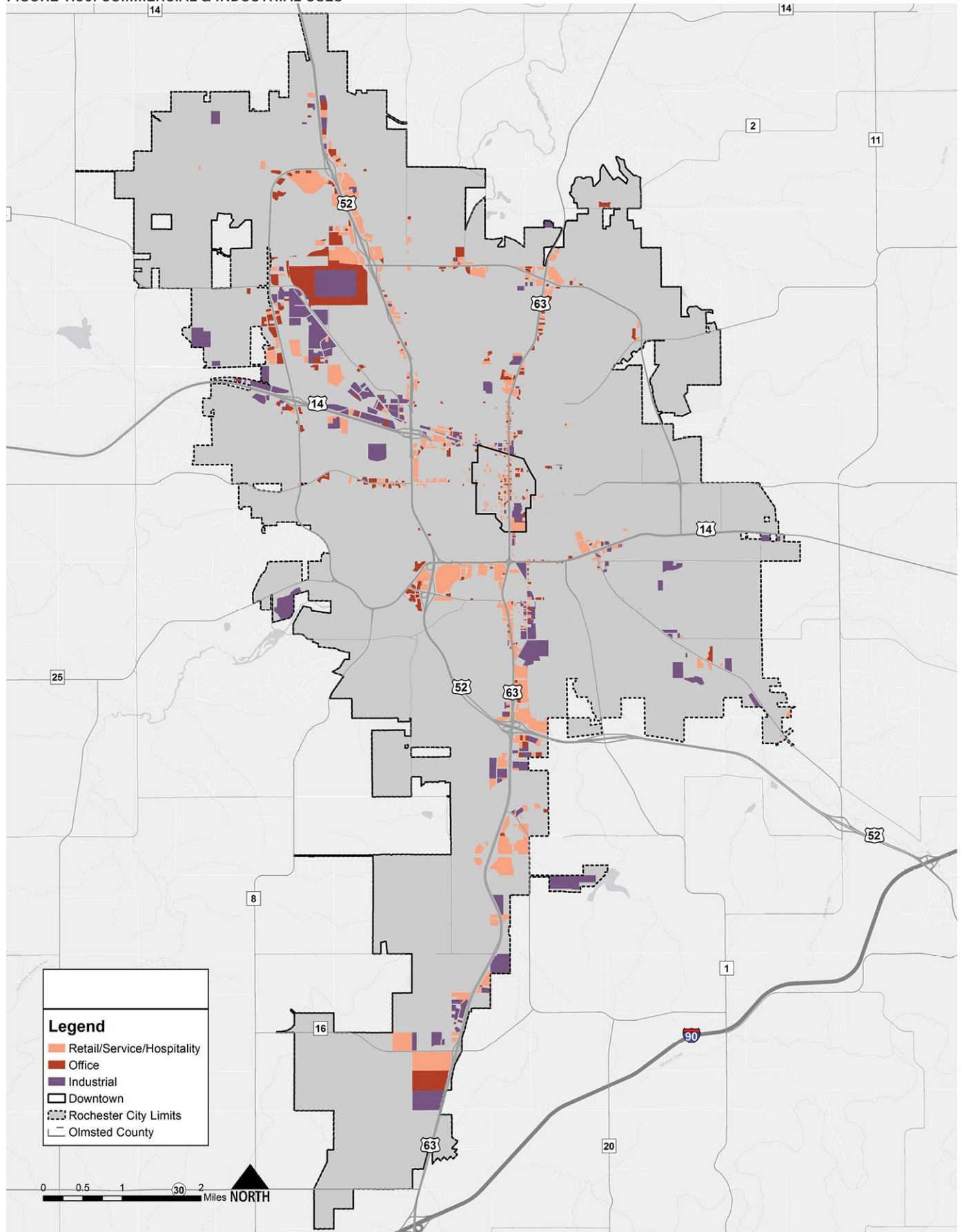
Industrial

Industrial uses include job intensive or manufacturing intensive uses that often require larger footprints and generate greater levels of noise, truck traffic, dust, or outside storage. This land use accounts for 4 percent of total land area in the city (1,129 acres).

Such uses include manufacturing, food processing, storage, warehousing, and waste disposal. Industrial sites are characterized by access to major roadways with concentrations of industrial uses adjacent to or integrated with office uses and often buffered from residential areas by agricultural or undeveloped land. There is a significant concentration of industrial uses in the northwest quadrant of the city along Valley High Drive, Highway 14, and 41st Street NW, including the IBM-owned facilities, which include over 3 million square feet of owned and leased space for engineering, manufacturing, and other technology uses. Smaller clusters of industrial uses are also located along the length of Broadway Avenue with a significant concentration southeast of the intersection with 12th Street SE (Highway 14).

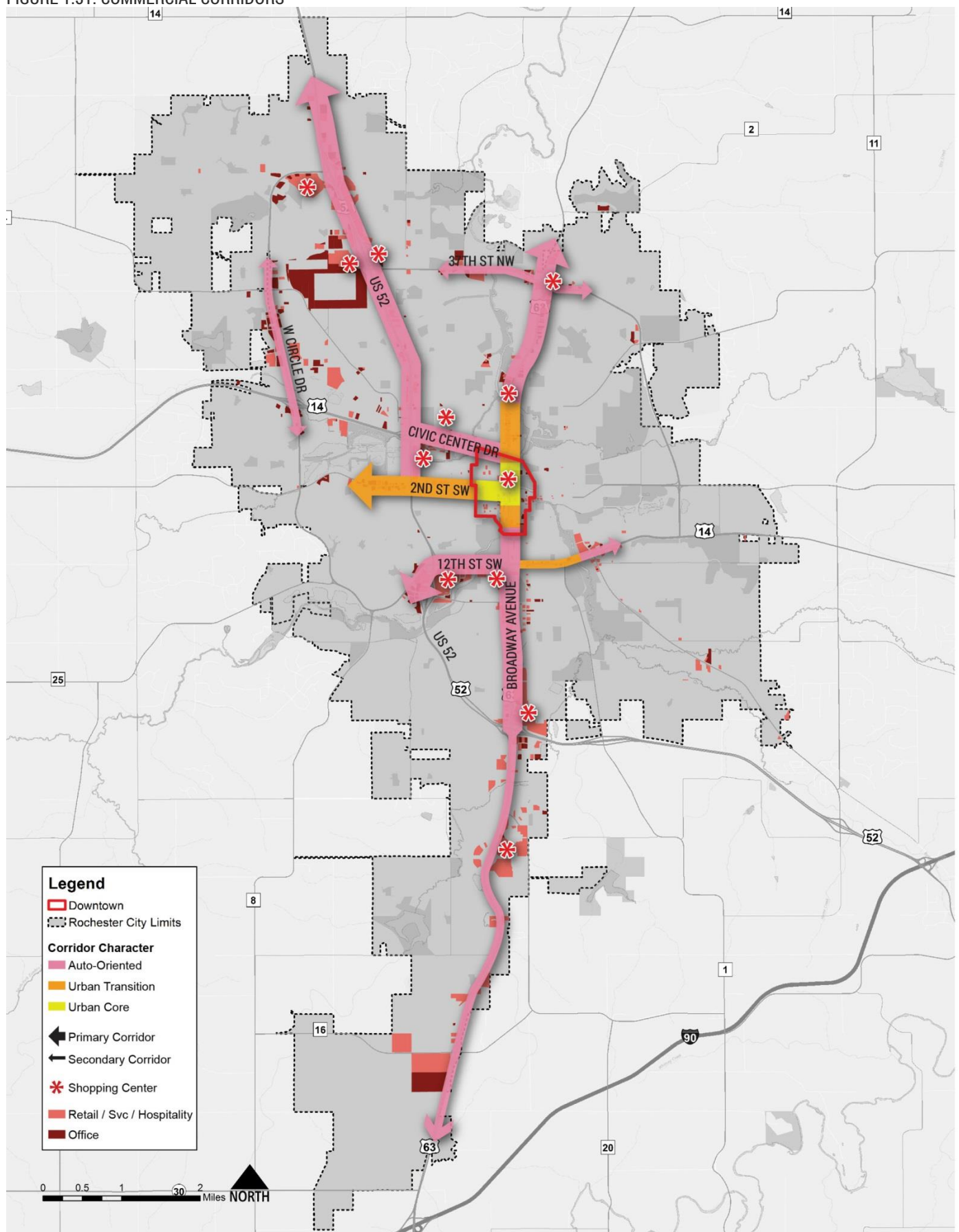
Figure 1.32 highlights key employment corridors in the city. These corridors were identified based on the prevalence of commercial and industrial land uses around the corridor; concentration of jobs in the surrounding area (jobs per square mile), and relationship to known employment centers and major employers.

FIGURE 1.30: COMMERCIAL & INDUSTRIAL USES



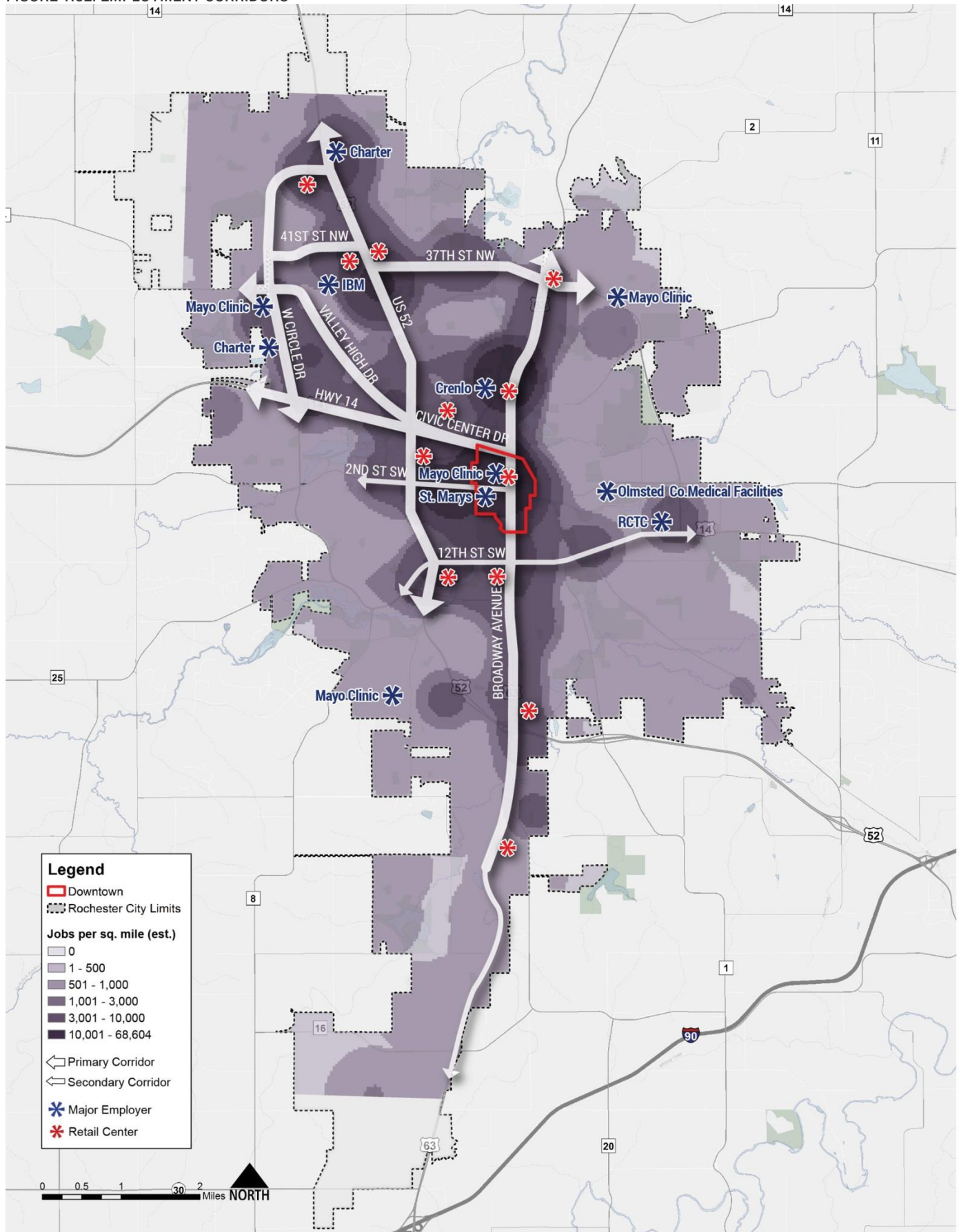
[View larger map](#)

FIGURE 1.31: COMMERCIAL CORRIDORS



[View larger map](#)

FIGURE 1.32: EMPLOYMENT CORRIDORS

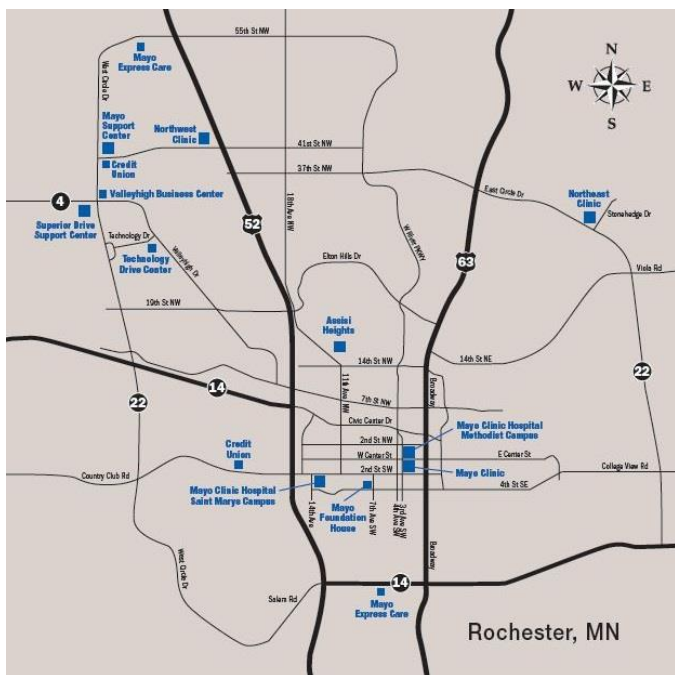


[View larger map](#)

Institutional / Civic

Institutional and Civic land uses include properties that serve a public or civic function, including schools, government buildings, places of worship, major hospitals (including all Mayo-owned facilities), and select public facilities such as airport lands, emergency services, and recreation centers. This land use accounts for 13 percent (3,958 acres) of the city's total land area, about 434 acres of is owned by Mayo.

Mayo-owned properties are concentrated in Downtown Rochester around the Mayo Clinic and its various hospital and research campuses. The Mayo Clinic also has significant land holdings to the southwest and northwest of Downtown, which include clinics, educational facilities, and laboratories.



