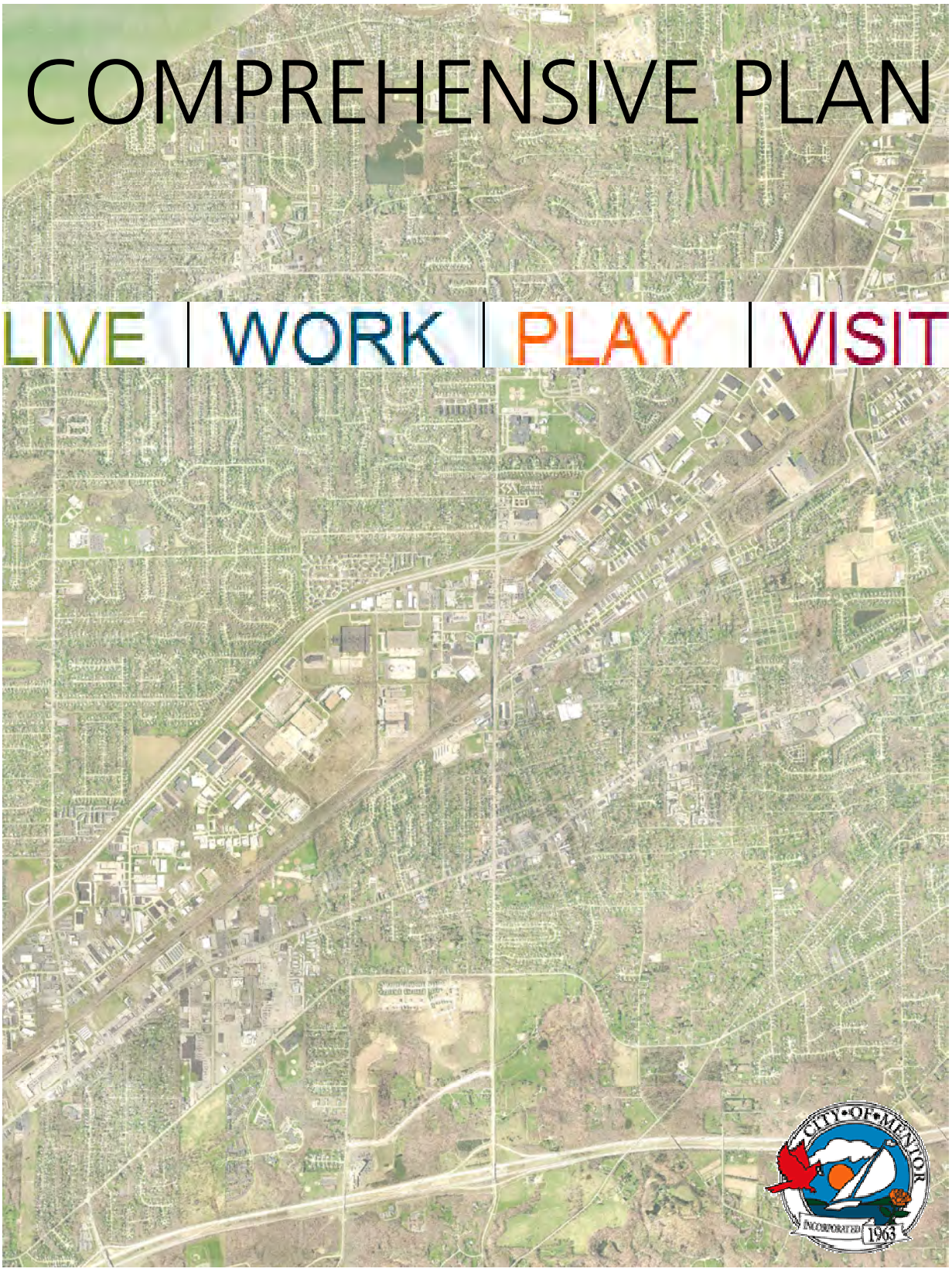
COMPREHENSIVE PLAN

LIVE | WORK | PLAY | VISIT



ADOPTED APRIL 19, 2011

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"Funding and support for this project was provided, in part, by CICEET, the Cooperative Institute for Coastal and Estuarine Environmental Technology. A partnership of the National Oceanic and Atmospheric Administration and the University of New Hampshire, CICEET develops tools for clean water and healthy coasts nationwide."

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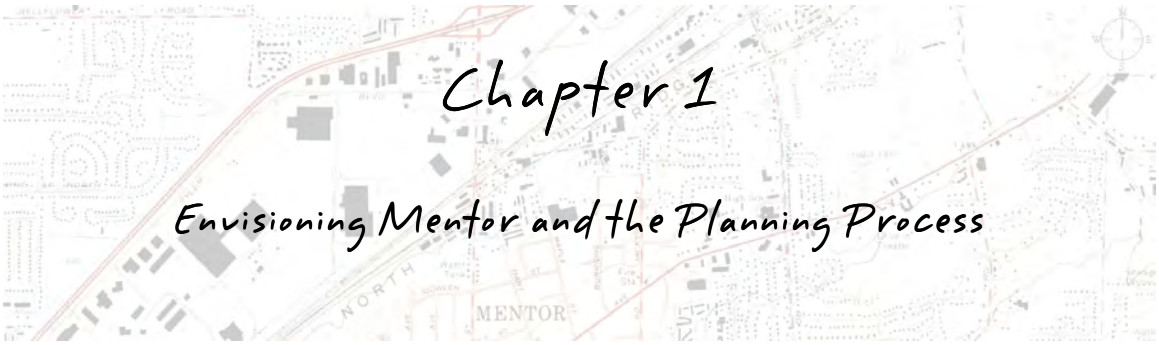


Chapter 1

Envisioning Mentor and the Planning Process

1.1 VISION STATEMENT

By creating this plan, the community wishes to continue seeking opportunities to develop and redevelop the City of Mentor. This plan is designed to preserve the diversity of land use along with financial and social stability of the community by promoting the City's natural features, educational system and suburban atmosphere. This plan will also address the goal of attracting new and diverse commercial and industrial businesses through proper planning, while striving to maintain the integrity and identity of the City of Mentor.

1.2 MUNICIPAL PLANNING COMMISSION

"…The Commission shall have the powers conferred upon it by general law and it shall adopt and recommend to the Council a *comprehensive general plan* for the physical development of the city, or the redevelopment of any area or district therein, which shall include the location of public ways, property, bridges, schools, utilities, buildings, parks, playgrounds and recreation areas, and the reservation and acquisition of lands therefore."

1.3 WHY A COMPREHENSIVE PLAN?

The City of Mentor is no stranger to the planning discipline. Planning for the future has been a tradition in Mentor since the 1950's when the community recognized that its tremendous potential for growth carried with it the potential for equally tremendous physical and social impacts. This document represents the continuing work of the Mentor community in carrying that planning tradition into the next decade and century of prosperous growth and wise community development and redevelopment. The work of study and analysis has culminated in the following *City of Mentor: Vision 2020*. *Vision 2020* is a rewrite of the "Comprehensive Plan, Mentor, Ohio" (June 1997). Multiple sections of the 1997 plan are still applicable in this document and were used in portions of this document.

A comprehensive plan is a land use document that provides the framework and policy direction for land use decisions and other actions affecting the physical, economic, and social aspects of the community. It indicates in a general way how local citizens and government leaders want the community to develop in the future.

The basic characteristics of a comprehensive plan are that it is general and far-reaching. Another defining characteristic is that the plan is long-range and provides a base from which to make decisions. In Mentor, local decision makers include the Municipal Planning Commission and City Council.

The adoption of a comprehensive plan often becomes the driving force behind creation of more targeted plans. Examples of more targeted plans may include a plan for Historic Mentor Village area or a plan for redevelopment of the Great Lakes Mall.

The City of Mentor Comprehensive Plan is a major planning effort to guide the community toward what it will be like in the future as a place to live, work, and invest. It is being developed through an open process driven by four broad-reaching questions:

1. Where are we now?
2. Where are we going?
3. Where do we want to be?
4. How do we get there?

The Comprehensive Plan will identify a vision and broadly address the needed elements that build a community including transportation, housing, open space and natural resources, sense of place, government services, the impacts of new developments and more.

The Comprehensive Plan serves as the City "to do" list, at least with regards to land use and the built environment for the near future. Through goal setting, it will set priorities about land use, economic development, cultural and natural resources, transportation and other areas.

The Comprehensive Plan will not propose specific lot-by-lot locations for land uses or facilities, or address detailed regulations. A Comprehensive Plan is not a zoning resolution or subdivision regulation. However, such regulations are used as tools for implementing the Comprehensive Plan. The Comprehensive Plan is intended to provide the legal and rational framework for regulations, investments, and government action.

This new plan charts the City's course into the twenty first century. It sets goals tempered by the realities of time, opportunity, and resources. It is a realistic plan which incorporates a feasible program of implementation designed to bring the community to where it wants to be in the foreseeable future. This plan is intended to focus on those community needs over the next 5-10 years and also the direction that development will take for areas of the City where major changes are likely to occur.

The Plan requires public cooperation and support for its accomplishments. It also requires far-sighted and steadfast leadership by public agencies that serve the city to support the vision and goals of the Comprehensive Plan. In addition to serving as a guide to expenditure of public funds in acquisition of land and construction of public facilities, the Comprehensive Plan forms the necessary background for the zoning and subdivision regulations. Zoning, subdivision and design standards, are necessary to achieve orderly growth, an acceptable pattern of land use and an attractive built environment. Growth and change occur with time, and good planning principles must be established to preserve our vision for the future.

1.4 USING THE PLAN

In simple terms, the Plan is a tool for dealing with change. Specifically, it can be used in at least the following ways:

1. As a basis for the development of public programs and regulations, including community services and facilities, thoroughfare, water and sewer services; zoning regulations; and land use.
2. As a basis for decisions on specific land use changes as reviewed through zoning regulations.
3. As a basis for the measurement and evaluation of change in the physical, social or economic makeup of the city. Out of this process may come modifications of the Comprehensive Plan.
4. As a means of multi-jurisdictional and regional coordination and understanding.
5. As a means of communication and education for the public.
6. As a basis for private decision-making regarding the nature and timing of land development and conservation activities.

1.5 PLAN ORGANIZATION

The Comprehensive Plan is the statement of development policy for Mentor. The Plan presents a series of goals and strategies to guide the preparation of City regulations and the application of City programs. These goals and policies are organized in 11 chapters.

The formal plan introduction, in the next chapter, describes the history, geography and geology of Mentor, along with a description of the challenges faced by the city. The **demographics element** describes attributes of the city's population, how it has changed through the years, and how it may change in the future. The **land use** chapter describes the role of the built environment on the city, how land is being used, and the importance of creating and maintaining a unique sense of place. The **transportation** chapter describes the transportation system in the City; not just considering motor vehicles, but also bicycles, pedestrians and public transit. The **housing** chapter describes home ownership and tenure trends, and addresses challenges such as affordable housing. The **recreation and public facilities** chapter describes all public land uses – public safety facilities, schools, parks and open space – and discusses future needs. The **utilities** chapter describes the role that utilities play in shaping the built environment of the city. The **economic development** chapter describes the business environment of the city and policies intended to maintain a diverse tax base and reduce the tax burden on residents, while increasing business growth. The **natural resources** chapter describes the features of the city built, not by man but by nature, and ways to protect those gifts in the face of population growth.

Each chapter contains a summary of important issues and trends, a statement of goals and a list of strategies, and recommendations that the City could use to reach these goals. Each chapter is supplemented with maps, tables and charts with data from countless sources including the City of Mentor, Lake County Planning Commission, US Census Bureau and the Ohio Department of Development.

1.6 RELATION TO REGIONAL PLANS

With Mentor being a home-rule City, its comprehensive plan is not considered an amendment to the Lake County Comprehensive Plan. Regional plans from the Northeast Ohio Area Coordinating Agency (NOACA), that guides transportation planning in the Cleveland metropolitan area, and information from the Lake County Coastal Development Plan is reflected in this plan.

1.7 PROJECT PARTNERS

The City of Mentor Economic and Community Development Department served as the project leader for the plan. They also served as a liaison between all City Departments including Engineering, Parks and Recreation, Police and Fire to ensure all information was included into the plan.

Technical partners included:

Chagrin River Watershed Partners, Inc.

The Chagrin River Watershed Partners, Inc. was established in 1996 in response to concerns regarding erosion, water quality and flooding within the watershed. CRWP staff provides technical support service to member communities (including Mentor and Lake County) and develops cost effective solutions to minimize new, and address current water quality and quantity problems (www.crwp.org).

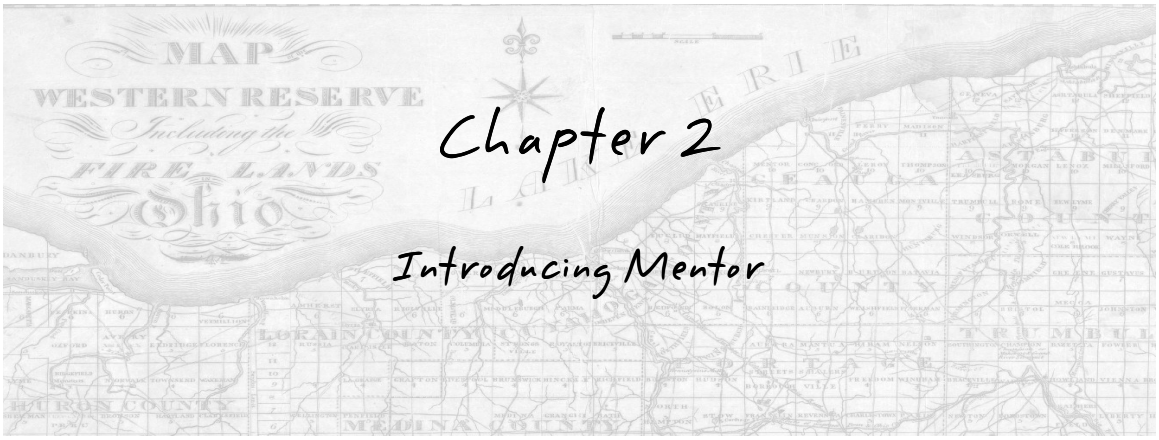
CRWP was a key technical contributor throughout the planning process for the following topics:

- CRWP staff assisted to ensure conformance with the Chagrin River Balanced Growth Plan. The Balanced Growth Plan is being developed based on a state wide program for balanced growth being promoted by the Ohio Lake Erie Commission. In 2004, the Ohio Lake Erie Commission finalized the Balanced Growth Program, defined as a *local planning framework to coordinate decisions about how growth and conservation should be promoted by State and local investments*. Through this program, CRWP has been working with Mentor to develop Priority Conservation Areas (PCA) and Priority Development Areas (PDA) throughout their community. This is discussed in Chapter 4.
- Parking standards
- Riparian corridor protection strategies
- Erosion and Sediment Control
- Comprehensive Storm Water Management
- Riparian and Wetland Setbacks
- Flood Damage Reduction regulations

Lake County Planning Commission

The Lake County Planning Commission staff served as the primary consultant. LCPC is well versed in land use, zoning, coastal planning, design guidelines and subdivision regulations.

The information presented in the plan is based upon guidance from City officials and department heads, CRWP and local citizens with a focus on innovative, long-term achievement strategies.



2.1 HISTORY

The evolution of the Mentor we see today began in the early 18th century as part of the Western Reserve. The Western Reserve was a western colony of Connecticut which lay just west of Pennsylvania and east of present day Sandusky. The land was purchased by the Connecticut Land Company in 1795 and divided into tracts five mile square. The land that became Mentor was one of those square tracts. Land was sold in smaller parcels along an old Indian trail which was the main route for the early residents. This trail is now known as Mentor Avenue.

When local government was established, the Mentor area was originally part of Painesville Township. However, by 1895 the increased population warranted the creation of a separate township which was named Mentor Township. In 1840 Mentor Township became part of Lake County when the State of Ohio created the County from portions of Geauga and Trumbull Counties. In 1855 approximately 3,000 acres in the center of the Township was incorporated into Mentor Village. The Township and Village continued in essentially the same configuration until 1924 when the Village of Mentor-on-the-Lake was incorporated out of the northwest corner of the township.

During the mid-1800's, Mentor began to develop into a thriving community. Wealthy Clevelander's were establishing country homes throughout the area. In the 1850's the old Cleveland, Painesville, and Ashtabula Railroad, now Conrail, was built spurring economic development and making Mentor the home of shipping and insurance companies. In the late 1890's the interurban street car line was extended along Mentor Avenue which was known at the time as the Cleveland-Buffalo Road. The street cars allowed Mentorites to live in the "suburb" and hold a job in Painesville or Cleveland.

Mentor's proximity to Cleveland and the Lake Erie shore made it a focus for resort and recreation development. The first resort hotel, Little Mountain House, was established in 1831 and remained popular until the turn of the century. Beginning in the 1870's Mentor experienced the development of private beach clubs. Property was subdivided into small lots on which private cottages were built. Many of the existing subdivisions adjacent to the Lake were influenced by this pattern of development.

Development continued at a gradual rate throughout this entire period. The 1920's were marked by speculative subdividing, however, consuming only a small percentage of land. After the Second World War a primarily rural Mentor experienced substantial residential and commercial development. The completion of State Route 2 in 1962 provided further stimulus for development.

The rapid development in Mentor Township and Village during the 1940's and 50's created the impetus for more local control. In 1953 a combined Village and Rural Board of Education separated from county jurisdiction and established the Mentor Exempted Village School District. At the same time, the Mentor Village Council instituted a Council-Manager form of government. Work began toward consolidation of Mentor Township and Mentor Village. In 1962 the people of Mentor Township voted to annex to the Village. Mentor Village accepted annexation on November 19, 1962. The following year on December 18, 1963 the Township and Village officially joined to become the City of Mentor.

During the 1960's Mentor flourished. Extensive commercial development occurred along Mentor Avenue and the first phases of the Great Lakes Mall were constructed. Residential development continued particularly in areas where sanitary sewers were available. The Tyler Blvd. industrial corridor, which was established between the railroad tracks and State Route 2, began to blossom and continued through the 1990's. Industrial and manufacturing development migrated east along Tyler Boulevard, to Heisley Road, through the 1990's and 2000's. Commercial development continues today along Mentor Avenue and the Heisley Road, area in the extreme eastern portion on the corridor. In 1997, the City purchased, and now operates, the 380-acre Mentor Lagoons Marina & Preserve and acquired 14 acres to expand Garfield Park.

In 2003, the city celebrated the opening of the SR 615 (Center Street) / I-90 interchange. This provided direct freeway access to the 400 acre Newell Creek mixed use development in the northeast quadrant of the interchange. This development represents one of the few remaining large vacant and developing tracts of property within the City's border. In 2005, the City continued to preserve valuable greenspace with the acquisition of the Morton Salt Property and Blackbrook Golf Course. The 18-hole course is located on Lakeshore Blvd. in the northern section of the City,