Map of the Mayo Clinic facilities (Source: www.mayoclinic.org)

[View larger map](#)

Park & Protected Open Space

Parks and Protected Open Spaces include any parcels protected or preserved for public recreation, burial, conservation, or functions. This includes designated parkland and recreation areas, as well as cemeteries, flood control areas, and storm ponds. This land use accounts for 9 percent of total land area in the city (2,747 acres). For detailed on park types, facilities, and other open space areas, see the [Parks & Open Space](#) discussion on p. 1-46 .

Agriculture

Agriculture includes any parcels in active agricultural use. This includes farmsteads, fields, nurseries, and barns. This land use accounts for 10 percent of total land area in the city (2,883 acres). Most of these areas are located in large contiguous swaths closer to the city boundary.

Vacant

Vacant parcels are properties with at least one significant structure on the site that, according to tax data, is not currently occupied. This land use accounts for only 1 percent of total land area in the city (246 acres).

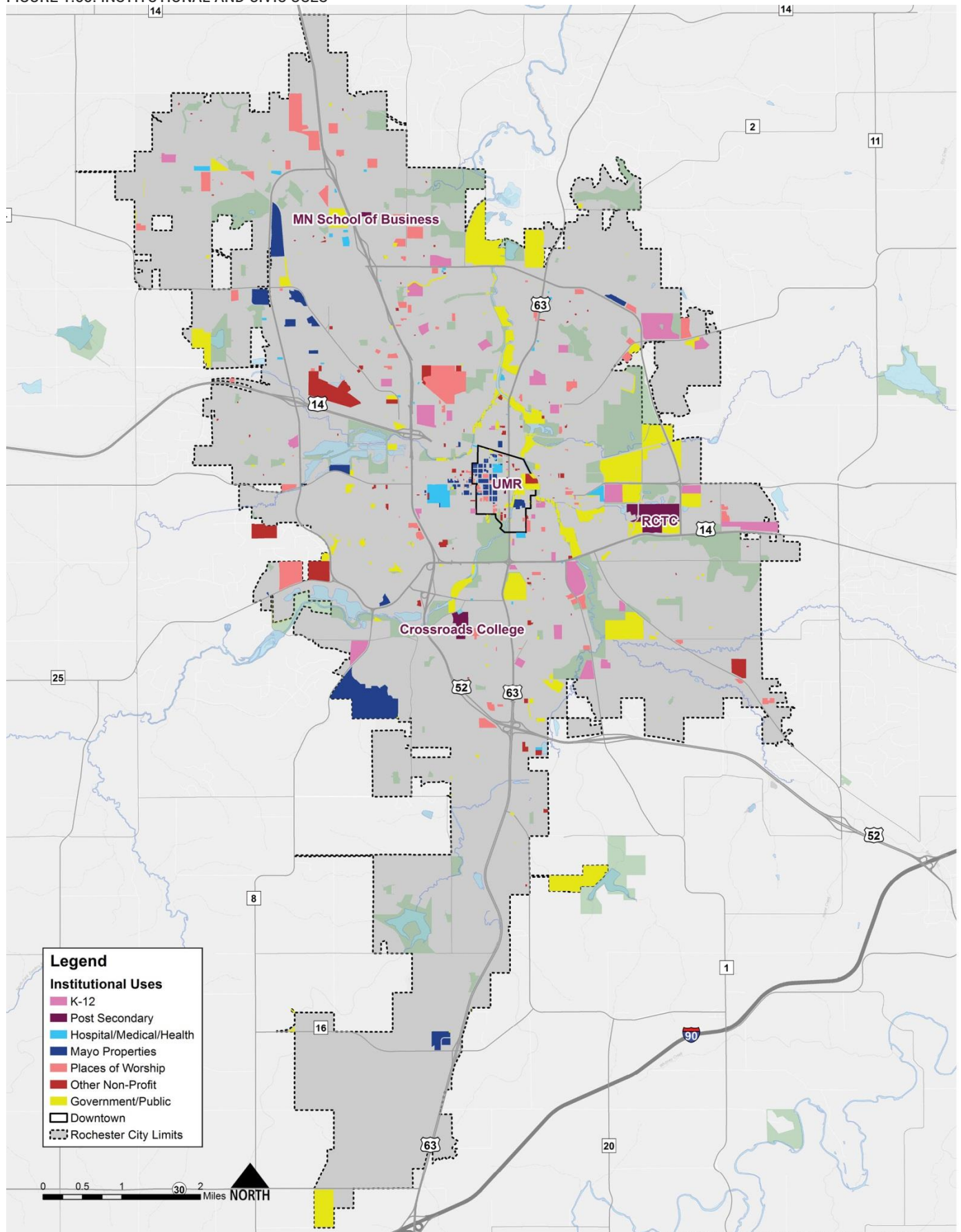
Other (Built)

This category includes properties with significant permanent structures (non-habitable) or infrastructure, including rail right-of-way (active and abandoned), parking lots, parking ramps, and public utility areas. These uses account for 1 percent of total land area (427 acres).

Other (Non-Built)

This category includes properties without significant permanent structures that may support temporary, seasonal, or intermittent uses. This includes airplane glidepaths, recreation areas (campgrounds and golf courses), residential common areas, right-of-way, and tax forfeiture properties. These uses account for 21 percent of total land area (6,145 acres).

FIGURE 1.33: INSTITUTIONAL AND CIVIC USES



[View larger map](#)

Economic Development >>

The following discussion examines the major factors shaping economic development in Rochester both today and in the future. In addition to examining regional strengths, challenges, and potential, this section identifies broader trends and practices in economic development that may inform future actions for the City of Rochester.

Overview

Rochester's track record of innovation and economic growth has positioned the city for tremendous population and employment gains, and various economic development entities have taken an active role in promoting and planning for future business growth. The summary below highlights key trends and projections shaping economic conditions in Rochester.

- » **Health Care.** Health care and social assistance jobs account for about 40 percent of regional jobs today. 70 percent of those jobs are housed at Mayo (the largest employer in Minnesota). In 2013, thirty-eight percent of Rochester residents were employed in health care and social assistance, and much of projected job growth will be in this sector.
- » **Labor Force Gap** ROCOG projects over 50,000 new jobs in Olmsted County by 2040. Assuming a roughly constant labor force participation rate in future years, the County labor force growth will be roughly 24,000 workers less than county employment growth, suggesting a significant projected labor force gap. See the [employment](#) analysis on p. 1-18 for details.
- » **Aging Population** As more baby boomers move into retirement age over the next 25 years, the proportion of residents outside the labor force is likely to increase. As the proportion of the population in the labor force declines, employers will face the challenge of finding workers to replace retirees and fill new jobs that will be created.

The following discussion of economic development plans and studies brings forward additional challenges and opportunities in Rochester.

Economic Development Plans & Studies

Journey to Growth Plan

The *Journey to Growth Plan* is a comprehensive five-year strategy coordinated by the Rochester Area Economic Development, Inc. (RAEDI) and the Rochester Area Chamber of Commerce to grow and diversify the economy of the Rochester metropolitan area (Dodge, Olmsted, and Wabasha counties).

- » The plan is structured around three key themes:
 - Expand and Diversify the Regional Economy
 - Optimize the Regional Talent Base
 - Become a Cohesive Connected Region
- » Each theme is supported by related objectives and strategies to support future planning and implementation.
- » The plan also identifies five **target sectors** that represent the region's highest value business categories for growth and development:
 - Advanced healthcare
 - Computer systems design and production
 - Food manufacturing and processing
 - Tourism
 - Transportation equipment
- » The plan's Target Sector Analysis includes an assessment of each sector, key challenges and opportunities for development, and discussion of the strategic role of each sector in regional economic development.

The following challenges and opportunities are highlighted in the *Journey to Growth Plan*:

- » **The Health Care Sector is Rochester's Top Asset and Greatest Challenge.** While health care and social assistance jobs provide a strong base for the local economy, development of other sectors can help to grow the laborforce, build economic resilience, and combat perceptions of Rochester as a single-industry community.
- » **A Dynamic and Diverse Talent Pool:** For Rochester to stand out in a knowledge driven economy, it must: welcome growing population diversity; prepare students for locally available jobs and ensure they stay in Rochester to live and work; promote [DMC](#) planning and similar efforts to make Rochester a

destination for top talent; and cultivate the next generation of business leaders.

- » **Fight the Brain Drain** Many students graduating from Rochester's post-secondary programs are not choosing to stay in Rochester or not able to find work in their field of study. Workforce development must focus not only on attracting new talent, but on building pathways and programs for existing students to train for and obtain the jobs at that are being created in Rochester.
- » **The Rochester Area's Urban Evolution Must Continue.** Professional and high-value companies weigh the attractiveness of the Rochester area against the population density and urban amenities that can be found in other major metropolitan areas. **Developing higher-density, amenity-rich, and walkable urban environments** will make Rochester a more attractive and competitive region for business and employee attraction.
- » **Quality of Life is Key.** Employees increasingly weigh quality of life factors in choosing where to live and work. This is especially true of younger workers. Rochester already competes with peer regions in terms of cost of living and other quality of life factors like community culture and safety- yet the lack of amenities and "things to do" is still perceived as a major barrier to attracting a young professional workforce.
- » **Entrepreneurial Support:** The entrepreneurial ecosystem in Rochester, while still nascent, has been developing steadily in recent years. Business development resources, incentives, and support (such as the Mayo Clinic Business Incubator, RAEDI's Seed Fund, the Rochester Entrepreneur Network, and the co-working space Cube) provide the critical infrastructure to attract and cultivate new business ventures. By leveraging the intellectual property/knowledge base at Mayo and other area employers, the city has the opportunity to attract entrepreneurs, venture capital, and other resources to the area.
- » **Development Regulatory Environment:** Input from stakeholder engagement suggests that Rochester's development regulatory environment is not business-friendly, with respondents citing high development fees, long turnaround time, and lack of "service-oriented customer-facing" personnel. A 2011 task force empaneled to review the City's development review process recommended steps

FIGURE 1.34: KEY THEMES OF THE JOURNEY TO GROWTH PLAN



Source: *Journey to Growth Plan, RAEDI*

such as hiring a citywide community development director and streamlining the permitting process.

- » **Plan for growth:** Future land use and infrastructure planning should accommodate prospective growth and ensure sufficient infrastructure (including roadways, utilities, transit options, and high-speed broadband) to support development and business needs in a manner that is both feasible and fiscally responsible.

Destination Medical Center (DMC) Development Plan – Draft as of January 2015

The Destination Medical Center (DMC) is a public-private venture between the State of Minnesota, Mayo Clinic, the City of Rochester, and Olmsted County to transform Rochester into a the world’s premier destination medical communities. The DMC recognizes the importance of private and public investments to accelerate job creation, improve quality of life, and building a strong sense of place to attract and retain a high-quality workforce.

The purpose of the DMC Development Plan is to establish a strategic business plan and framework to guide the implementation of the DMC Initiative. The Destination Medical Center (DMC) legislation passed in May of 2013 requires the creation of a DMC Development Plan to guide public and private development. As of January 2015, the Development Plan is in draft form and under review by City staff. The plan will ultimately be subject to City approval.

The update of the Rochester Comprehensive Plan will complement the DMC Development Plan by providing a framework for future land use and development policy and regulations, accommodating prospective growth

and development within the DMC project area as well as the city of Rochester as a whole.

The core objectives of the DMC are to:

- » Sustain Rochester and Minnesota as a global medical destination that offers patients a welcoming, comfortable and engaging environment in which to receive the most advanced medical care in the world
- » Grow Rochester as a magnet community attracting the most promising students and sophisticated healthcare professionals, thinkers and educators from across the globe
- » Leverage Mayo Clinic’s presence in Minnesota to ignite institutional and commercial research in an environment that encourages shared knowledge, partnerships, medical advancements and innovation
- » Create unparalleled and meaningful experiences of hope, health and hospitality for every person, every day
- » Provide the ideal patient, companion, visitor and citizen experience to become the world’s premier destination medical community

The DMC will be a major driver for future employment and population growth in Rochester. While employment and housing projections included in this existing conditions summary are based on the strength of historic growth trends and do not reflect projected impacts of current DMC planning, adoption of the DMC Development Plan (which is in draft form as of January 2014 and subject to City approval) will further increase growth projections cited here.

Economic Development Programs & Entities

There are a number of organizations engaging in economic development activities in the Rochester area. The following provides an overview of key organizations and agencies that provide economic development-related services, and describes their core mission, programs, and services.

City of Rochester

The City Administrator's office includes a Development Administration function. Staff within this division oversee the City's economic development and redevelopment programs and advise the City Council on related matters. Responsibilities include:

- » Negotiating public participation for economic development and redevelopment projects
- » Coordinating implementation of public projects with private development projects
- » Coordinating long range planning for the downtown area
- » Coordinating the planning and implementation of public improvements in the central business district including skyways and parking facilities
- » Supporting other community and economic development efforts, including working with Rochester Area Economic Development Incorporated (RAEDI)
- » Coordinating implementation of the City's Downtown Master Plan

Rochester Area Economic Development Inc. (RAEDI)

RAEDI is a non-profit economic development organization whose goal is to attract, retain, and assist the growth and expansion of businesses within the Rochester Area. Founded in 1985, RAEDI operates today with the support of a range of local businesses, non-profits, and other community development entities, and is managed by a board of business, municipal, development, and institutional leaders from the Rochester area.

RAEDI assists businesses and entrepreneurs in securing the private and/or public resources to execute their business plans. RAEDI offers sources of small business capital through its SEED Fund and an SBA 504 loan program. RAEDI also partners with other local organizations on initiatives such as Workforce 2020 and the Mayo Clinic Business Accelerator.

Services include:

- » Financial Packaging
- » Business Planning
- » Site/Location Support
- » Business/Community Advocacy

The 2014 *Journey to Growth Plan* is a comprehensive economic development strategy coordinated by RAEDI and the Rochester Chamber of Commerce (see p. 1-33). www.raedi.com

Rochester Area Chamber of Commerce

The Rochester Area Chamber of Commerce is a membership organization representing area businesses. The Chamber provides networking, marketing, public advocacy, and educational opportunities and represents the business community on economic and governmental issues.