2.2 GEOGRAPHY AND GEOLOGY

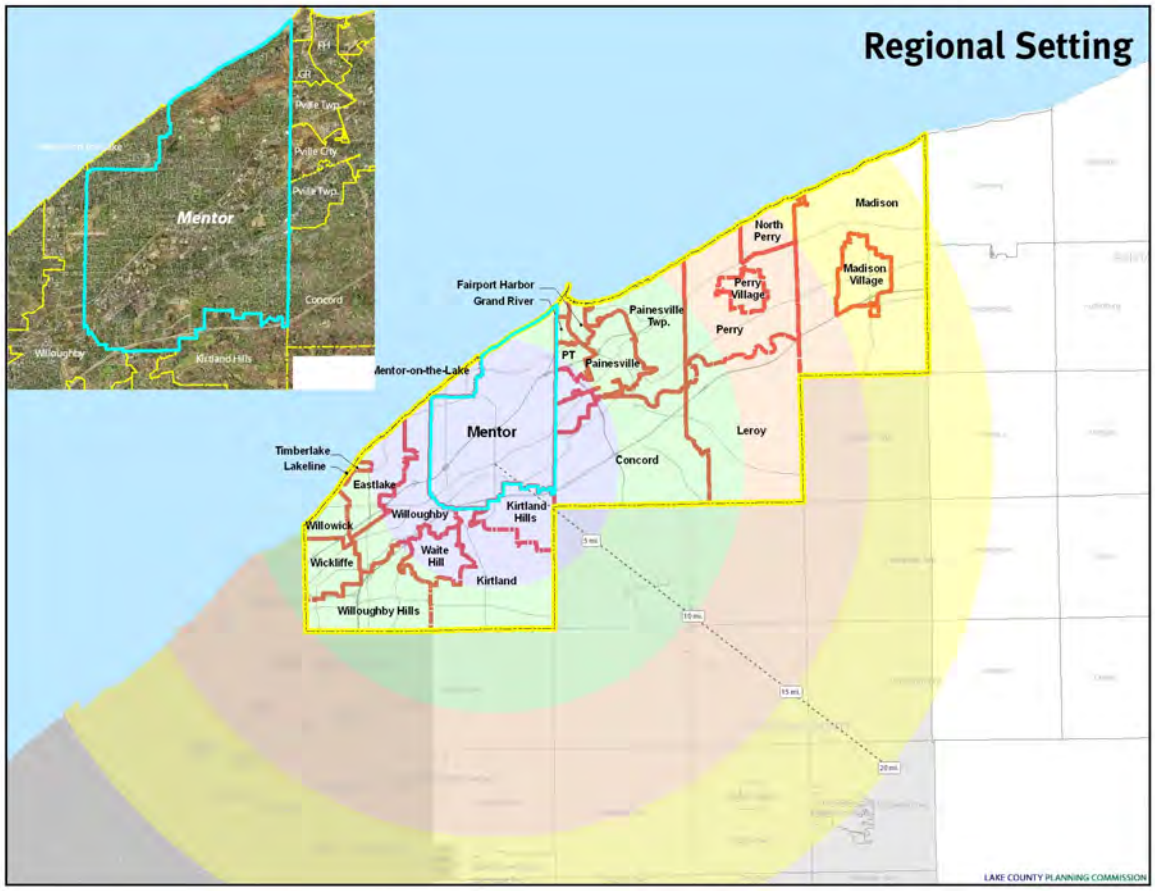
Mentor is a 28.4 square mile city located on the shore of Lake Erie in the central portion of Lake County. Mentor is considered part of the Cleveland-Lorain-Elyria Primary Metropolitan Statistical Area (PMSA), Cleveland-Elyria-Mentor Metropolitan Statistical Area (MSA) and Cleveland-Akron-Elyria Combined Statistical Area (CSA) by the US Census Bureau. In 2008, Mentor had a population of approximately 51,825 (Ohio Department of Development).

Mentor's northern landscape geography is notably characterized by unique features such as Lake Erie, Mentor Lagoons, Headlands Beach State Park and the nationally recognized Mentor Marsh. The central and southern portions of the City are predominately built out with the exception of neighborhood parks and a few remaining undeveloped parcels.

Interstate 90, US 20 (Mentor Avenue), and State Routes 2 (Lakeland Freeway), 84 (Johnnycake Ridge Rd.) and 283 (Lakeshore Blvd.) are the primary east-west transportation thoroughfares. State Routes 44, 615 (Center St.), 306 (Reynolds Rd.) and Heisley Road provide direct north-south vehicular access.

A 20 mile radius around the Center Street/Mentor Avenue intersection encompasses the densely populated (both people and businesses) I-271 and SR 2 (Lakeland Freeway) corridors and the central business district of Cleveland making Mentor an attractive location for work and living (Map 2.1).

Map 2.1: Regional Location



Mentor is in the Lake Plain physiographic region of Ohio. The greatest geological influence on the area is the former post-glacial Lake Erie. This area was highly glaciated during the last ice age and has resulted in a relatively flat topographical profile (1.0% slope from south to north) characterized by four basic soil types (Map 2.2):

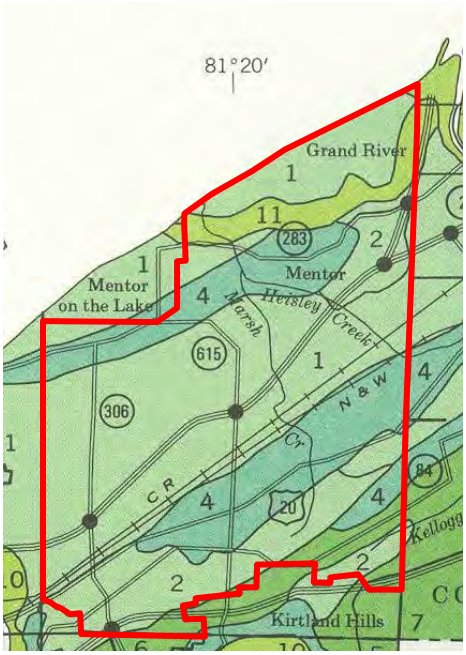
1. Conneaut-Painesville: nearly level and gently sloping, poorly drained soils that formed in silty glacial till or loamy material over silty glacial till, on the lake plain. *(Shown as 1 on map)*

2. Red Hook: Nearly level, somewhat poorly drained soils that formed in loamy outwash deposits underlain by stratified material; on lake plain and offshore bars. *(Shown as 2 on map)*

3. Tyner-Otisville: Nearly level to sloping, well drained and excessively well drained soils that formed in water-sorted sediment; most on beach ridges *(Shown as 4 on map…Mentor Ave., Johnnycake and Lakeshore Blvd.)*

4. Carlise: Level, poorly drained soils that formed in accumulated organic material; in marshes. *(Shown as 11 on map. This is the Mentor Marsh area which was the post glacial drainage channel of the Grand River)*

Map 2.2: Physiographic Profile

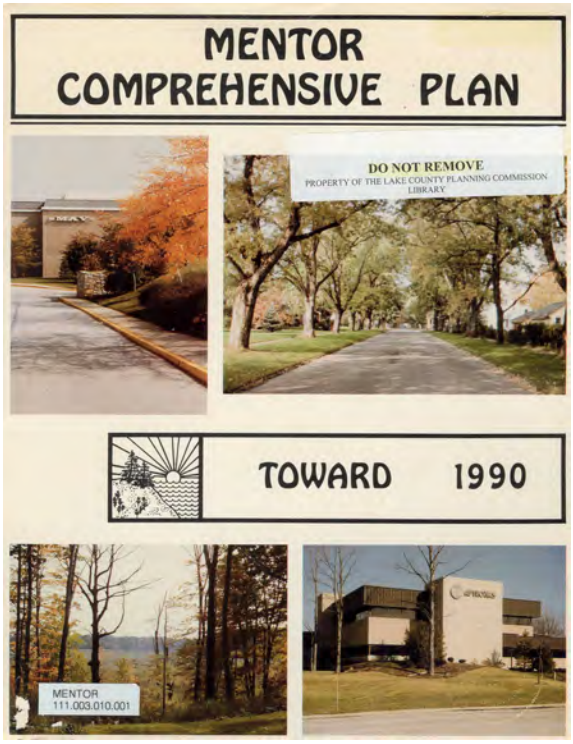


The elevation ranges from 890' in the southeast to 572' above sea level along the Lake Erie shoreline. Mentor Ave. (US 20) and Johnnycake Ridge Rd. are located on beach ridges left by the last prehistoric lakes.

The northern boundary of the City at about 572 feet above sea level, is defined by one of the City's greatest resources, Lake Erie. Its positive features include serving as a backdrop to the community, giving the City a distinctive identity that similar inland communities lack, providing recreational opportunities to residents, and providing potable water. Lake Erie is a young, living body of water, and constantly in a state of flux. Until recently, water levels have been above normal, accelerating the rate of erosion along the coastal bluffs fronting Lake Erie in the region.

2.3 PREVIOUS PLANS

By the mid-1960's the newly created city realized a guide was needed for the continued development of Mentor. In 1967, a Comprehensive Development Plan for the City of Mentor was produced. On April 2, 1968 the plan was officially adopted by Mentor City Council.



The Comprehensive Development Plan guided the development in Mentor for almost 15 years. During the years following the adoption of the Comprehensive Development Plan, the city realized that periodic review of the plan was necessary. In 1973 a Comprehensive Plan Review Committee was established to examine and recommend changes to the Comprehensive Plan adopted in 1967. The Committee suggested 24 changes to the plan primarily dealing with land use. The Committee felt that these changes would upgrade and update the plan to guide the City for the next five years.

As the City continued to develop and change during the late 1970's it once again became evident that a review and update of the Comprehensive Development Plan was necessary. It had been almost 15 years since the adoption of the original plan. It was time to review the basic premise on which the original plan was based and determine whether the city was still on the course it originally set or whether that course ought to be adjusted to reflect changing circumstances.

In 1984, the City prepared the "Mentor Comprehensive Plan, Toward 1990." This document examined all aspects of the physical, social and natural environments in the City. Four general goals were established to lay the ground work for more specific goals to be achieved in the 1990's:

1. General community-wide goals which describe elements to be taken into account in all types of development due to their impact of the character and health of the whole community;
2. Residential development goals which stress the safety, aesthetics, and maintenance necessary for attractive single family, duplex and apartment areas;
3. Commercial development goals for the district where retail and service businesses are clustered; and
4. Industrial development goals intended to ensure that the city's industrial sector continues to grow and develop.

In June 1997, the city adopted the "Comprehensive Plan, Mentor, Ohio." This document had a planning horizon to 2015. Using the 1984 plan as the base, the City added two additional general goals from the four listed above:

5. Recreational goals for enhancing the opportunities to all residents of Mentor.
6. Transportation goals which encourage easier movement and services for all modes of public and private transportation.

While the document covered the traditional planning issues (land use, demographics, housing), additional emphasis was placed on recreation in this plan. Needs assessments, facility planning standards, current program analysis, trends and recreational finances were discussed in greater detail in the 1997 plan.

In addition, four major development areas were identified and discussed:

1. Mentor Lagoons and Headlands west
2. I-90/Center Street
3. The Old Village Commercial Corridor
4. Mentor Avenue (north) mixed use zone.

The 1997 plan was the baseline document used for the preparation for this project.

2.4 FUTURE CHALLENGES

At the time this plan was written, the United States was in the middle of an economic recession. As with all units of local government, the City of Mentor will enter the coming decade with the difficult responsibility of maintaining the level and quality of city services to which residents and businesses are accustomed. This challenge comes at a time of potentially flat revenue and decreasing population growth rates.

Specific land use and planning challenges include:

1. Maintaining and increasing the retail vibrancy of the Mentor Avenue corridor.

    - Preliminary vacancy rate data for 2009 indicates an increase from 2008 in multi-tenant retail centers.
    - While Mentor is still considered the retail center of Lake County, local, regional and national chain stores are expanding their markets to more semi-rural areas, thus reducing the potential for customers from areas beyond the city boundary.

2. Ensuring the long-term stability of Great Lakes Mall as a closed air venue or a hybrid design.

    - New regional shopping areas are oriented as "destination/entertainment" type facilities with a focus on the traditional shopping, along with the addition of restaurants, and residential land uses. Venues such as Legacy Village (Beachwood), Crocker Park (Westlake) and First and Main (Hudson) were developed in a traditional town layout pattern following New Urbanism design features.

3. Establishing the 'historic central business district' of the City.

    - Maintaining, if not expanding, the historic district of the center is an important component to a City's identity and character. In Mentor, efforts to revitalize the US 20 corridor from Lawnfield to Jackson Street are encouraged, but will be difficult due to the high traffic volume (deterrent to pedestrian activity) and the proximity/convenience of multiple shopping and dining activities in nearby areas.

4. Changing demographic profile

    - The aging of Mentor's population is evidenced by the increase in median age from 25 in 1970 to more than 38.9 in 2000.

    - The percentage of Lake County residents older than 65 has been increasing since the 1970s. In Mentor, the population more than 55 years of age increased from 10% in 1960 to 22% of the total population in 2000. Older residents may want to remain in the city where they lived for so many years, but cannot maintain a large house on a large lot. With no other options available for them, many senior citizens are forced to find suitable housing elsewhere that is more conducive to their lifestyle and closer to medical facilities.

- In 1970, about 44% of all households in the US had children, and only 17% of them were single-person households. In 2006, only about 35% of all households in the US have children, while another 26% are single-person households. By 2040, the US Census Bureau predicts that about 27% of households will have children, and single-person households will remain at about 26%. In Mentor approximately 21% of the households are single family.

2.5 PLAN GOALS

Before any community can effectively plan for its future, it is first essential to develop a consensus about the desires and aspirations of the city. These goals and a well thought out plan will guide the community toward the shared image of the future. It is important to note that not all the goals are attainable within the planning period (approximately 10 years), but the groundwork should be established and short term goals pursued.

The following statements are a combination of relevant existing goals from the City's 1997 plan and new goals established for this document.

1. Maintain and expand the manufacturing sector of the local economy with a renewed emphasis on bio-medical and alternative energy industries.

2. Promote a strong, stable diversified economy which meets the needs of the community for employment, consumable goods and services, and provides a growing tax base.

3. Maintain existing park facilities, while seeking opportunities to expand and enhance the current range of facilities and recreational programs.

4. Create a transportation system which allows the mobility of people and goods by providing a variety of transportation options (multi-modal).

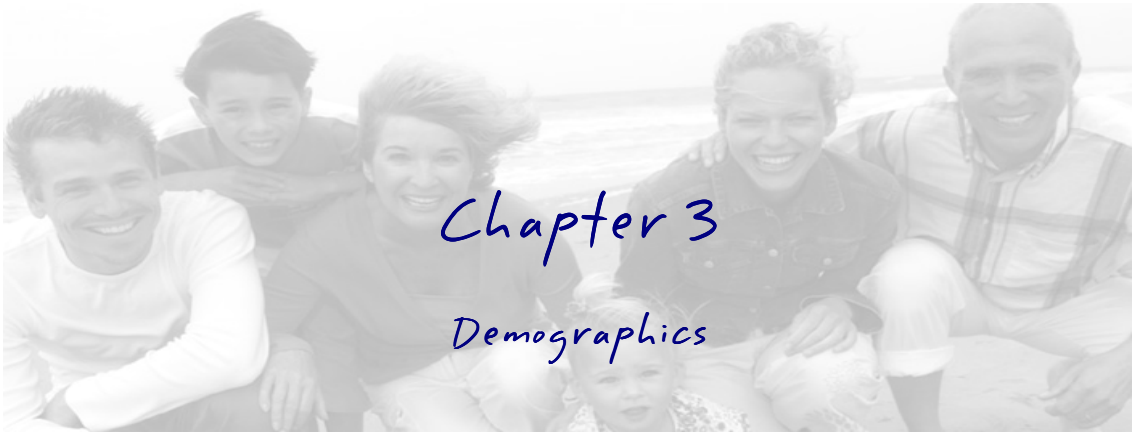
5. Protect and preserve environmentally sensitive areas and sustain a healthy natural environment.

6. Identify, protect and preserve the City's historic resources, and enhance the identity of those areas and neighborhoods in which they exist.

7. Capitalize on the City's position as a regional commercial center.

8. Provide a wider range of housing styles.

9. Maintain the City's housing stock.



3.1 INTRODUCTION

Demographic analysis is an important part of a community comprehensive plan. Identification of demographic and socioeconomic characteristics in Mentor, surrounding communities, Lake County, and the Cleveland metropolitan area are vital, both for understanding the community and for providing information used in making policy decisions.

This chapter provides a demographic profile of Mentor, examining information such as population characteristics, educational attainment, school enrollment, income statistics, and employment characteristics.

Demographic analysis provides basic information necessary to develop a well thought-out comprehensive plan. Demographic information is used in a number of ways:

Quantify: Quantifying the various characteristics of municipal residents is needed to understand the impacts of a population, or subgroup, on matters such as the level of services required, size of markets that can be supported, and impact on transportation and infrastructure.

Trends: Analyzing numbers over time can identify trends now affecting or which may affect the community in the future.

Identifying issues and needs: Numbers or trends may identify conditions or issues the city may need to address through policy or programs.

Projections: Demographic analysis is the starting point for developing projections. Understanding the size and characteristics of the future population to be served can help a community plan policy and programs in a timely fashion.

The latest data available for most demographic characteristics is from the 2000 Census of Population and Housing by the U.S. Census Bureau. More recently collected data have been included to supplement Census Bureau data wherever possible.

The following highlight some of the more important points of the analysis.

1. Population growth in Mentor continues to grow, but at a much slower rate than in the past and at a slower rate than the surrounding communities. Mentor has a higher growth rate than the county.

2. Mentor City's percentage of families (75.7%) is higher compared to the Lake County percentage of families.

3. The age group that is represented by the largest percentage is the 35 to 44 years old group with 17.8%. This is very comparable to the Lake County, 16.9%, and the Cleveland Primary Metropolitan Statistical Area (PMSA), 16.1%.

3.2 POPULATION

Mentor was originally two communities, Mentor Village (incorporated in 1855) and Mentor Township, which merged in 1963. Mentor became a city with a combined population of 21,652. Populations for 1910 to 1960 shown on table 3.1 are the combined populations for Mentor Township and Mentor Village.

Mentor's population growth is a similar pattern for a post World War II community and of an exurban community. From 1940 to 1960, as evident by the double digit growth rates, the city grew rapidly (Table 3.1, 3.2). Through the 1950's the population grew at an even faster pace, increasing by 163% during the decade.

This growth was similar to Eastlake, Willowick, Wickliffe and other post World War II communities (Chart 3.1). But unlike Eastlake, Willowick and Wickliffe, Mentor had a much larger land base to expand upon as the other communities become landlocked in the 1970s.

Evidence of a slowing population growth rate is apparent beginning in the 1970s when the growth rate dropped to approximately 14% (Table 3.2).

Table 3.1 Population Comparison 1910-2000

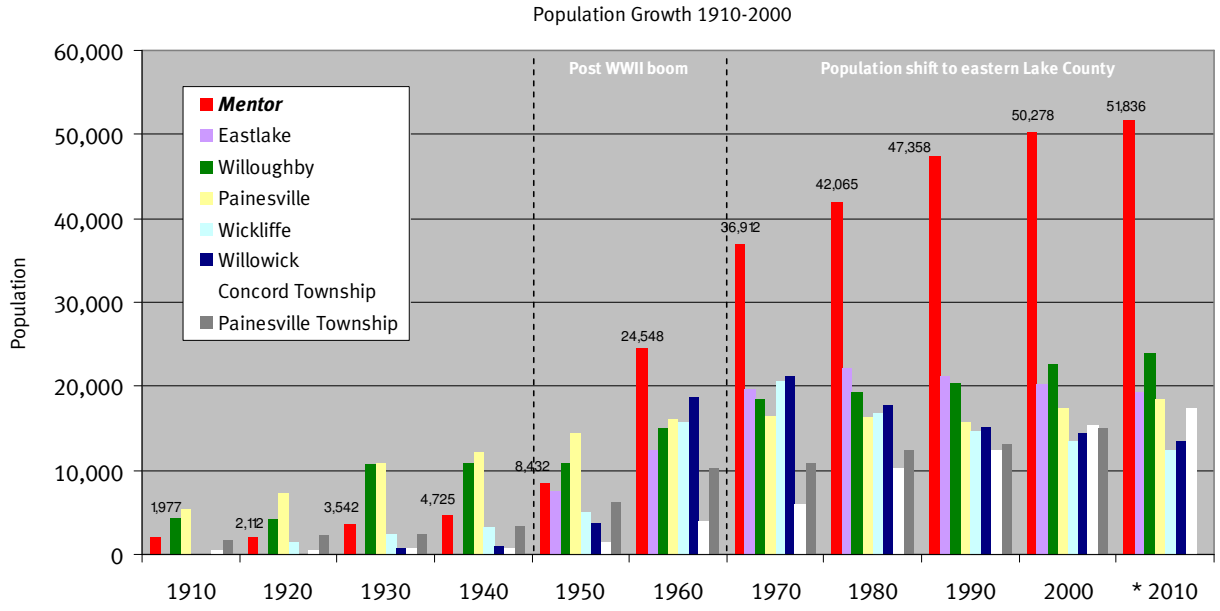
Year	*Mentor*	*Concord Twp.*	*Grand River*	*Kirtland*	*Kirtland Hills*	*Mentor on the Lake*	*P'ville Twp.*	*Willoughby*	*Lake County*
1910	1,760	608	203	1,047	n/a	n/a	1,634	4,370	22,927
1920	1,880	623	249	957	n/a	n/a	2,288	4,177	28,667
1930	3,417	710	314	1,159	206	230	2,433	10,640	41,674
1940	4,635	795	305	1,333	237	598	3,403	10,957	50,020
1950	8,228	1,440	448	1,723	235	1,413	6,102	10,967	75,979
1960	21,652	3,860	477	4,709	292	3,290	10,316	15,058	148,700
1970	36,912	5,948	613	5,530	452	6,514	10,870	18,634	197,200
1980	42,065	10,335	412	5,969	506	7,919	12,348	19,329	212,801
1990	47,358	12,432	297	5,881	628	8,271	13,218	20,510	215,499
2000	50,278	15,282	345	6,670	597	8,127	15,037	22,621	227,511
2007 Est.	51,739	16,370	365	7,343	779	8288	15,516	22,410	233,392

n/a- Not incorporated at the time of the census. Populations shown for Mentor from 1910 to 1960 are the populations of Mentor Twp. and Mentor Village Combined. The Village and the Twp. merged in 1963 (US Census Bureau and Ohio Dept of Development).