Workforce 2020 program Workforce 2020 is an initiative supported by a coalition of community leaders (including the Chamber of Commerce, Rochester Area Foundation, RAEDI, the Department of Employment and Economic Development, and other community partners) to cultivate a competitive educational and workforce development system. Workforce 2020 researches and promotes best practices in education and workforce readiness to prepare students with the knowledge and skills to pursue post-secondary education and career-track employment positions. Workforce 2020 also invests in educational strategies geared towards young students and teachers to promote early childhood education program, STEM (Science, Technology, Engineering & Math) education, and other skills training. www.rochestermnchamber.com

Rochester Downtown Alliance

The Rochester Downtown Alliance is a non-profit corporation that represents property owners, business leaders, the city and others concerned with business and economic development in the downtown district. Rochester Downtown Alliance operates as a special service district and is funded by a portion of property taxes paid by commercial property owners located in the downtown service district. The RDA has three full-time staff and a board of directors comprised of elected, business, development, and institutional leaders.

The RDA was formed in 2005 as a public/private partnership after a year-long study by the Downtown Planning Task Force. The RDA focuses on creating

energy and activity- and promoting Downtown Rochester as “The Place to BE!”.

Services include:

- » Events Programming including SocialICE, Thursday on First and 3rd, STYLE Fashion Show, and winter festivities.
- » Placemaking and public realm improvements
 - Public space programming (Peace Plaza)
 - Streetscape visioning and design
 - Façade improvement program
- » Arts and Cultural programming grants
- » General promotion of downtown events and business

www.downtownrochestermn.com

Convention and Visitors Bureau

The RCVB is a non-profit organization that serves as a primary point of contact for travel and tourism coordination, including visitor services and convention/meeting planning. The mission of the Rochester Convention and Visitors Bureau is to create a public/private partnership to promote Rochester as a convention, sports and leisure destination. Funding for the Rochester Convention & Visitors Bureau (RCVB) comes from a local lodging tax that is collected from visitors staying in local hotels. www.rochestercvb.org

SCORE (Southeast Minnesota Chapter)

SCORE is a national non-profit association whose mission is to “foster vibrant small business communities through mentoring and education”. The Southeast Minnesota Chapter of SCORE is based out of Rochester and provides free and low-cost business support services, mentoring, seminars, and workshops for start-up and existing businesses in the region.

www.seminnesota.score.org

Destination Medical Center Corporation (DMCC) & Economic Development Agency (EDA)

The Destination Medical Center (DMC) legislation passed in May, 2013 authorized two new DMC entities to manage the DMC initiative. The Destination Medical Center Corporation (DMCC) is a public, non-profit established by the City of Rochester. The DMCC’s job is to develop and approve the development plan, and to make decisions about how public funds should be used in keeping with the goals of the development plan. The DMCC oversee planning and implementation of the DMC to ensure alignment with the intent and public purpose defined by state statute.

The DMC Economic Development Agency (EDA) is a private, non-profit created by Mayo Clinic to work with the DMCC and community partners to develop and implement the DMC vision. Primary functions of the EDA include:

- » Assisting the DMCC in developing and marketing the DMC
- » Collaborating with the City, County and other community representatives
- » Working with private developers to help facilitate private investments that support the DMC vision
- » Providing services to assist the DMCC and City in implementing the goals, objectives and strategies in the Development Plan

Mayo Clinic Business Accelerator

The Mayo Clinic Business Accelerator is a joint venture of RAEDI, the Mayo Clinic, and the City of Rochester to promote local and regional economic development through new company creation and expansion. The Business Accelerator provides collaborative space for start-up businesses and venture capitalists and also works with existing companies and service providers to support entrepreneurial ventures. The Business Accelerator opened in 2013 in the Minnesota BioBusiness Center, located near the Mayo Clinic in Downtown Rochester, and has plans to expand its facilities within the current location.

<http://www.mcbusaccel.com>

Rochester Entrepreneur Network

The Rochester Entrepreneur Network (REN) hosts events and forums to promote networking among local entrepreneurs, helping to cultivate a robust startup ecosystem in Rochester. REN events are typically hosted or sponsored by local organizations such as Cube.mn (a local co-working space), Mayo Business Accelerator, and the University of Minnesota Rochester.

THIS PAGE INTENTIONALLY LEFT BLANK

Housing >>

The availability of high quality and affordable housing options plays a critical role in attracting and retaining residents to any city. In Rochester, where residential uses comprise a third of the city's land area, housing is also a defining characteristic of the physical form and appearance of the city. The following discussion examines current housing conditions and characteristics, as well as opportunities and challenges with regards to meeting future housing demand.

Housing Profile

The following profile incorporates findings from the 2014 *Comprehensive Housing Needs Assessment for Olmsted County*. The report examines current and future market conditions in Rochester, demographic and housing characteristics, and employment and development trends as they pertain to housing needs and demand. The report projects housing demand for submarkets in the Olmsted County market area from 2013 through 2030 and provides recommendations for the type and amount of housing that should be developed.

Housing Types & Location

- » The existing housing stock is primarily single family detached or attached units (72% of close to 43,000 occupied units). See dwelling types shown in Figure 1.36 and Table 1.9.

Tenure

- » The majority of housing units in the city are owner-occupied (70%).
- » Share of owner-occupied units decreased slightly between 2000 and 2010 (75.7% to 74.9%), reflecting the impacts of the recession and a shift from ownership to rental.
- » Rental vacancy rates in Rochester in 2013 were low, particularly for affordable and subsidized units (4.5% for market rate units, 1.4% for affordable units, and 0.0% for subsidized units). Low vacancy rates for affordable and subsidized units suggest ongoing challenges for low and moderate-income households to secure affordable housing.

Age of Housing

- » 20% of housing units in Rochester were built since 2000, and 30% were built in the 1980s and 1990s.
- » Over 4,500 units were permitted in Rochester between 2004 and 2012, accounting for 78% of residential building activity in the county. The majority of units permitted were single family (72% and 75% for Rochester and Olmsted County, respectively).
- » See age of housing shown in Figure 1.37 and Table 1.10.

Housing Burden

- » Low vacancy rates for affordable and subsidized units limit housing options for renters and contribute to rising rental costs. An income-to-cost comparison shows that rental rates are more burdensome for renters than home prices are for homeowners. Only about 40% of rental households in the Rochester area can afford the average market rate rent (\$967) whereas almost 70% of ownership households can afford entry level home prices (\$202,570, includes single and multi-family resales).
- » **A significant number of households in Rochester are experiencing a housing burden** (i.e. paying more than 30% of income for housing). This issue is most pronounced for renters and low and moderate income households. 53% of owner households making less than \$50,000/year experience a housing burden, and 75% of renter households making less than \$35,000/year experience a housing burden.
- » See [Housing Costs](#) discussion p. 1-21.

Impact of Demographic Trends on Housing Demand

- » The baby boomer generation and the 18 to 34 age cohort are projected to see the higher growth rates in coming decades. These shifts will impact housing demand, and the need for alternatives to the predominantly single family housing stock. Seniors and middle-aged persons may prefer **smaller-scale and lower-maintenance housing options**. Young single adults and couples will increase demand for rental units and starter homes.
- » Continued household and population growth is anticipated, with Rochester's population projected to increase by approximately 18% and households projected to increase by 22% between 2010 and 2020. Similar rates of increase are projected for 2020 to 2030, with a total growth of about 20,000 households projected from 2010 to 2030. At the same time average household size is declining- a result of social trends such as families delaying marriage, growing senior population, and couples deciding to have fewer or no children. **Future housing development will need to accommodate the shift to smaller household sizes**, as well as generally increasing the supply of housing units.
- » A growing share of non-family households, single-parent households, and married couples without children suggests **increasing demand for multifamily and affordable housing options**. These family types

may include empty-nesters and retirees who may be looking to downsize, as well as younger couples who are deferring having children and may not desire the space and commitment of a single family home. These groups may be drawn to more urban options such as apartments and townhomes that offer access to amenities and lower costs/maintenance.

TABLE 1.9: HOUSING UNITS IN STRUCTURE, 2000 & 2010

Units in Structure	2000	%	2010	%
Total housing units	35,224	-	45,976	-
1-unit, detached	21,350	61%	27,763	
1-unit, attached	2,167	5%	4,676	10%
2 units	1,287	3%	1,523	3%
3 or 4 units	2,334	5%	2,145	5%
5 to 9 units	1,475	3%	1,223	3%
10 to 19 units	1,370	3%	1,452	3%
20 or more units	4,433	10%	6,076	13%
Mobile home	803	2%	1,118	2%
Boat, RV, van, etc.	5	0%	0	0%

Source: 2007-2011 American Community Survey, 2000 U.S. Decennial Census

TABLE 1.10: YEAR STRUCTURE BUILT, 2000 & 2010

Year Built	Number	Percentage
Total housing units	45,976	-
2005 or later	872	2%
2000 to 2004	9,687	21%
1990 to 1999	6,260	14%
1980 to 1989	5,492	12%
1970 to 1979	6,870	15%
1960 to 1969	6,184	13%
1950 to 1959	5,290	12%
1940 to 1949	1,895	4%
1939 or earlier	3,426	7%

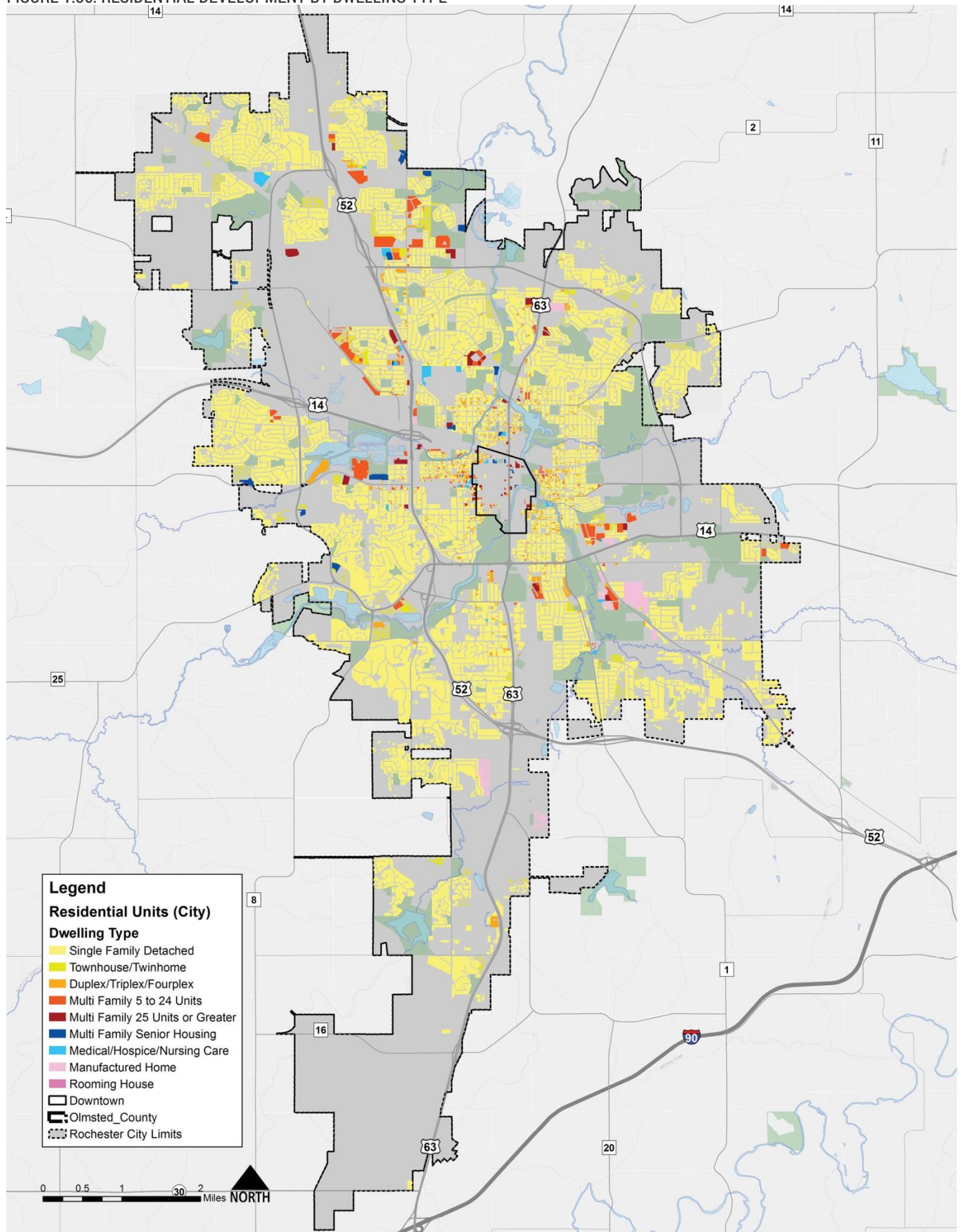
Source: 2007-2011 American Community Survey, 2000 U.S. Decennial Census

FIGURE 1.35: MATRIX OF PREFERRED HOUSING TYPES BY HOUSEHOLD SIZE



Source: Maxfield Research

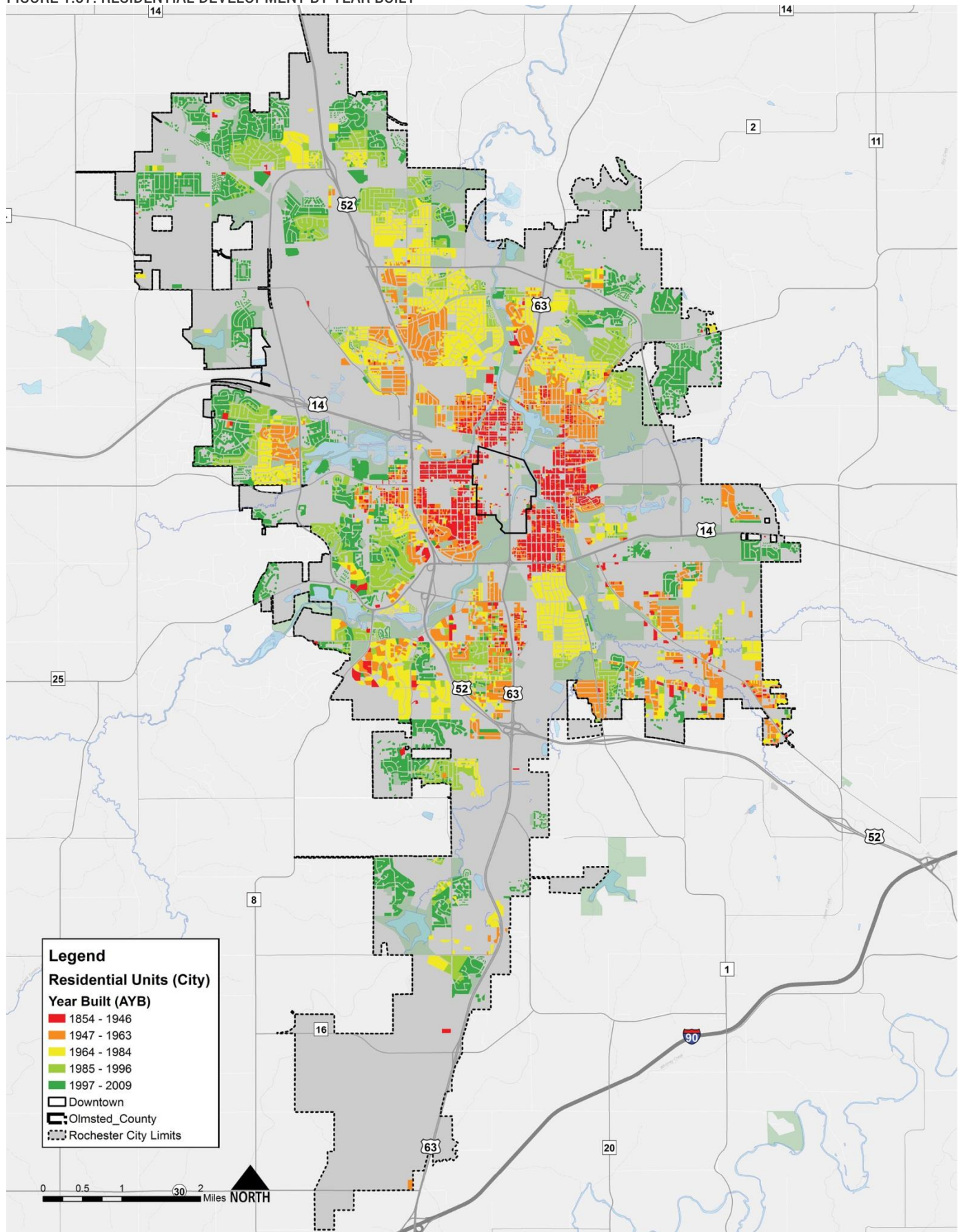
FIGURE 1.36: RESIDENTIAL DEVELOPMENT BY DWELLING TYPE



Source: Rochester-Olmsted Planning Department

[View larger map](#)

FIGURE 1.37: RESIDENTIAL DEVELOPMENT BY YEAR BUILT



Source: Rochester-Olmsted Planning Department

[View larger map](#)

Projected Housing Demand

- » The Rochester submarket is projected to add 9,300 households this decade and will account for 80% of total housing demand in the Olmsted County market area, with the city capturing 77.5% of the for-sale market and 90% of the rental market. See housing demand summary in Table 1.11.
- » The housing assessment projects demand for 5,889 single family and 2,922 multifamily for-sale units in Rochester between 2013 and 2030, with the highest demand for modest and move-up single-family units, and move-up multifamily units. These projections account for 78% of the total projected single family demand for the County, and 90% of projected multifamily demand.
- » The housing assessment projects demand for 6,410 rental units, assuming a distribution of 41% market rate, 29% affordable, and 30% subsidized units. These projections account for about 90% of total projected rental demand for the County.
- » The housing assessment projects demand for an additional 2,144 units of senior housing by 2020, with the greatest demand for active adult rental and affordable rental units. That excess demand number rises to 3,246 by 2030.

TABLE 1.11: PROJECTED HOUSING DEMAND (IN HOUSING UNITS), CITY OF ROCHESTER, 2013-2030

Product Type	2013 to 2020	2020 to 2030	2013 to 2030
For Sale Housing	3,233	5,578	8,811
Single Family	2,263	3,626	5,889
Multifamily	970	1,952	2,922
Rental Housing	2,626	3,783	6,410
Market Rate	1,079	1,555	2,634
Affordable	764	1,101	1,865
Subsidized	782	1,128	1,910
Product Type	2013	2020	2030
Senior Housing*	2,822	2,144	3,246
Active Adult	2,114	1,358	2,062
Service-Enhanced	708	786	1,184

Source: Comprehensive Housing Needs Assessment for Olmsted County, 2014

*Note: Demand for each benchmark year is a "point in time demand" and not a cumulative demand for each year.

City Policy on Affordable Housing & Diversity

The City's current land use plan identifies the critical shortage of affordable housing units in the city as a key issue, and underlines a commitment to building an inclusive community that supports economic, racial, and cultural diversity by:

- » Supporting the Olmsted County Human Rights Ordinance and the work of the Olmsted County Human Rights Commission in implementing the Ordinance
- » Supporting low income tax credit housing, and other subsidized housing of high quality, in locations that are accessible to employment, neighborhood amenities, and commercial services
- » Supporting well-designed private development proposals that include townhouses, condominiums, apartments, and appropriate commercial uses as part of neighborhood development areas
- » Enforcing minimum standards for housing and enforcing such ordinances as the Disorderly Use Ordinance in order to address neighborhood concerns about crime and potential impacts on property values
- » Increasing the supply of land zoned for lower cost housing, especially providing for mixtures of housing by style and cost
- » Providing for neighborhoods that are integrated by income class, race, ethnicity, age, and ability, and that are accessible to all modes of travel by all age and ability levels
- » Providing incentives to developers to accommodate affordable housing up front as part of well-planned neighborhoods
- » Communicating to neighborhood groups and community members that lower income households are not equivalent to lower quality families; that the "goodness" of a neighborhood is not measured by the price of its structures but by the character of its residents; and that the quality of a community is not measured by the degree to which it is exclusive
- » Encouraging neighborhood organizations to create a welcoming environment in all neighborhoods for persons of diverse age, ability, race, ethnic, and economic backgrounds

Challenges & Opportunities

- » **Additional Growth Factors** Future growth rates stand to surpass projections cited in the housing assessment, contingent on several planned and potential development projects. Principally, the Destination Medical Center (whose forthcoming Development Plan is slated for adoption by the City in the coming year) stands to compound population growth estimates and housing demand projections. Future growth of the University of Rochester Minnesota campus and student population, as proposed in the UMR Master Plan, has the potential to drive further population growth in and around Downtown Rochester and increase demand for student rental housing. Similarly, a high-speed rail connection between the Twin Cities metro and Rochester (a concept still in preliminary planning stages), if implemented, could impact future in-commuting and out-commuting patterns, as well as future development demand.
- » **Changing Demographics and Lifestyle Choices** Changes in the demographic makeup of the city (household composition, age, and race) as well as changing lifestyle choices (increased mobility, preference for rentership, interest in urban living) will shape the housing market in Rochester in future years. Creating alternative housing options to the city's predominantly single family housing stock will be critical to meeting future housing demand. Additionally, **Rochester will need to increase its supply of affordable and subsidized units** through new development as well as providing new market rate move-up units that will open up affordable units.
- » **Housing Levy** The Olmsted County HRA does not collect a HRA levy as permitted under Minnesota statutes, and as a result, does not provide housing programs to the same level as HRAs that have enacted a levy.
- » **The Rochester Area Foundation/First Homes Land Trust** has been highly utilized in recent years, and while it remains active, the majority of funding the program received has been dispersed. Given the rising demand for affordable housing options, expansion of this program through funding partners is recommended.
- » **Rising land costs** will increase acquisition costs for developments and home builders, driving up the retail sales price of homes.
- » **Lot Supply** There are approximately 1,500 vacant developed lots at year-end 2013, resulting in a three-year lot supply (based on an estimated annual absorption of 500 single-family lots). New lots will need to be platted to meet growing demands.

Housing Programs & Entities

See the *Comprehensive Housing Needs Assessment for Olmsted County* for a comprehensive list of housing programs and resources.

Olmsted County Housing & Redevelopment Authority (OCHRA)

The mission of OCHRA is to provide Olmsted County residents opportunities to obtain quality, affordable housing. The Olmsted County HRA administers programs that provide rental assistance to tenants and rehabilitation funds to both homeowners and rental property owners. In addition, the Olmsted County HRA manages county-owned rental properties and partners with local agencies to provide other programs to increase the availability of affordable housing to residents of Olmsted County. The Olmsted County HRA is responsible for the maintenance and upkeep of county-owned properties.

www.co.olmsted.mn.us/cs/ochra

First Homes Program (Community Land Trust)

The First Homes Program is a program of the Rochester Area Foundation (RAF), a non-profit philanthropic organization serving counties in the greater Rochester area. The First Homes provides a range of services and assistance to enable home ownership opportunities for low and moderate income families- and to preserve housing affordability in the Rochester area.

First Homes operates a community land trust that creates affordable housing by taking the cost of land out of the purchase price of a home through a ground lease and resale formula. Through the community land trust, financial assistance, and other homeowner services, the program has provided subsidies to over 719 households through homeownership, funded nine multifamily rental projects (totaling 423 units), and generated over \$90 million in State, Federal, local and private funding. www.firsthomes.org

Rochester Community Housing Partnership (CHP)

www.rochhp.org

The Rochester Community Housing Partnership (CHP) is a non-profit organization that supports education and advocacy to support affordable housing and homeownership. CHP has also proposed and initiated several affordable housing rental projects in partnership with local institutions and organizations. Services include:

- » Home buyer education
- » Pre-purchase counseling
- » Homeowners counseling / foreclosure counseling

Rochester Area Builders

Rochester Area Builders, Inc., chartered in 1953, is a professional organization of commercial & residential builders, remodelers, developers, and associated businesses dedicated to advancing the building industry in Southeast Minnesota. The organization provides leadership, education, networking, and information resources to our members, community, and government officials. www.rochesterareabuilders.com/

THIS PAGE INTENTIONALLY LEFT BLANK

Parks & Open Space >>

This section provides an inventory and assessment of Rochester's existing parks, open spaces, and natural systems. Much of the information in this section examines assets at the city scale to understand access to and distribution of resources around the city. Discussion of natural features and protected areas looks more broadly at connections and landforms that extend beyond the city limits.

Overview

With more than 100 parks, recreational facilities, and open spaces, the City's parks system provides an array of options for residents and visitors to get outside and stay active. In addition to providing for recreational opportunities, the system plays a critical role in protecting and preserving sensitive natural areas.

A community asset inventory conducted in 2012 identified the City's parks and trails system as an important community asset, one that supports residents' core values and preferences. Residents expressed a preference for spending free time outside of the house in parks and public spaces, as well as a value for low-cost or free activities. The inventory also underscored the need for usable indoor recreation spaces to support a variety of year-round activities.

The parks and open space system is comprised of a range of assets and facilities, from playgrounds to regional parks, that support various activities, community needs, and geographic areas. As illustrated in Figure 1.38, the City's park assets are classified into the following categories:

Regional Park: These parks are typically larger than 100 acres and feature regionally significant facilities, attractions, or programming. These parks are intended to serve city-wide needs and attract residents and visitors alike.

Community Park: These parks are typically between 10 and 50 acres, often offering a combination of active and passive programs and facilities. These parks serve local needs for residents within 1-3 miles of the park.

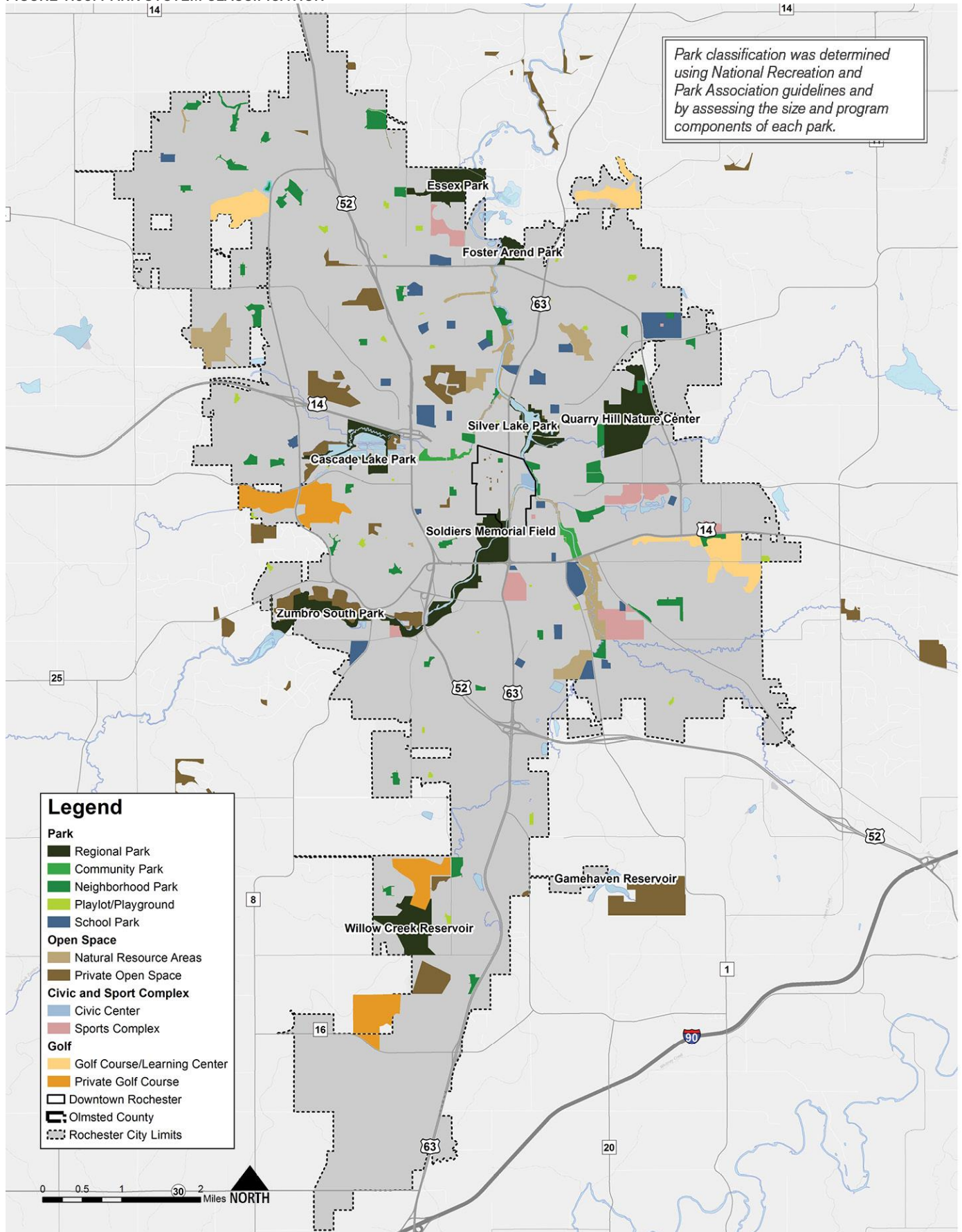
Neighborhood Park: These parks are typically between 2 and 10 acres, programmed for active and/or passive use. Programming may be more limited than a community park, serving residents within a half mile.

Playgrounds and Playlots: These parks are typically between 0.1 and four acres, and feature primarily playground equipment and small lawn areas. The parks typically serve residents within a half mile.