Table 3.2 Population Growth Rates 1910-2000

Year	Mentor	Concord Twp.	Grand River	Kirtland	Kirtland Hills	Mentor on the Lake	P'ville Twp.	Willoughby	Lake County
1910-20	6.82%	2.47%	22.66	-8.60%	n/a	n/a	40.02%	-4.42%	25.04%
1920-30	81.76%	13.96%	26.10%	21.11%	n/a	n/a	6.34%	154.7%	45.37%
1930-40	35.65%	11.97%	-2.87%	15.01%	15.05%	160.0%	39.91%	2.98%	20.03%
1940-50	77.52%	81.13%	46.89%	29.26%	-0.84%	136.29%	79.31%	0.09%	51.9%
1950-60	163.1%	168.1%	6.47%	173.3%	24.26%	132.8%	69.06%	37.30%	95.71%
1960-70	70.48%	54.09%	28.51%	17.43%	54.79%	97.99%	5.37%	23.75%	32.62%
1970-80	13.96%	73.76%	-32.79%	7.94%	11.95%	21.57%	13.60%	3.73%	7.91%
1980-90	12.58%	20.29%	-27.91%	-1.47%	24.11%	4.45%	7.05%	6.11%	1.27%
1990-2000	6.17%	22.92%	16.16%	13.42%	-4.94%	-1.74%	13.76%	10.29%	5.57%

(U.S. Census)



Mentor was only able to maintain its double digit growth rates through the 1980's. The west to east migration shift evident since 1950 continues today, but transportation upgrades such as SR2 and I-90 and employment sprawl to the I-271 corridor has allowed more people to locate to semi-rural communities in central and eastern Lake County. The City has not been able to maintain a similar growth as exurban communities such as Concord Township and Kirtland (Table 3.2).

However, to place the growth rate over the last three decades in perspective, it is important to note that it occurred during the same period in which the population of the region decreased, and the county increased very modestly in the 70's and much less in the 80's and only 6% in the 90's.

Mentor's population growth rate percentage places it at number 17 of the top 20 communities of Northeast Ohio. Painesville City is number 14 and Willoughby is number 15 (Table 3.3).

Table 3.3 Northeast Ohio Population Growth Rates 1990-2000

Rank	Community	County	Growth Rate Percentage		Community	County	Growth Rate Percentage
1	Green City	Summit	542.2%	11	Wadsworth City	Medina	17.3%
2	Hudson City	Summit	344.9%	12	Stow City	Summit	16.0%
3	Twinsburg City	Summit	77.0%	13	Wooster City	Wayne	11.8%
4	Medina City	Medina	30.7%	14	Painesville City	Lake	11.5%
5	Strongsville City	Cuyahoga	24.2%	15	Willoughby City	Lake	10.3%
6	N. Royalton City	Cuyahoga	23.5%	16	New Philadelphia	Tuscarawas	8.7%
7	Avon Lake City	Lorain	20.4%	17	Mentor City	Lake	6.2%
8	Brunswick City	Medina	18.3%	18	Ashland City	Ashland	5.8%
9	Solon City	Cuyahoga	17.5%	19	N. Ridgeville City	Lorain	3.6%
10	Westlake City	Cuyahoga	17.4%	20	Rocky River	Cuyahoga	1.6%

ODOD

Map 3.1 shows growth from a geographical perspective. While most areas have witnessed population increases, three tracts have shown a decrease in total population (2032, 2034, 2028). These losses were more that offset by the large increase in population in tract 2035.

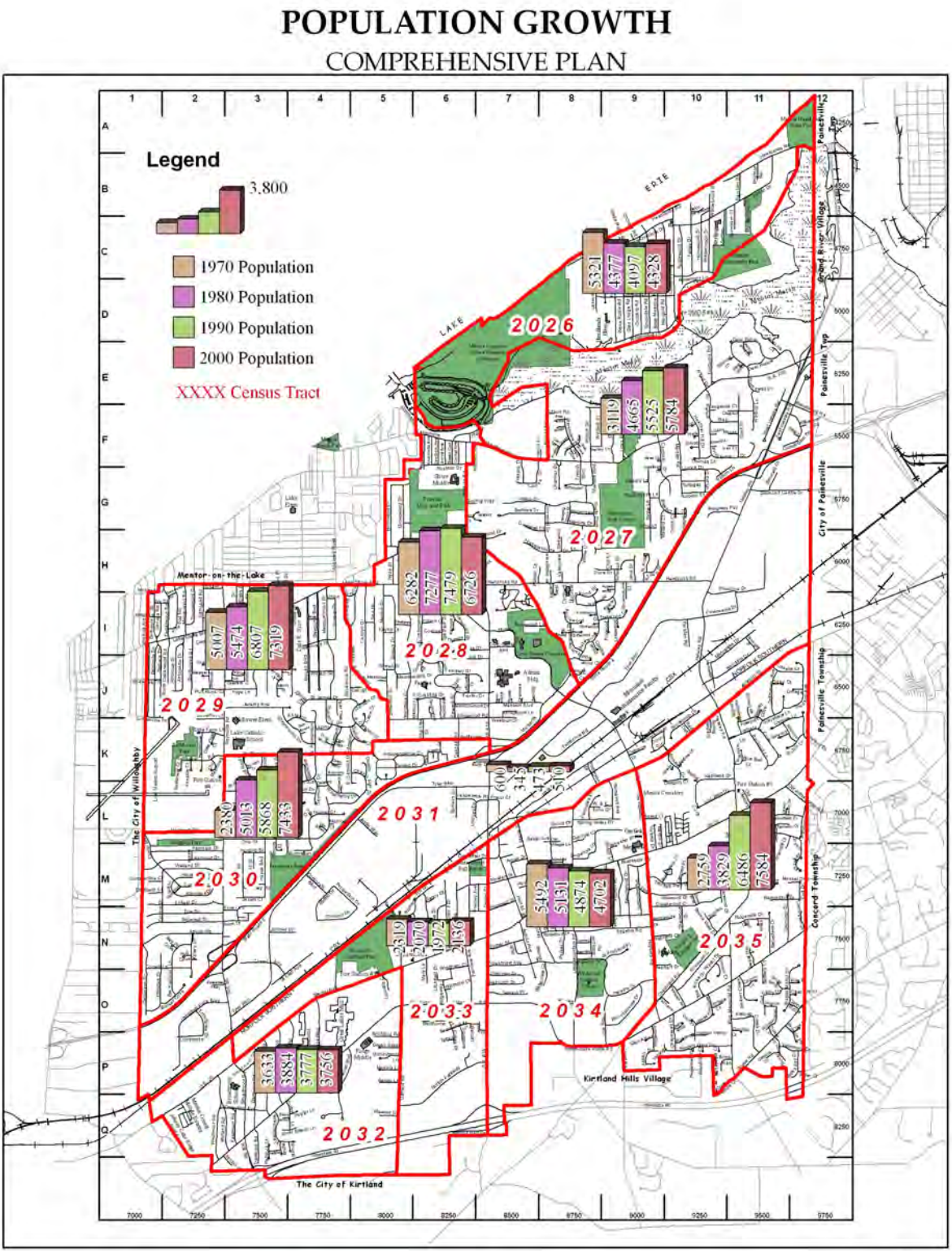
Table 3.4 Census basics 2000

Tract	Population	Dwelling units	Area (acre)	Density (per acre)
2026	4,328	1,617	1,387.16	1.17
2027	5,784	2,039	2,966.13	0.69
2028	6,726	2,630	1,582.01	1.66
2029	7,319	2,773	1,555.89	1.78
2030	7,433	2,760	1,272.65	2.17
2031	510	208	3,165.58	0.07
2032	3,756	1,761	1,267.23	1.39
2033	2,136	844	1,143.39	0.74
2034	4,702	1,996	1,525.08	1.31
2035	7,584	2,673	2,159.76	1.24
Total	*50,278*	*19,301*	18,024.87	*1.07*

(US Census Bureau)

The growth between 1960 and 1980 reflects a general migration eastbound from Cuyahoga County as well as a continuing exodus from the central city. It also reflects the availability of large tracts of vacant developable land. Today, the City of Mentor is Lake County's most populous political subdivision with a 2007 population estimate of 51,739.

Map 3.1: Population Growth



3.3 HOUSEHOLDS AND FAMILIES

Household size has been steadily declining in both Mentor and Lake County since 1960 (Table 3.5). The largest drop occurred in the 1970's, when the average household lost half a person and it has lost a full person between the 1970 Census and Census 2000. While the average household size in Mentor has declined, it still remains well above both the regional and state averages.

Table 3.5 Household Size 1970 Census to 2000 Census

Census	Mentor	Lake County	Cleveland PMSA	Ohio
1970	**3.63**	3.50	3.13	3.16
1980	**3.07**	2.95	2.70	2.76
1990	**2.83**	2.68	2.56	2.65
2000	**2.65**	2.50	2.47	2.59
(US Census Bureau)				

Mentor's average family size is the second highest amongst its neighbors, with only Grand River higher (Table 3.6). Mentor's average family size is near the county average and is equal to the regional average, but it is less than the national average.

Table 3.6 Household and family size 2000

Community	Household size (persons)	Family size (persons)
Mentor	**2.65**	**3.08**
Willoughby	2.17	2.87
Mentor on the Lake	2.46	3.00
Cleveland PMSA	2.47	3.08
Painesville Twp.	2.49	2.98
Lake County	2.50	3.03
Concord Twp.	2.63	3.01
Kirtland Hills	2.68	2.99
Kirtland	2.69	3.06
Grand River	2.83	3.24
United States	2.59	3.23

(US Census Bureau)

Mentor average household size is in the middle compared to its neighbors. Concord Township, Mentor-on-the-Lake, Painesville Township and Willoughby all have average household sizes smaller than Mentor, while Grand River, Kirtland and Kirtland Hills are all larger. The shift in household size reflects the changing social conditions in the nation. People are waiting longer to marry and are establishing more single person households. The increase in the number of divorces has created additional single parent households.