School Park: Park spaces owned and operated by a school with features such as playgrounds, basketball courts, field space, and/or passive recreation areas.

Open Space: Open space includes land set aside for the preservation of natural resources, stormwater treatment areas, buffers, remnant landscapes, and areas with significant aesthetic qualities or views.

FIGURE 1.38: PARK SYSTEM CLASSIFICATION



Source: Rochester-Olmsted Planning Department

[View larger map](#)

Park Inventory & Access

The following inventory quantifies park space available in the city of Rochester, as well as the level of geographic access across the city as a whole. These analyses allow us to benchmark current park access and identify potential service gaps or deficiencies.

Table 1.12 shows total count, acreage, and acreage per 1,000 residents for parks and open space within the city of Rochester. Currently, there are **32 acres of parkland per 1,000 residents**. The City’s previous land use plan identified one acre per 50 residents (or 20 acres per 1,000) as a benchmark for adequate park provision. The National Recreation and Park Association (NRPA) recommends six to 19 acres of parkland per 1,000 residents. The city’s park acreage exceeds both of these standards.

The park inventory reveals that certain park types are more abundant than others. Lower counts and per person acreage for community parks may suggest a deficiency in that park type- or that larger regional parks are fulfilling the need for community parks in some areas. Another explanation is that several neighborhood parks in Rochester, while large enough to be classified as community parks, lack the sufficient programming to be classified as a community park. These findings warrant further investigation to assess park utilization and service levels across the city to ensure that all residents have adequate access to a range of park options- and that existing parklands are being used efficiently and for their optimal purpose.

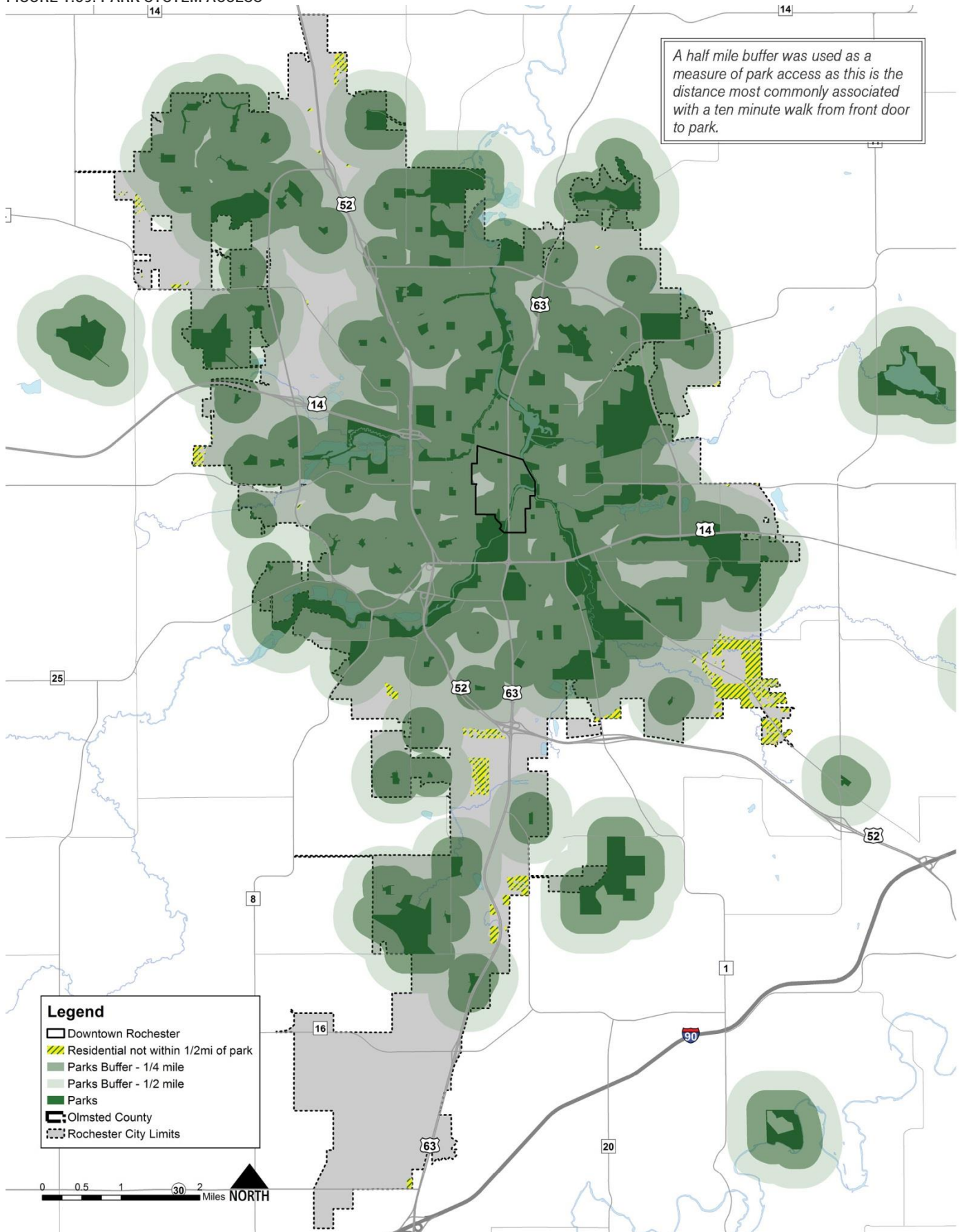
In addition to assessing the overall acreage and type of park assets, it is also important to understand the geographic distribution of parks. Figure 1.39 provides a high level analysis of the city’s park access and distribution, illustrating quarter mile and half mile buffers around public parklands. A half mile, or roughly a 10-minute walking distance, is a general standard for measuring park access from residential areas. The access map indicates that parkland is well-distributed and that at least one park asset is accessible within 10 minutes of over 95 percent of residential properties. A few residential areas in the southeast, north, and south extents of the city are not within a half mile walk of a park (see map).

TABLE 1.12: PARKS & OPEN SPACE ACREAGE BY TYPE

Park Type	Count	Acres	Acres/ 1,000 People
Regional Park	9	1,500	13.6
Neighborhood Park	46	519	4.7
Community Park	2	61	0.6
Play Lot and Playground	29	70	0.6
School Park	27	444	4.0
Natural Resource Areas *	7	409	3.7
Private Open Space *	49	530	4.8

**Open space areas not included in overall parkland per capita calculation or parks access analysis.*

FIGURE 1.39: PARK SYSTEM ACCESS



Source: Rochester-Olmsted Planning Department

[View larger map](#)

Recreational Programs & Venues

In addition to the city’s public parks, other recreational and athletic facilities augment the system by providing venues for a wider range of activities than would traditionally be programmed into the park system.

Open Space

The city has a modest system of open space preserves, with approximately 1,000 acres land protected or preserved and accessible to the public. These areas include wetlands, flood prone areas, sensitive natural areas, forests, and other important natural areas and tend to be oriented on or near one of the river or stream networks that flow into the city.

Trail and Sidewalk System

The city currently features a trail system comprised of 85 miles of city trails as well as the Douglas State Trail, which extends out of the city, connecting to other regional trails. Complementing this system is a network of more than 600 miles of pedestrian paths and sidewalks. See the [Non-Motorized Transportation Analysis](#) memo (under separate cover) for further discussion of bike and pedestrian facilities.

Facilities and Athletic Venues

The city has several major venues, which host a variety of public events including trade shows, conferences, concert, and sporting events. These venues include:

- » Taylor Arena (7,200-2,000 capacity), Auditorium (3,400-3,000 capacity), Exhibition Hall (2,200-1,100 capacity), and Presentation Hall (1,172 capacity)
 - Annually hosts the NYWA Youth Wrestling State Championships which is one of the biggest tournaments in the United States
 - Events include concerts, shows, tournaments, speaking engagements, and expositions
- » National Volleyball Center (11 courts)
- » Mayo Civic Center (Taylor Arena 5,000 seats and Exhibit Hall 3,000 seats)
- » URS Regional Sports Center (field house with 1,700 seats and performance court with 1,300 seats)
- » Rochester Regional Stadium and Bubble (2,000 seats, year round use)
- » Rochester Recreation Center (pro-rink and Olympic pool with 4,000 seats)
- » McQuillan Softball Complex (7 fields)

- » Graham Ice Arena (2 pro-rinks, 1,000 seats each)
- » Fuad Mansour Soccer Complex (8 fields)
- » Rochester Baseball Complex (6 fields)
- » Rochester Athletic Club
- » Public Golf Courses: Eastwood, Northern Hills, and Soldiers Field
- » Hadley Creek Golf Learning Center
- » Kutzky Park Outdoor Tennis Center (15 hard courts)

Athletic Programs & Organizations

Rochester’s athletic organizations offer a myriad of choices for youth, amateur, and adult athletic programs (summarized in Table 1.13). Most of the athletic programs listed have a managing body to organize and manage participants. The following list includes existing Rochester athletic organizations:

- » Rochester Amateur Sports Commission
- » Rochester Youth Baseball Association
- » Rochester Youth Soccer Association
- » Rochester Community Youth Basketball Association
- » Rochester Youth Fastpitch Softball Association
- » Rochester Youth Football Association
- » Rochester Youth Soccer Association
- » Rochester Youth Hockey Association
- » Rochester Youth Volleyball Association
- » Rochester Area Lacrosse
- » RCTC Youth Athletic Camps/Programs
- » Rochester Youth Wrestling Association
- » Med-City Aquatics

TABLE 1.13: ATHLETIC PROGRAMS

Sport	Youth Athletics	Amateur Athletics (12-18yrs)	Adult Athletics (18+)
Baseball	X	X	X
Softball (fast pitch)		X	X
Softball (slow pitch)	X		X
Basketball	X	X	X
Football	X		
Volleyball	X	X	X
Hockey	X	X	
Soccer	X	X	
Wrestling	X	X	
Lacrosse	X		
Swimming		X	
Rugby		X	
Triathlon		X	
Weight Lifting		X	
Table Tennis			
Tug-of-War		X	
Baton Twirling		X	
Broomball			X
Dodgeball			X
Golf			X
Non-contact Football			X
Kickball			X
Other		X	

Water Resources

Water has played a significant role in shaping development in Rochester from its infancy to the present day. Early in the city's formation, waterways provided ice, power, drinking water, places for recreation and religious ceremony, and even gold. Proximity to water was an important driver of settlement patterns and the proximity of major institutions and civic sites in the city reflects this today.

Rivers, Streams, and Surface Water

Rochester possesses significant water resources in the form of tributary creeks which combine with the South Fork of the Zumbro River in Rochester (see Figure 1.40). These waterways create an important network of open water resources for residents to use and enjoy.

The county has no naturally occurring lakes, a characteristic born from the area's porous geology. The relative rarity of surface water resources makes maintaining and protecting these assets a critical task for the community. Despite a lack of natural lakes, the Rochester area features a number of man-made open water amenities created through dams along rivers and streams. These open water resources include Silver Lake, Lake George, Bamber Lake, Mayo Lake, Mayowood Lake, Cascade Lake, Manorwood Lake, Interlachen Lake, Willow Creek Reservoir, Silver Creek Reservoir, and Lake Zumbro north of the city. These lakes and reservoirs provide Rochester residents with access to valuable recreational and scenic resources.

Existing aggregate pit mining operations both within and just outside the city limits present long-term opportunities to create new open water amenities as mining subsides and reclamation activities transform the pits into deep fresh water lakes.

Floodways

Seasonal flooding and major flood events around the city's waterways has resulted in the preservation of many of these areas, particularly floodplain corridors around the Zumbro River South Fork and its tributaries.

After a devastating flood in 1978, a flood control project was undertaken by the Army Corp of Engineers. See p. 1-62 in the Public Utilities section for more on the flood control project. While mitigation efforts effectively addressed the issue of seasonal flooding, the infrastructure put in place changed the natural character of the river, making it less inviting and harder to access and degrading the river's habitat and ecological functions. The flood control project and other protected floodways present a major opportunity to enhance recreational and scenic amenities around the river system, and improve wildlife habitat. These protected areas can serve as the basis for a network of "green corridors," connecting the city's parks and open space system.

Wetlands

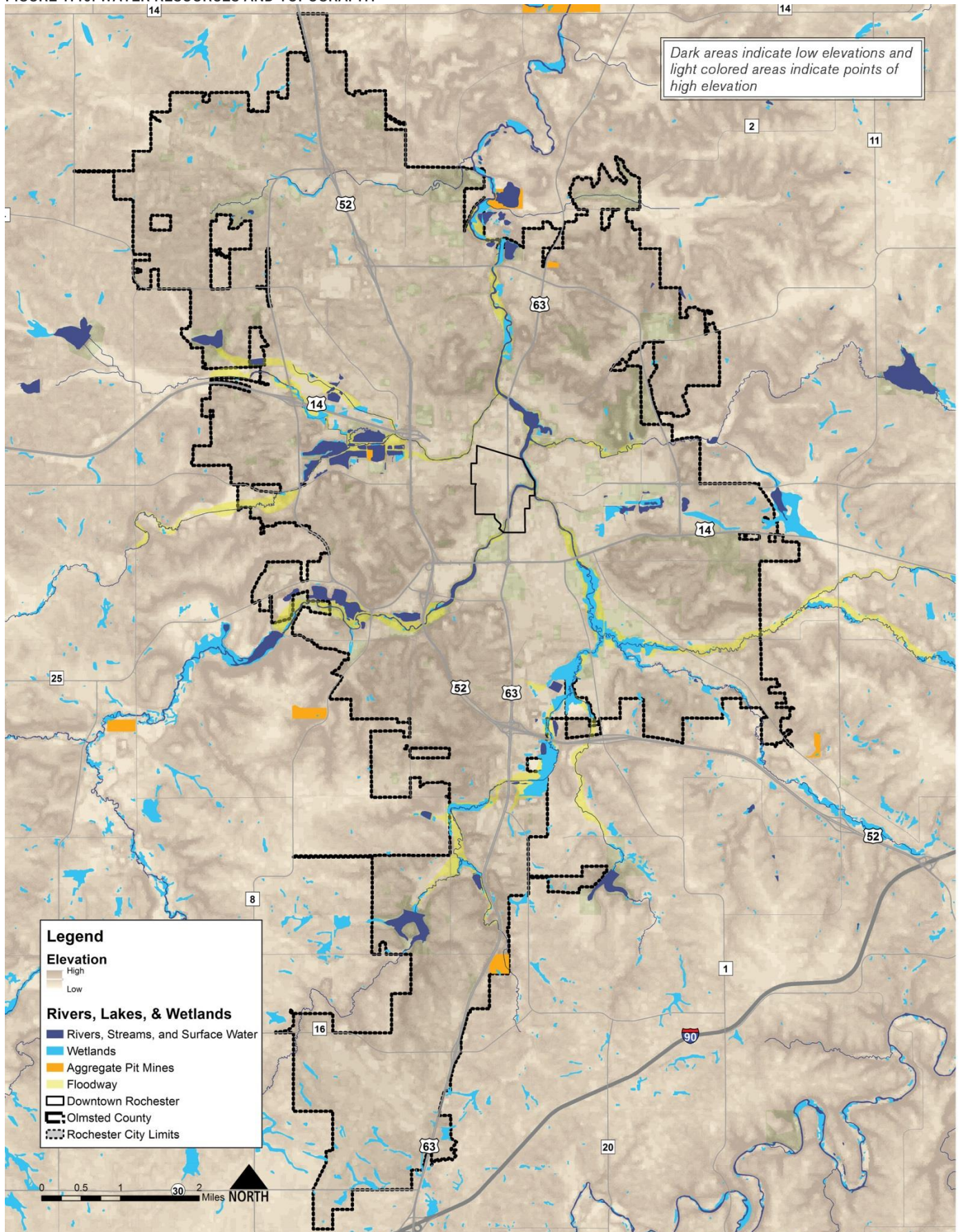
Wetlands play an important role in mitigating flooding, cleaning and infiltrating water, and providing habitat and open space in and around the city. More than two-thirds of the city's wetlands exist on or near rivers and streams, and serve as critical buffer zones to slow and filter water during significant rain events.

Urban development has impacted Rochester wetland areas. Today, wetlands account for about three percent, or 1,200 acres, of the city's total land area. Excluding wetlands in or connected to the city's floodplains, this number drops to just 465 acres, or just over one percent of total land area. By comparison, in less developed areas just outside of the city, wetlands are more numerous and evenly distributed, with large clusters adjacent to stream and river channels. Even in these areas, however, agricultural activity has significantly reduced the presence and quality of wetlands.

Federal, state, and local laws protect wetland areas, including the federal Clean Water Act, the Minnesota Wetland Conservation Act, and the City's Wetland Conservation Ordinance. Within Rochester, wetlands cannot be destroyed in any way unless there is an approved plan in place to replace the lost acres with wetland areas of at least equal public value.

Wetland protection and mitigation will become an increasingly important consideration as the city grows and expands into less-developed and geologically sensitive areas. See p. 1-52 for further discussion of sensitive natural resources.

FIGURE 1.40: WATER RESOURCES AND TOPOGRAPHY



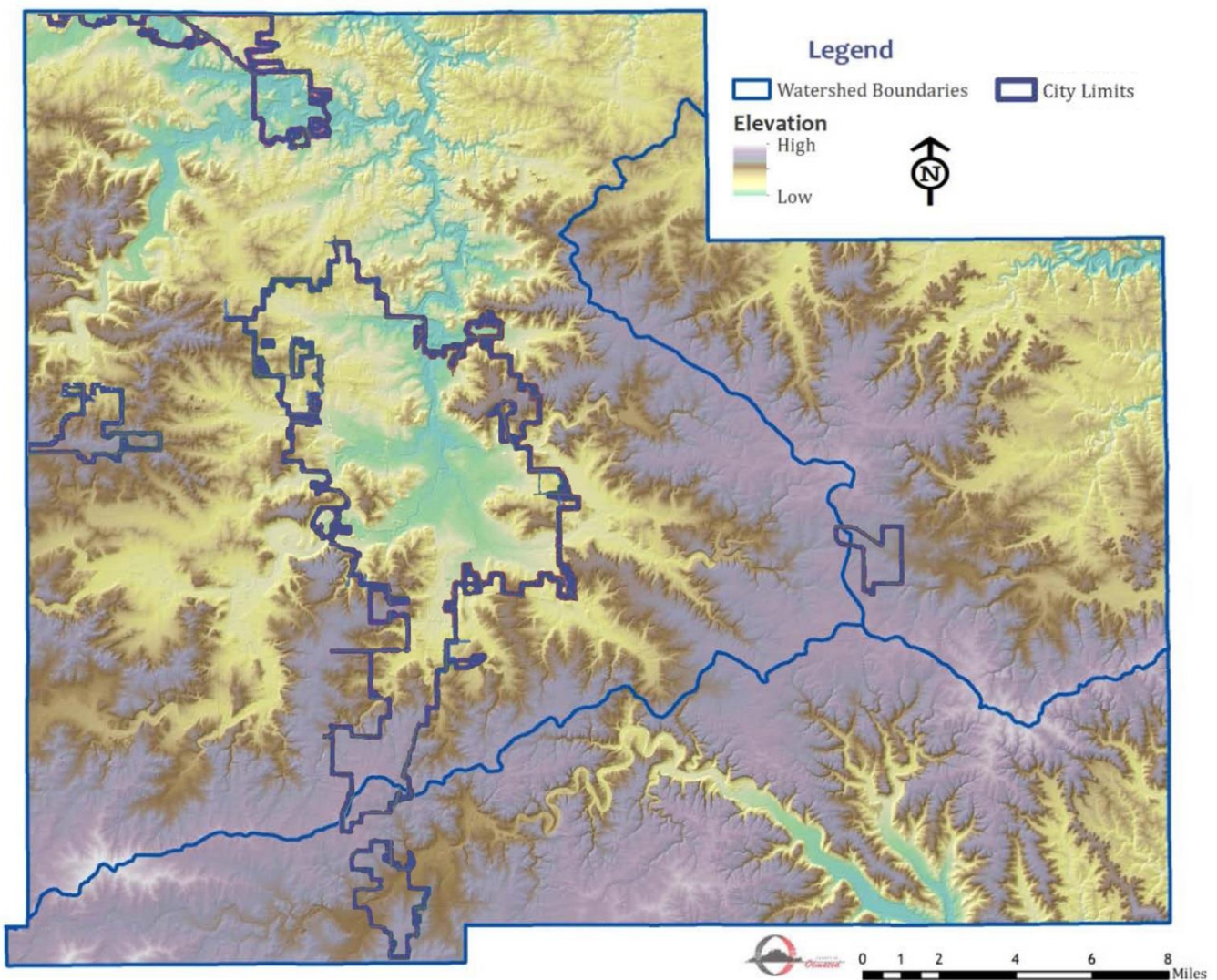
Source: Rochester-Olmsted Planning Department

[View larger map](#)

Landform

Topographically, Downtown Rochester resides in a bowl bracketed to the east, south, and west by a series of ridgelines (see Figure 1.41). These ridgelines are punctured by streams and rivers which feed into the Zumbro River South Fork, the hydrologic force which formed the floodplain and valley in which much of central Rochester resides. These ridgelines present challenges to extending development and infrastructure outside of the city, resulting in the city's general north/south orientation along the river valley. Of particular importance is the flow of water away from these ridgelines, a limiting factor in planning the development of new sewer and water infrastructure.

FIGURE 1.41: LANDFORM (TOPOGRAPHY), OLMSTED COUNTY



Source: Olmsted County Water Management Plan

Sensitive Natural Resources

Decorah Edge

The Decorah confining unit is a group of bedrock formations (the Decorah and Glenwood shale layers and the Platteville limestone layer) that create an impermeable layer between the upper Galena Limestone Layer and lower St. Peter sandstone layer. The **Decorah Edge** is a term used to refer to the areas of the Decorah formation that are exposed at the surface where groundwater confined above the Decorah formation seeps out, creating springs, wetlands, and other sensitive environmental areas before filtering into the more permeable layers below the Decorah formation.

The Decorah Edge surrounds much of the city of Rochester and serves as a critical groundwater filtration and recharge zone that should be preserved and precluded from development. The Minnesota Geological Survey has found that 50% of the groundwater recharge in the Rochester area comes from the Decorah Edge.² These areas can be preserved to create environmental corridors for recreation and wildlife and may be suitable locations for storm water management systems for new development.

Karst

Karst geology is characterized by a region of permeable and erodible bedrock, usually limestone or dolostone that is susceptible to erosion by the dissolving action of groundwater. A number of sensitive natural features are characteristic of karst geology; including Calcareous Fens, sinkholes, springs, sieves, and edge support areas (see Figure 1.42).

The continual and rapid movement of water through this linked system allows the quick movement of surface water and pollutants into the aquifers and groundwater. Areas with advanced Karst formation can cause issues of sinkholes, direct connection from surface waters to drinking water aquifers, and create areas of restricted sanitary sewer drainfields and storm water infiltration. The City's Wetland Conservation Ordinance provides guidance on the protection of these sensitive areas. See p. 1-62 in the [Public Utilities](#)

section for more on the implications of sensitive natural resources for the provision of public utilities.

Karst formations also support rare wildlife habitats; spring water from the karst formations feeds a wetland type known as the **Calcareous Fen**- a wetland that receives nearly all of its water directly from underground sources. These fens are exceedingly rare, comprising about 0.03 percent of all wetlands in Minnesota, and are among the list of Minnesota's protected natural features. The calcareous fens support a high level of biodiversity with several rare, threatened, and endangered species residing only in these specialized habitats.

The Karst springs also feed cold, clean groundwater into a large network of high-quality trout streams. As a result, the Rochester area features some of the best trout fishing in the state. In addition, the caves and sink holes found in the region provide a unique natural attraction.

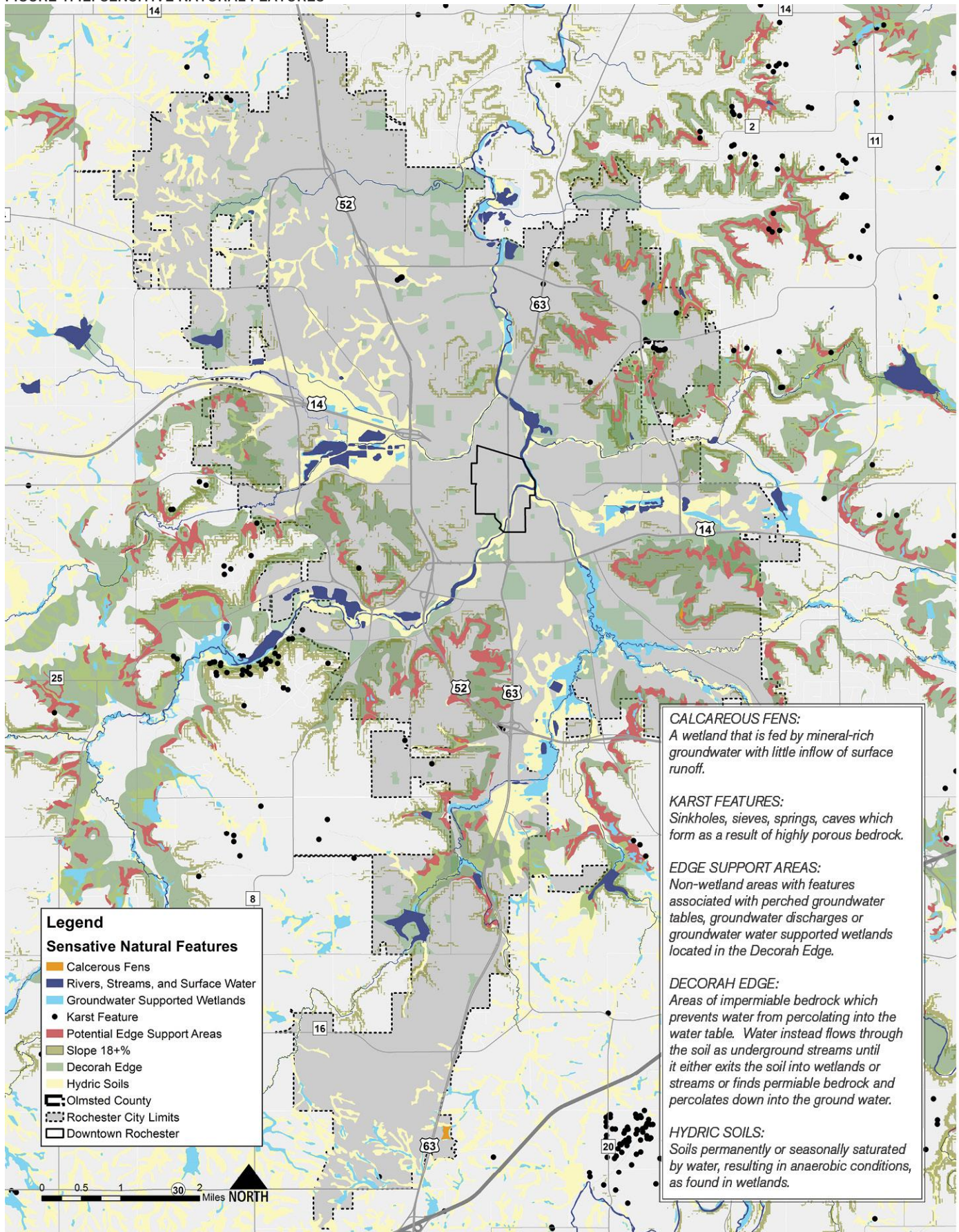
Groundwater

While the County's groundwater is a high quality resource, local land use activities in sensitive areas and improper well construction and abandonment have introduced contaminants into the groundwater system. Figure 1.43 identifies areas (shown in pink, red, and orange) in and around Rochester of particular sensitivity to groundwater contamination due to bedrock geology and high water tables.³ With virtually all of the county's drinking water being drawn from underground aquifers and the high cost and degree of difficulty to treat contamination, it is critical that these sensitive areas be precluded from future development. Further, the porous nature of the bedrock in these areas makes the construction of permanent structures expensive and potentially hazardous.