The smaller household size has had an impact on the total number of households in the community. Between 1990 and 2000 the population in Mentor increased 6%. During the same period the number of households increased at a lower rate. As household size declines, more dwelling units are needed to house the same population, therefore a portion of new housing starts serves merely to accommodate the redistribution of people into more units.

Mentor's percentage of family households is in the 70th percentile and it is very similar to the surrounding communities (Table 3.7). Kirtland Hills has the highest percentage of family households and the lowest non-family and single person households. This trend may have been caused by the fact that the majority of the housing stock in Kirtland Hills is single family homes.

Table 3.7 Family and non-family households 2000

Community	*Family households*	*Single Person households*	*Nonfamily households*
Mentor	**75.7%**	**20.5%**	**24.3%**
Concord Twp.	77.7%	18.2%	22.3%
Grand River	78.8%	18.9%	21.3%
Kirtland	77.1%	19.8%	22.9%
Kirtland Hills	80.7%	14.8%	19.3%
Mentor on the Lake	67.5%	26.6%	32.5%
Painesville Twp.	70.4%	24.7%	29.6%
Willoughby	57.4%	36.6%	42.6%
Lake County	69.7%	25.6%	30.3%
Cleveland PMSA	65.9%	29.2%	34.1%
United States	68.1%	25.8%	31.9%

(US Census Bureau)

There are 18,797 households in the city of Mentor and the majority of them, 75.7%, are inhabited by families. This is 6 percentage points higher than Lake County (69.7%) and almost 10 percentage points higher than the Cleveland PMSA (65.9%) (Table 3.7).

Table 3.8 Household type 2000

Family type	*Households*	*% households*
Total households	18,797	100.0%
Family households:	14,235	75.7%
Married-couple family:	11,957	63.6%
Male Householder, no wife	600	3.2%
Female Householder, no husband	1,678	8.9%
Non-Family households:	4,562	24.3%
Male Householder	1,989	10.6%
Living alone	1,570	8.4%
65 years and older	366	1.9%
Not living alone	419	2.2%
Female Householder	2,573	13.7%
Living alone	2,291	12.1%
65 Years and older	1,159	6.2%
Not living alone	282	1.6%

(US Census Bureau)

The majority of these families are headed by married couples but, 12.1% of all households in the city are single-parent families. This average is higher compared to 7.3% of Lake County households (Table 3.8).

20.5% of the households in Mentor are single person households. This is lower than the county, regional and national averages. 8.1% of all the households in the city are people sixty-five years or older and are living alone. This is lower than the county average of 9.8%

3.4 AGE

The City of Mentor's median age of 38.9 is very similar to the overall County average (38.6) (Table 3.9). Both the City and the County are slightly higher than the averages for the Cleveland PMSA and United States. Mentor on the Lake has the lowest median age of 35.1 years and Kirtland Hills has the highest. Mentor has a similar median age to Painesville Township and Willoughby.

Table. 3.9 Median Age

Community	*Median Age*
Mentor	38.9
Concord Twp.	41.4
Grand River	37.6
Kirtland	42.5
Kirtland Hills	44.9
Mentor on the Lake	35.1
Painesville Twp.	38.1
Willoughby	39.1
Lake County	38.6
Cleveland PMSA	37.3
United States	35.4

(US Census Bureau)

The aging of Mentor's population is evidenced by the increase in median age from 25 in 1970 to more than 38.9 in 2000 (Table 3.9). The "baby boom generation" of the 1950's and 1960's is growing older resulting in larger numbers in the middle and upper middle age ranges. The life expectancy of the average person is also increasing. This inflates the upper age groupings.

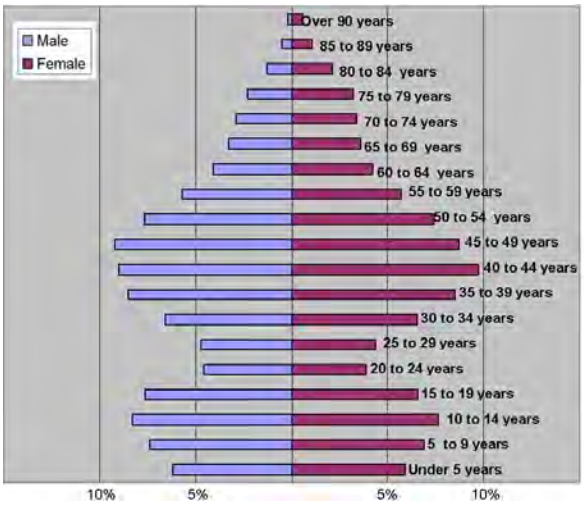
Table 3.10 provides an age profile and age-sex pyramid of the City according to the 2000 census. The 40-49 age sector is the largest population segment for both men and women. The small percentage of the 20-24 age segment is partially due to the number of people attending non-local colleges or attending local colleges and pursing job opportunities outside of the region. This same age sector often returns in their thirties to pursue stable employment and raise a family.

The data on Chart 3.11 indicates an evening out of the age groups from 1960-2000. According to the Census, in 1960 and 1970 more than 43% of the total population was less than 18 years of age. By 1980 this segment of the population declined to 34%, and decreased further in 1990 to 30%. The 2000 Census indicated that this population segment had decreased to 28%. At the same time, the population more than 55 years of age increased from 10% in 1960 to 22% of the total population in 2000.

Table 3.10 Age distribution 2000

Age	*Mentor*		*Lake County*		*Cleveland PMSA*	
	Persons	*%*	*Persons*	*%*	*Persons*	*%*
≤5	**3,026**	**6%**	13,906	6.1%	148,150	6.6%
5-9	**3,606**	**7.2%**	15,486	6.8%	164,872	7.3%
10-14	**3,972**	**7.9%**	16,079	7.1%	164,207	7.3%
15-19	**3,560**	**7.1%**	14,689	6.5%	149,349	6.6%
20-24	**2,140**	**4.3%**	11,460	5.0%	121,813	5.4%
25-34	**5,595**	**11.2%**	29,247	12.9%	295,398	13.1%
35-44	**8,969**	**17.8%**	38,345	16.9%	363,179	16.1%
45-54	**8,272**	**16.5%**	33,689	14.8%	313,916	13.9%
55-59	**2,879**	**5.7%**	12,718	5.6%	111,566	5.0%
60-64	**2,090**	**4.2%**	9,848	4.3%	91,791	4.1%
65-74	**3,341**	**6.6%**	17,024	7.5%	165,665	7.4%
75-84	**2,236**	**4.4%**	11,676	5.1%	121,616	5.4%
≥85	**592**	**1.2%**	3,344	1.5%	39,349	1.7%
Grouping of ages 19 and under, 20-54, and 55 and over						
≤19	**14,164**	**28.2%**	60,160	26.5%	626,578	27.8%
20-54	**24,976**	**49.7%**	112,741	49.6%	1,094,306	48.5%
≥55	**11,138**	**22.2%**	54,610	24.0%	529,987	23.6%

(US Census Bureau)



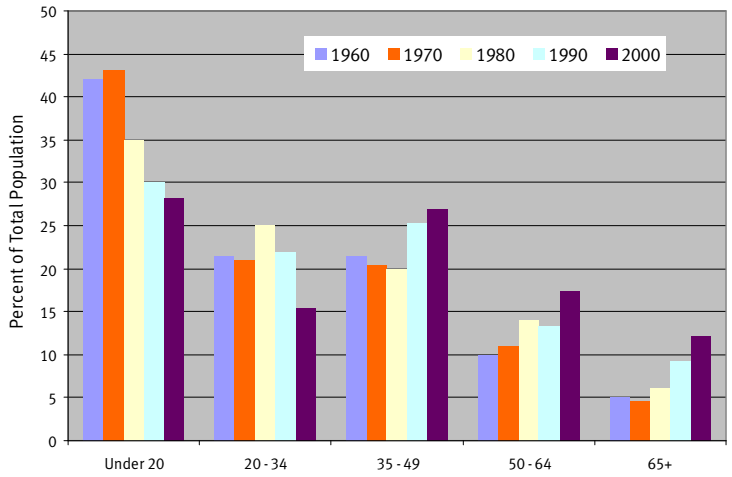
The changing social and economic climate has had an influence on the population. Many couples are choosing not to have children or are waiting longer and having fewer children than in the past reducing the number of persons in the lower age groups and ultimately the enrollment in the local schools.

Table 3.11 Age distribution 1990-2000

Age	1990		2000	
	Persons	%	Persons	%
≤19	14,255	30.1%	**14,164**	**28.2%**
20-54	24,729	52.2%	**24,976**	**49.7%**
≥55	8,374	17.7%	**11,138**	**22.2%**

(US Census Bureau)

CHANGES IN AGE GROUPS
1960 - 2000



3.5 EDUCATION

The Mentor Public School system over the years has provided an excellent education experience for the children under the age of 18. During the past five years the district has received an excellent rating by the Ohio Department of Education. During the 2007—2008 school year the district met 29 out of the required 30 indicators (which measures the percentage of students scoring at or above proficient on the state assessments). In 2000, Mentor's 89.2% high school graduation rate is higher than Lake County, the Cleveland PMSA and the US (Table 3.12).

Table. 3.12 Percentage of High School Graduates or Higher

Community	
Mentor	89.2%
Concord Twp.	94.0%
Grand River	89.9%
Kirtland	88.1%
Kirtland Hills	94.0%
Mentor on the Lake	87.8%
Painesville Twp.	87.9%
Willoughby	87.6%
Lake County	86.4%
Cleveland PMSA	82.8%
United States	80.3%

(US Census Bureau)

According to the 2000 Census approximately 89% of the City's population age 25 years and older are high school graduates compared to 86.4% for Lake County and 80.3% for the country (Table 3.13). Furthermore, 27.5% of the population has attained a Bachelor's or higher degree compared to 21.5% for Lake County, 23.3% for the Cleveland PMSA and 24.4% for the country.

Table 3.13 Educational attainment of Persons 25 years and Older 2000

Education	Mentor	Concord Twp	Grand River	Kirtland	Kirtland Hills	Mentor on the Lake	Painesville Twp	Willoughby	Lake County	Cleveland PMSA
Less than 9th grade	1.8%	0.9%	0.0%	3.7%	1.4%	1.8%	2.3%	2.0%	2.9%	4.3%
Some high school	9.0%	5.0%	9.8%	8.3%	4.8%	10.5%	9.9%	10.3%	10.6%	12.9%
High school grad or GED	30.0%	26.4%	60.0%	28.0%	15.20%	40.0%	38.2%	33.3%	34.4%	32.4%
Some college	24.9%	24.9%	19.7%	21.4%	22.9%	27.1%	22.3%	23.4%	23.8%	21.4%
Associate degree	6.8%	6.5%	6.4%	6.0%	8.2%	6.3%	6.6%	7.2%	6.7%	5.7%
Bachelor's degree	18.6%	24.0%	1.7%	21.5%	27.7%	9.4%	15.5%	17.4%	14.6%	14.9%
Graduate degree or PhD	8.9%	12.2%	2.1%	11.2%	20.0%	5.0%	5.3%	6.3%	6.9%	8.4%

(US Census Bureau)

3.6 OCCUPATION AND INDUSTRY

Among employed city residents, 25.2% work in the manufacturing sector, reflecting the large manufacturing base of Mentor and Lake County; only 20% of workers in Ohio and 14.1% of workers in the United States are employed in the manufacturing sector (Table 3.14). Data from the Harris Publishing Company indicates a 3% reduction in the number of companies and manufacturing companies in the City. The second largest employer is the education, health, and social services sector, with 18.3% of all workers living in the city; a lower percentage than the county (18.0%). According to the US Census, 13.1% of Mentor residents work in the retail trade sector; this is comparable to Lake County (12.0%) and to the Cleveland PMSA (11.2%)(Table 3.13).

75.9% of all workers in the city can be considered white-collar (management/professional, service, sales/office), compared to the 73.3% for Lake County and to the 75% for the Cleveland PMSA (Table 3.15).

Table 3.14 Employment by industry 2000

Industry	Mentor	Concord Twp	Grand River	Kirtland	Kirtland Hills	Mentor on the Lake	Painesville Twp.	Willoughby	Lake County	Cleveland PMSA
Agriculture	0.3%	0.5%	0.0%	0.7%	0.6%	0.1%	1.0%	0.2%	0.6%	0.5%
Construction	4.8%	6.0%	4.2%	8.0%	8.6%	5.6%	6.8%	5.8%	6.1%	5.6%
Manufacturing	25.2%	21.8%	30.7%	23.8%	23.6%	23.1%	25.9%	21.7%	24.4%	19.1%
Wholesale trade	4.0%	4.2%	4.2%	3.8%	4.1%	3.3%	3.1%	4.5%	4.0%	3.7%
Retail trade	13.1%	11.0%	4.8%	10.9%	7.3%	13.7%	12.8%	9.8%	12.0%	11.2%
Transportation, warehousing, utilities	3.6%	3.1%	6.0%	3.7%	0.6%	4.3%	2.9%	3.6%	3.9%	4.7%
Information technology	1.9%	2.0%	0.0%	1.0%	1.0%	2.0%	1.1%	2.6%	1.8%	2.5%
Finance, insurance, real estate	7.1%	8.1%	2.4%	6.4%	9.9%	7.2%	7.2%	8.9%	7.1%	7.5%
Professional, scientific, management, administrative	8.2%	11.3%	6.6%	8.6%	16.2%	8.1%	7.2%	8.4%	8.0%	9.1%
Educational, health, social services	18.3%	21.1%	20.5%	18.6%	20.7%	18.0%	16.5%	20.1%	18.0%	20.4%
Arts, entertainment, recreation, hospitality	6.3%	5.2%	12.0%	6.0%	3.8%	7.8%	6.6%	7.2%	6.7%	7.3%
Other services	4.0%	2.8%	4.8%	6.2%	3.5%	3.7%	4.4%	4.7%	4.3%	4.4%
Public administration	3.2%	2.9%	3.6%	2.2%	0.0%	3.1%	4.4%	2.5%	3.1%	3.8%

(US Census Bureau)

Table 3.15 Employment by occupation 2000

Industry	Mentor	Concord Twp	Grand River	Kirtland	Kirtland Hills	Mentor on the Lake	Painesville Twp.	Willoughby	Lake County	Cleveland PMSA
White collar										
Management, professional, related	**36.1%**	45.7%	14.5%	42.5%	59.9%	27.8%	31.5%	34.7%	32.1%	33.0%
Service	**11.1%**	8.6%	25.3%	10.8%	2.9%	15.1%	14.1%	13.0%	13.0%	14.4%
Sales and office	**28.7%**	29.2%	16.9%	24.2%	23.6%	30.2%	27.5%	28.1%	28.2%	27.7%
Blue collar										
Farming, fishing and forestry	**0.2%**	0.3%	0.0%	0.3%	0.0%	0.0%	0.1%	0.1%	0.0%	0.3%
Construction, extraction, maintenance	**7.0%**	7.1%	13.9%	10.1%	8.3%	8.9%	8.8%	7.9%	10.3%	8.7%
Production, transportation, material moving	**16.9%**	9.1%	29.5%	12.1%	5.4%	18.0%	18.1%	16.1%	16.1%	17.7%

(US Census Bureau)

3.6 INCOME

Mentor City is considered a middle-class community. The median household and family income in the city ($57,230 and $60,322, respectively) is higher than the county ($48,763 and $57,134), and higher than the national median ($41,994 and $50,046.) Median household and family incomes are similar to the surrounding communities (Table 3.15).

Compared to Lake County and the Cleveland PMSA, Mentor has a lower percentage of households with an annual income under $50,000 (42%) than the county as a whole (51.4%), and a slightly lower percentage of households with an income of $50,000 to $149,000 (Table 3.17).

In 1999, 259 families, or 1.8% of all families in the city, lived below the poverty level, compared to 3.5% in Lake County and 8.2% in the Cleveland PMSA. 1,366 residents, or 2.7% of the city population, live under the poverty level, compared to 5.1% of all Lake County residents and 10.8% of all Cleveland PMSA residents.

Table 3.16 Median Household and family income 1999

Income	*Median Household Income*	*Median Family Income*
Mentor	**$57,230**	**$60,322**
Concord Twp.	$69,256	$77,117
Grand River	$45,000	$50,469
Kirtland	$65,422	$76,062
Kirtland Hills	$112,421	$144,134
Mentor on the Lake	$44,871	$50,802
Pville Twp.	$51,170	$56,175
Willoughby	$43,387	$53,677
Lake County	$48,763	$57,134
Cleveland PMSA	$42,089	$52,047

(US Census Bureau)

Table 3.17 Household income distribution 1999

Income	*Mentor City*		*% of Lake County*	*% of Cleve PMSA*
	House-holds	*%*		
Less than $10,000	**575**	**3.1%**	4.9%	9.3%
$10,000 to $14,999	**541**	**2.9%**	4.7%	6.2%
$15,000 to $24,999	**1,628**	**8.7%**	11.0%	12.8%
$25,000 to $34,999	**1,896**	**10.1%**	12.4%	12.8%
$35,000 to $49,999	**3,225**	**17.2%**	18.4%	16.7%
$50,000 to $74,999	**4,563**	**24.3%**	24.2%	20.1%
$75,000 to $99,999	**3,320**	**17.7%**	13.0%	10.7%
$100,000 to $149,999	**2,385**	**12.7%**	8.4%	7.3%
$150,000 to $199,999	**348**	**1.9%**	1.5%	1.9%
$200,000 or more	**277**	**1.5%**	1.5%	2.1%

(US Census Bureau)

Household: *A household includes all the people who occupy a housing unit as their usual place of residence and a person, or one of the people, in whose name the home is owned, being bought, or rented. If there is no such person present, any household member 15 years old and over can serve as the householder for the purposes of the Census.*

Family Household: *A family consists of two or more people, one of whom is the householder, related by birth, marriage, or adoption and residing in the same housing unit.*

Non-family Household: *A non-family consists of a householder living alone (a one-person household) or where the householder shares the home exclusively with people to whom he/she is not related.*

Source: US Census Bureau

There were 256 senior citizens living under the poverty level – 4.4% of those in poverty – while 5.4% of those living under the poverty level in Lake County are seniors. Female-headed single parent households usually make up the bulk of family types living under the poverty level, ninety-nine such households live under the poverty level in Mentor (Table 3.18).

To determine qualification for loans and grants, HUD considers the number of households who are very low, low or moderate income. 36.6% of households in Mentor City meet the HUD definition of moderate, low or very low income households (Table 3.19).

Table 3.18 Poverty status: persons 1999

Group	Mentor City		% of Lake County	% of Cleve PMSA
	Number	%		
All persons under poverty level	1,366	2.7%	5.1%	10.8%
Persons in poverty: ≤17 years	407	3.2%	6.8%	15.9%
Persons in poverty: 18-64 years	703	2.3%	4.3%	9.3%
Persons in poverty: ≥65 years	256	4.4%	5.4%	8.2%
All families under poverty level	*259	*1.8%	*3.5%	*8.2%
Families in poverty: married w/children ≤18	*51	*0.9%	*6.0%	*13.1%
Families in poverty: female HH w/children ≤18	*99	*10.7%	*21.0%	*34.0%

** = Number or percentage of all families under the poverty level; not number or percentage of all persons*
HH = householder, no partner of opposite sex present
(US Census Bureau)

Table 3.19 Moderate, low and very low income households 2000

Household attribute	Households	% of households
Total households	18,758	100%
Mod. income (51- 80%)	3,127	16.7%
Low income (36-50%)	2,004	10.6%
Very low income (≤35%)	1,741	9.3%
Total households ≤80%	6,872	36.6%

(US Census Bureau)

3.8 RACE AND ETHNICITY

Table 3.20 Race and ethnicity 2000

Industry	Mentor	Concord Twp	Grand River	Kirtland	Kirtland Hills	Mentor on the Lake	Painesville Twp.	Willoughby	Lake County	Cleveland PMSA
White	97.3%	97.5%	99.4%	98.5%	98.2%	97.1%	96.4%	96.5%	95.4%	76.9%
Black / African-American	0.6%	0.5%	0.0%	0.3%	0.3%	0.8%	1.6%	0.7%	2.0%	18.5%
Native American / Alaskan	0.0%	0.1%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.2%
Asian	1.2%	1.0%	0.6%	0.4%	0.2%	0.7%	0.6%	0.6%	0.9%	1.4%
Hawaiian / Pacific Islander	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Other	0.2%	0.1%	0.0%	0.0%	0.0%	0.3%	0.4%	0.1%	0.7%	1.4%
Two or more races	0.6%	0.8%	0.0%	0.0%	1.3%	1.0%	1.0%	0.9%	0.9%	1.6%

(US Census Bureau)

Table 3.21 Hispanic/Latino population 2000

Industry	Mentor	Concord Twp	Grand River	Kirtland	Kirtland Hills	Mentor on the Lake	Painesville Twp.	Willoughby	Lake County	Cleveland PMSA
Hispanic or Latino	0.7%	0.5%	0.3%	0.6%	0.5%	1.2%	1.1%	0.7%	1.7%	3.3%
Not Hispanic or Latino	99.3%	99.5%	99.7%	99.4%	99.5%	98.8%	98.9%	99.3%	98.3%	96.7%

3.9 GROWTH

Any estimate of future population is faced with the task of also predicting social and economic trends that can affect the components of population change. As such, Table 3.22 indicates four projection data sets.