² Rochester Water Primer, 2013

³ Olmsted County Water Management Plan 2013-2023

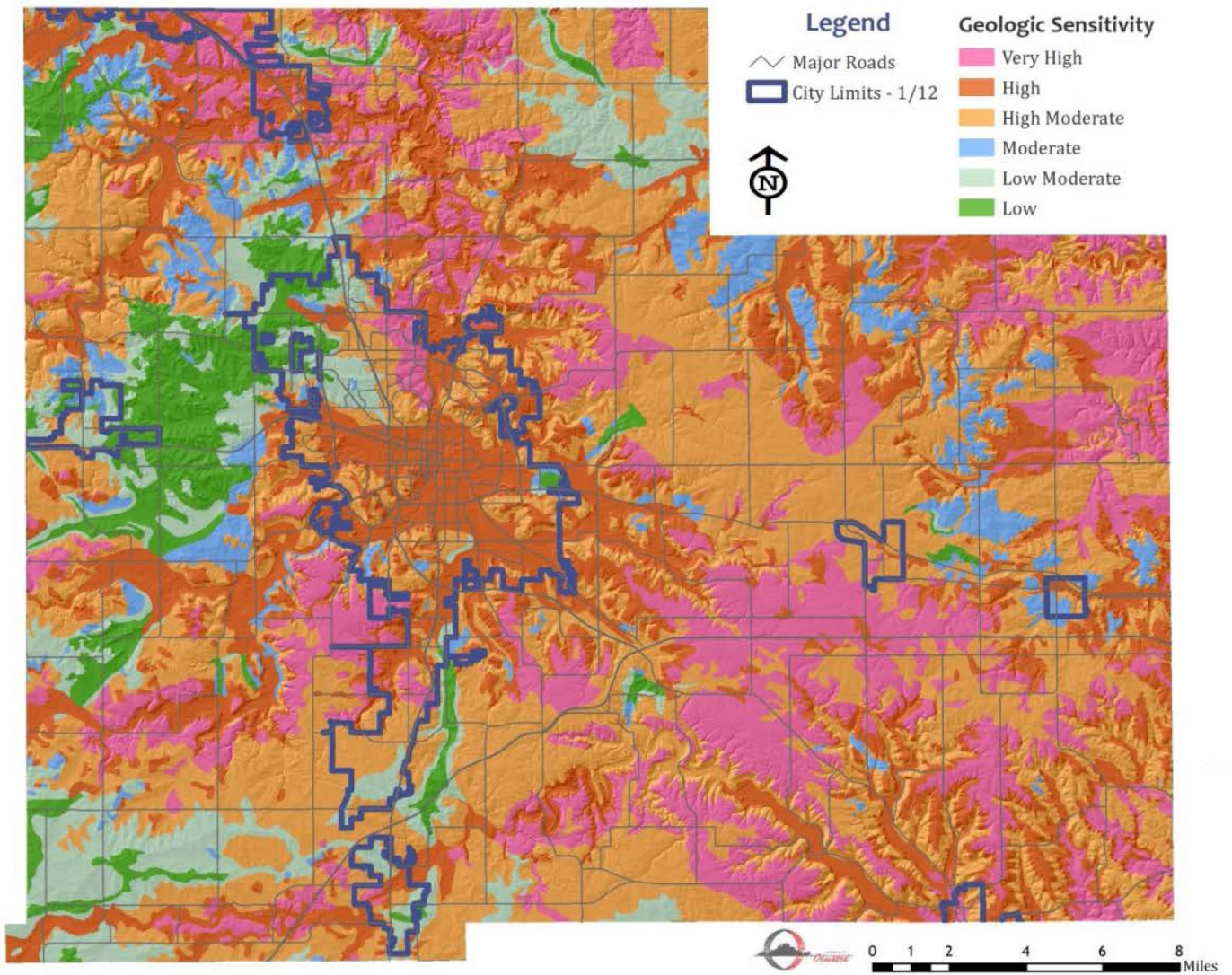
FIGURE 1.42: SENSITIVE NATURAL FEATURES



Source: Rochester-Olmsted Planning Department

[View larger map](#)

FIGURE 1.43: GEOLOGIC SENSITIVITY



Source: Rochester-Olmsted Water Management Plan

Public Utilities >>

This section examines public utilities in the City of Rochester, which consist of sanitary sewer collection and treatment, drinking water and fire protection water system, storm water management systems, and an electric utility.

Sanitary Sewer Collection and Treatment System

The sanitary sewer collection and treatment system is owned and operated by Rochester Public Works. The sanitary sewer collection system is funded by connection fees (sewer availability charge or SAC) and the city's general fund. The wastewater reclamation plant (WRP) is funded by plant investment fee (PIF) and sewer utility fees. See Figure 1.45 for an overview of the sanitary sewer collection and treatment system.

The wastewater plant has a current capacity of 23.85 million-gallons-per-day (mgd) with available capacity of about 4.65 mgd. It is anticipated at current growth rates and plant condition that the available capacity will be adequate for the next five to 10 years. Based on information provided by the WRP Plant Manager, "Industrial growth is not expected to be significant and wastewater loadings will increase with population growth. A large impact to the wastewater treatment plant growth plan is stricter plant effluent limits as set by the Minnesota Pollution Control Agency. Adding a total nitrogen limit and a lower total phosphorus limit has significant cost impacts. Below are projected process improvement projects and associated estimated costs as outlined by our rate study, facilities plan, and internal needs."

TABLE 1.14: WATER RECLAMATION PLANT CAPITAL IMPROVEMENT PROJECTS

Year	Description	Cost
2018	Nitrogen Sidestream Removal	\$4.5M
2020	Phosphorus Sidestream Removal	\$9.5M
2023	Tertiary Phosphorus Removal Project	\$54M
2023	Plant Expansion	\$46M
2032	Plant Expansion	\$80M

Much of current growth is occurring in and anticipated in the Kings Run district in the northwest portion of the city. The area beyond Kings Run, known as the "NW Territory," has been studied to evaluate feasibility of serving the area with sanitary sewer. See Figure 1.44 for an overview of the NW Territory. Due to topography, lift stations are required to provide sanitary sewer treatment to the WRP. This makes extending services to the NW Territory two to four times more expensive than extending similar service to the Kings Run and West Zumbro sewer districts.

As Rochester has grown, the existing downtown sanitary trunk sewer network has been a limiting factor

in draining the sewersheds south of town through downtown to the WRP. Recognizing the need for future capacity, new sanitary sewers upstream of downtown have been installed at larger diameter than the downstream sewers. Over time, the city has increased the capacity of sanitary trunk sewers through downtown to match the upstream capacity. There are still some sewers that need upgrading, as identified in a 2013 sanitary sewer study and the forthcoming DMC Development Plan.

The sanitary sewer system is impacted by inflow and infiltration during rainfall events. It is estimated by the city that approximately 30% additional sanitary sewer capacity could be realized by addressing inflow and infiltration.

An AUAR was performed in 2002 and updated in 2009 for Marion Township. The 2014 AUAR update is in the process of completion. For more information, go to: <http://rochestermn.gov/departments/public-works/projects-and-studies/construction-activity/future>

The City of Oronoco, just north of Rochester, has been in discussion with MPCA for over 10 years with concern over direct connection between septic drain field waste entering the drinking water aquifer. It is conceivable that the Rochester WRP may need to serve Oronoco in the future.

Water Distribution System

The water system is owned and operated by Rochester Public Utilities. The water utility is an enterprise utility that is funded completely by water utility rates and connection fees (water availability charges or WAC). See Figure 1.46 for an overview of the water distribution system.

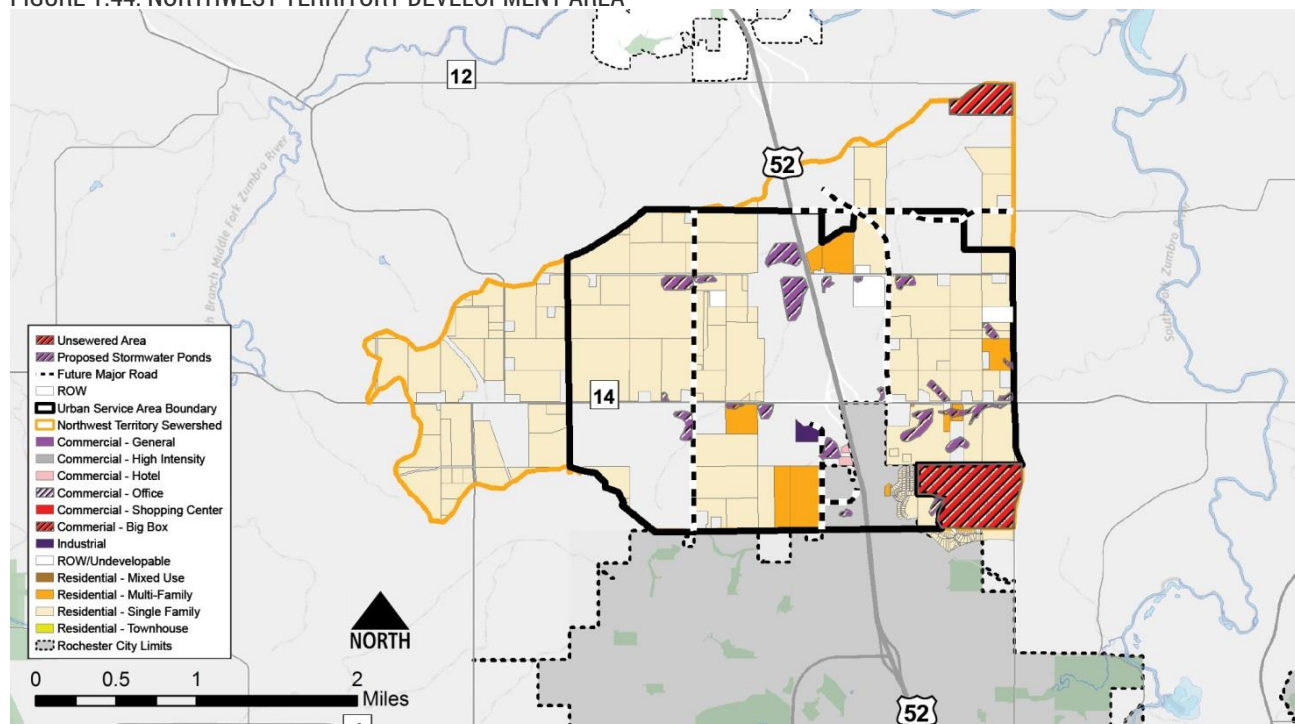
The water system has a current capacity to pump approximately 37 mgd from a system of 31 deep wells and 19 storage facilities throughout the city. A typical well is assumed to produce 1,100 gpm, but some are found to produce more.

The distribution system is divided into two levels; one serving users below the 1,100 foot elevation and one serving users above the 1,100 foot elevation. Eight high level areas exist in the water distribution system. The high level areas are served by towers that are fed from wells or water that is pumped from the lower level.

There are three small suburban water systems that are operated by the city. They are Sandy Slopes SE, Meadowbrook SE, and Merrihills SW.

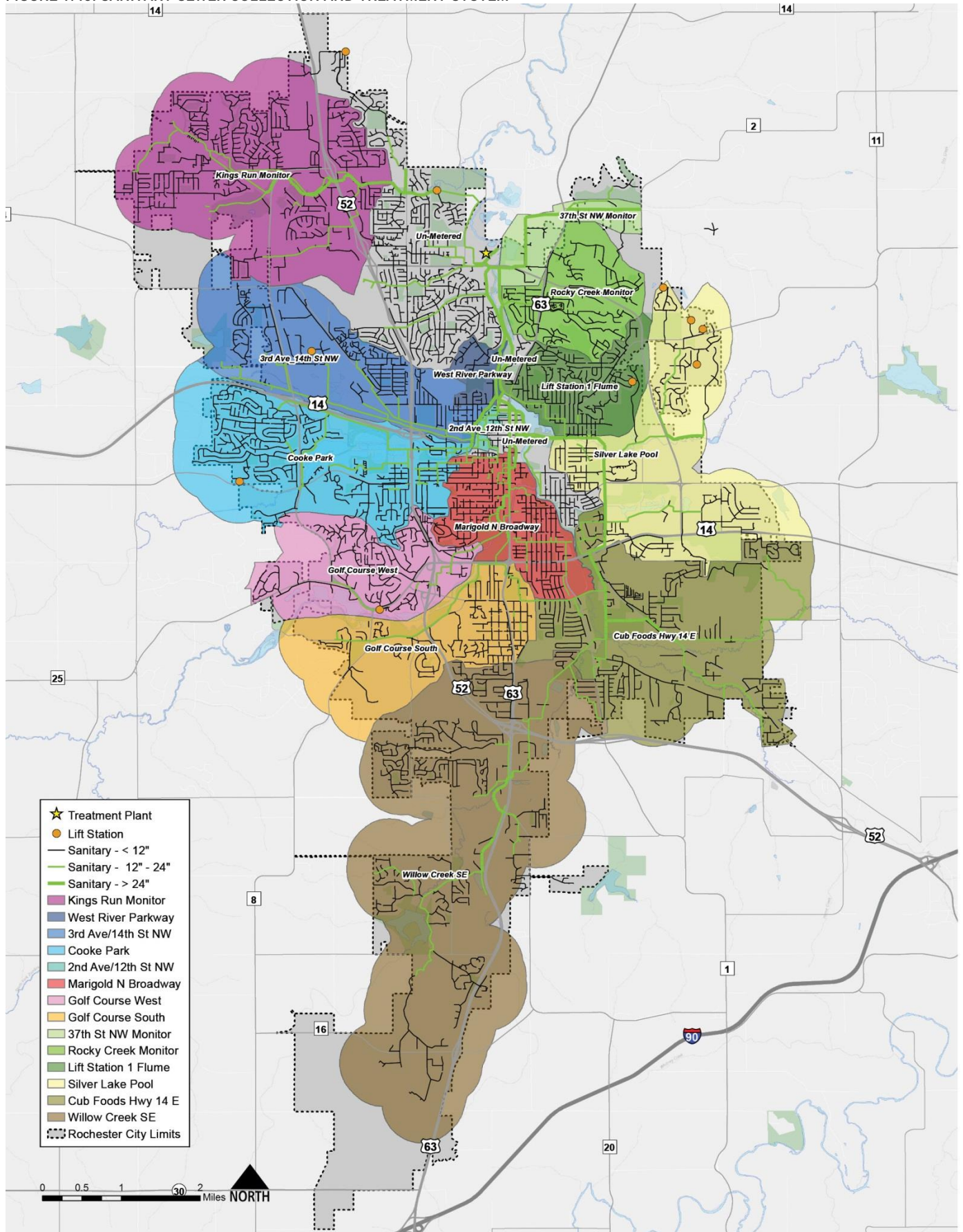
The Soldiers Field master plan will impact water demand, depending on whether the 18-hole golf course remains. Irrigation for the golf course is a significant existing demand. If the golf course is shortened to 9-holes, as has been contemplated, additional water capacity will return to the water system

FIGURE 1.44: NORTHWEST TERRITORY DEVELOPMENT AREA



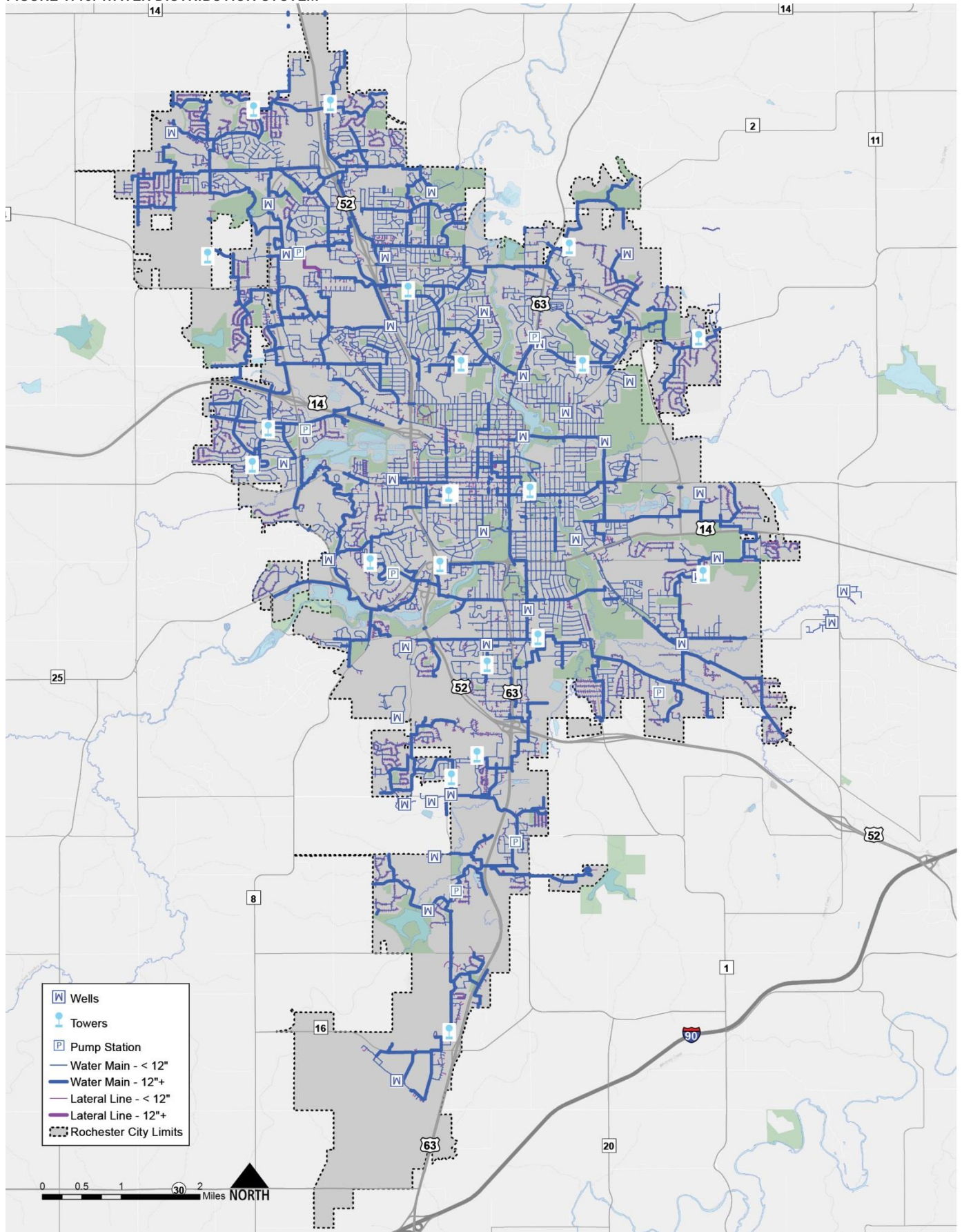
[View larger map](#)

FIGURE 1.45: SANITARY SEWER COLLECTION AND TREATMENT SYSTEM



[View larger map](#)

FIGURE 1.46: WATER DISTRIBUTION SYSTEM



[View larger map](#)

Storm Water System

Rochester Public Works developed a comprehensive storm water management plan in 1997 requiring storm water management and encouraging a regional approach to managing storm water. In 2003 the city adopted a storm water utility fee to support the storm water management program. The storm water utility is not an enterprise utility and general funds are used to maintain and expand the municipal storm water system. See Figure 1.47 for an overview of the storm water system.

The city has recently renewed the Municipal Separate Storm Sewer System (MS4) permit with MPCA. The permit requires a new storm water ordinance to be created in early 2015. It is anticipated that the new ordinance will emphasize a site-by-site storm water management approach to new development in order to meet new volume, rate, and quality requirements in the MS4 permit.

There are many impaired waters in Rochester. A Watershed Restoration and Protection Strategy (WRaPS) is underway for the Zumbro river and should be completed in the next year.

Electrical System

The electric system is owned and operated by Rochester Public Utilities. The electric utility is an enterprise utility that is funded completely by electric utility rates and connection fees. See Figure 1.48 for an overview of the electric system.

The electric utility no longer generates electricity. There is adequate electricity supply from the grid. A new transmission line in Pine Island and a potential new transmission line to wind farms in Iowa are not necessary to supply Rochester with adequate power.

The Silver Lake plant now only produces steam from natural gas for Mayo Clinic.

Geologic Implications

Southeast Minnesota is characterized by Karst topography, which impacts development, design, and function of a number of public utilities. Karst geology is characterized by a region of permeable and erodible bedrock, usually limestone or dolostone that is susceptible to erosion by the dissolving action of groundwater. See 1-55 in the [Parks and Open Space](#) section for more on Karst geology and sensitive natural resource areas.

Areas with advanced Karst formation can cause issues of sinkholes; direct connection from surface waters to drinking water aquifers; and create areas of restricted sanitary sewer drainfields and storm water infiltration. Rochester's experience with Karst has seen a limited number of sinkholes, typically limited to storm water detention areas. In 2004 the City of Rochester began serving the Chester Heights subdivision in the Village of Chester, about 3 miles outside the City of Rochester, due to failing septic systems and the inability to feasibly construct new privately operated treatment works due to geological conditions, including Karst.

Flood Control

The South Fork Zumbro River flows through Rochester. Monthly average river flows range from approximately 100 cubic feet per second (cfs) in the winter months to over 400 cfs in the rainy spring season and average about 150 to 200 cfs the rest of the year (Source: Zumbro Watershed Partnership – Watershed Management Plan). This results in an average river stage of about 3 to 4 feet. Flood stage is 14 feet. Record flood stage is 23.4 feet in July 1978.

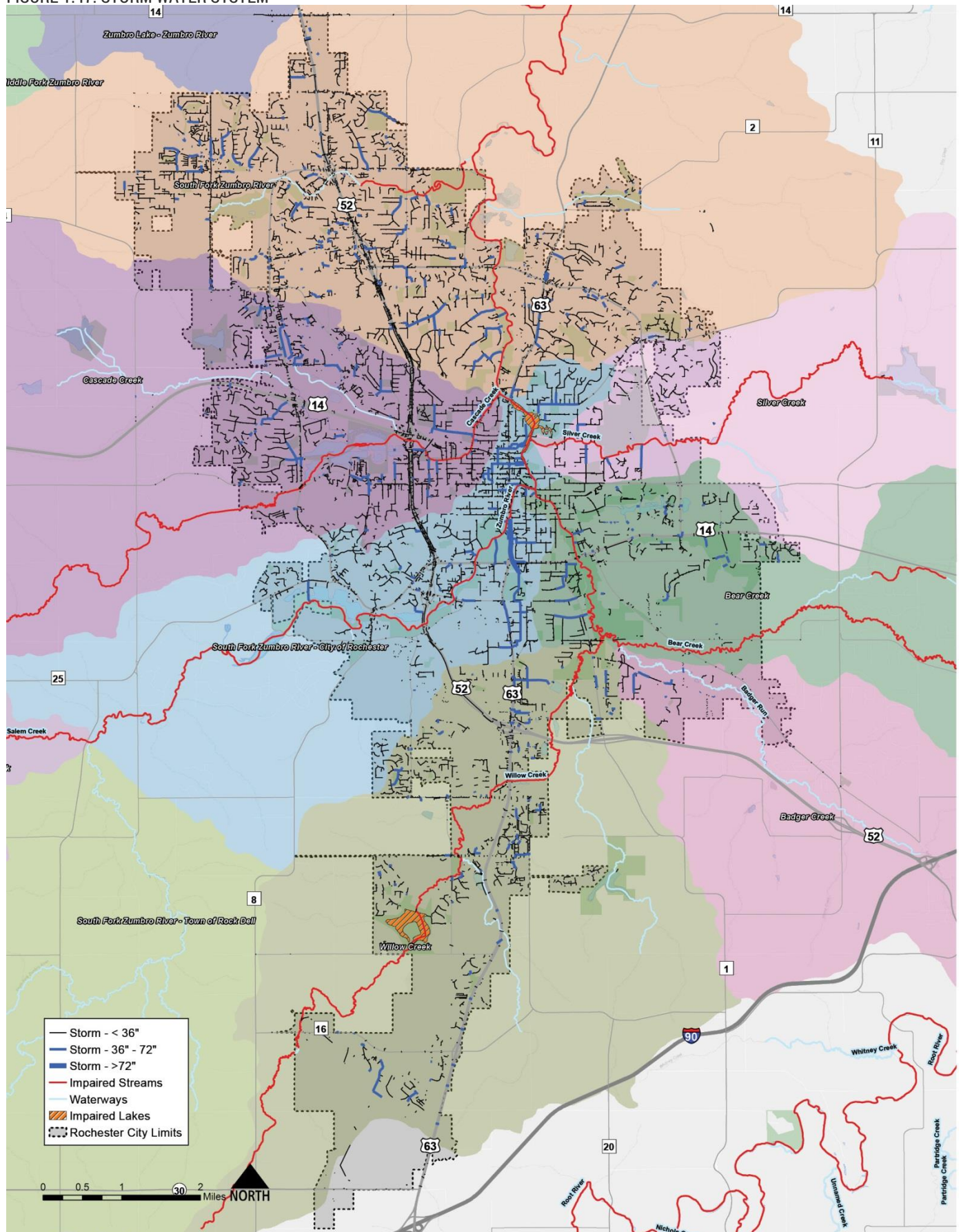
As a result of the 1978 flood, flood control projects were undertaken by the City of Rochester, with support from the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) and the U.S. Army Corps of Engineers (USACE). Construction on a 9-mile-long flood control project began in the mid-1980s and ended in the mid-1990s, resulting in protection of this stretch of river from storms with up to a 0.5% chance of occurrence. The flood control project cost \$114 million with the city's portion being \$40.7 million. The city funds were raised through a voter-approved, 1% addition to the local sale tax that was collected between 1983 and 1992 (Source: Rochester Water Primer, 2013).

Adequate Public Service Standard

The city has an Adequate Public Services Standard that requires developers to investigate the broad effects development of property will have not only on the site itself, but on adjacent properties and the on and off site public infrastructure system. On and off-site public facilities are adequate, or will be adequate if the development is phased in, to serve the properties under consideration and will provide access to adjoining land in a manner that will allow development of those adjoining lands in accord with this ordinance. The Adequate Public Service Standard is part of the City Land Development and Zoning Ordinance Manual dated Jan 1992:

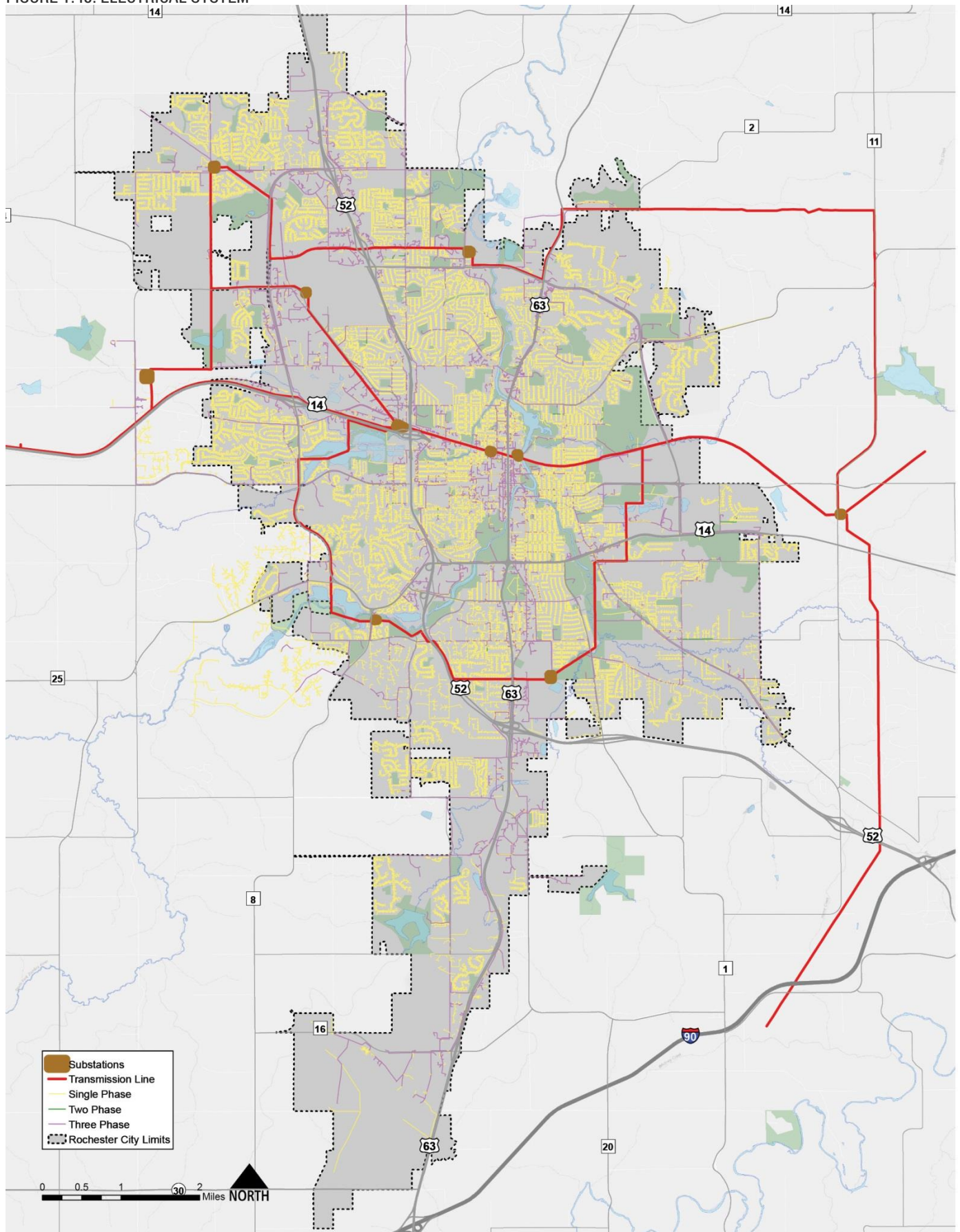
<http://www.rochestermn.gov/departments/planning-and-zoning/land-development-manual-and-ordinances>

FIGURE 1.47: STORM WATER SYSTEM



[View larger map](#)

FIGURE 1.48: ELECTRICAL SYSTEM



[View larger map](#)