Table 3.22 Projected population 2010-2030

Year	*LCPC (low)*	*LCPC (medium)*	*LCPC (high)*	*NOACA/ODOD projection*
2000	50,278	50,278	50,278	50,278
2010	54,780	55,501	59,962	* 51,836
2020	58,886	60,040	66,732	* 51,976
2030	n/a	n/a	n/a	* 51,487

LCPC projections were calculated in 2003 using linear regression

Constrained by the decreasing amount of vacant buildable residential property and the requirements of the city's zoning regulations, it is projected that the maximum population of the city will not exceed 55,000 people. That figure is based on household size stabilizing near 2.5 persons per household and the maximum density of residential development not changing substantially.

Barring major changes in fuel prices, locations of new employment centers and home-buyer preference trends that may continue to the near future include:

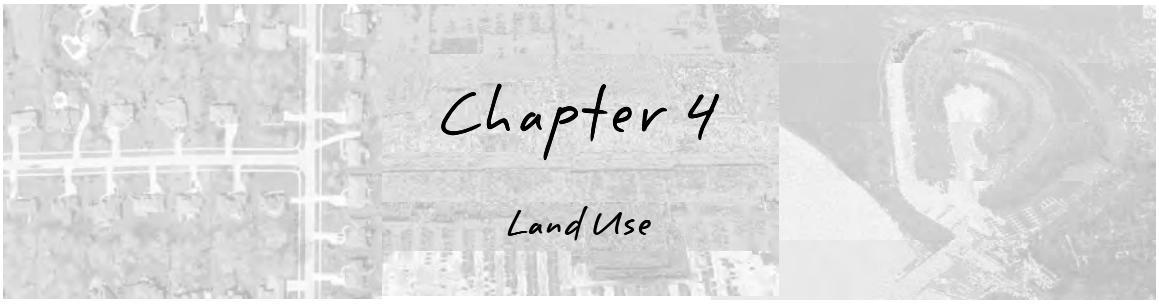
- Continued decrease in fertility rates and household sizes, which would impact built-out inner ring suburbs.
- Continued development in urban fringe areas, not from those leaving Cleveland or pre-WWII era suburbs, but rather families moving from inner and middle-ring suburbs to more exurban areas.
- Continued growth in the southern and western United States.

Table 3.21 is provided for comparison purposes. Similar to Mentor, the data for the communities shown indicate low growth rates through 2030.

Table 3.21 Projected population 2010-2030

Year	*Mentor*	*Willoughby*	*Concord*	*Kirtland*	*Pville Twp.*
1950	8,432	10,967	1,440	1,723	6,102
1960	24,548	15,058	3,860	4,709	10,316
1970	36,912	18,634	5,948	5,530	10,870
1980	42,065	19,329	10,335	5,969	12,348
1990	47,358	20,510	12,432	5,881	13,218
2000	50,278	22,621	15,282	6,670	15,123
*2010	51,836	23,978	17,176	7,210	16,445
*2020	51,976	24,049	17,478	7,232	16,496
*2030	51,847	23,801	17,260	7,153	16,314

** - projected population (ODOD, NOACA)*



4.1 INTRODUCTION

The Land Use element is not intended to be a lot-by-lot plan for future development and preservation of land in Mentor, but rather a guide for development, redevelopment and best management practices.

The Land Use element will evaluate existing conditions, identify emerging patterns, analyze the current zoning scheme, and provide achievable goals and policies to meet the desires of residents and public officials.

Table 4.1 Land use (acres/percent)

	Year				
	1966	*1984*	*1990 **	*2000*	*2007*
Residential	3,243 (18%)	4,200 (23%)	6,158 (34%)	6,490 (35%)	6,790 (37%)
Multi-Family (A.K.A. High Density)	92 (1%)	290 (2%)	332 (2%)	493 (3%)	513 (3%)
Commercial	245 (1%)	800 (4%)	1,160 (7%)	1,045 (6%)	1,132 (6%)
Industrial	298 (2%)	1,100 (6%)	1,179 (7%)	1,266 (7%)	1,431 (8%)
Open Space/Marsh	431 (7%)	2,140 (12%)	2,438 (13%)	1,245 (7%)	1,184 (6%)
Parks & Recreation	-	-	-	1,134 (6%)	1,178 (6%)
Public Building/Institutional	117 (0%)	-	-	742 (4%)	858 (5%)
Public Utility / Railroads	148 (1%)	150 (1%)	150 (1%)	351 (2%)	348 (2%)
Streets**	1,337 (7%)	2,000 (11%)	2,082 (12%)	2,227 (12%)	2,292 (13%)
Vacant	12,339 (63%)	7,570 (41%)	4,386 (24%)	3,257 (18%)	2,524 (14%)
Nursery	*757.00*	*450*			
Vacant Commercial		*1,709*	*586*	*165*	*151*
Vacant Industrial	*2,356*	*1,608*	*1,400*	*962*	*744*
Vacant Multi-Family				*2*	*2*
Vacant Residential		*3,803*	*2,400*	*2,128*	*1,627*
Total	**18,250**	**18,250**	**17,586**	**18,250**	**18,250**

** A different methodology was used in creating the calculation*
***Proportion of the 1966 City/State streets estimated by 1984 ration (Source: URS Consultants, City of Mentor.*

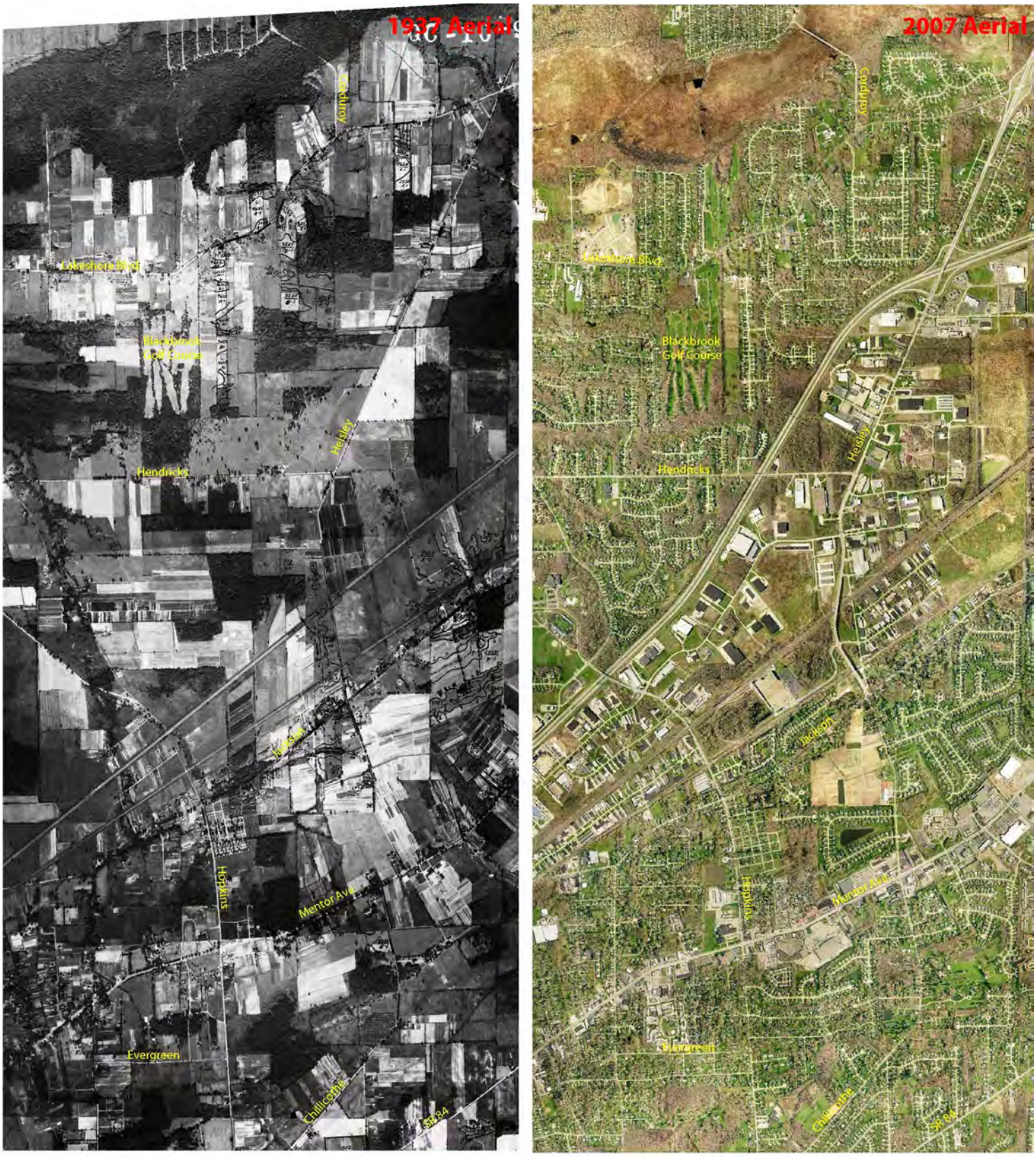
4.2 RECENT DEVELOPMENT TRENDS AND HISTORY

A review of existing planning documents and historic photos shows the land use pattern of the City changed dramatically over the past several decades (Map 4.1). Land use throughout Mentor's early history has been dominated by vacant and agricultural land. Residential uses, of which the predominant type has been single family homes, have replaced the majority of the agricultural landscape over the past 50 years. Table 4.1 notes the land use breakdown from 1966 to 2007. Of note, the amount of vacant property has decreased from 63% in 1966 to 14% in 2007. Conversely, the amount of industrial land has increased from 2% to 8% from 1966-2007.

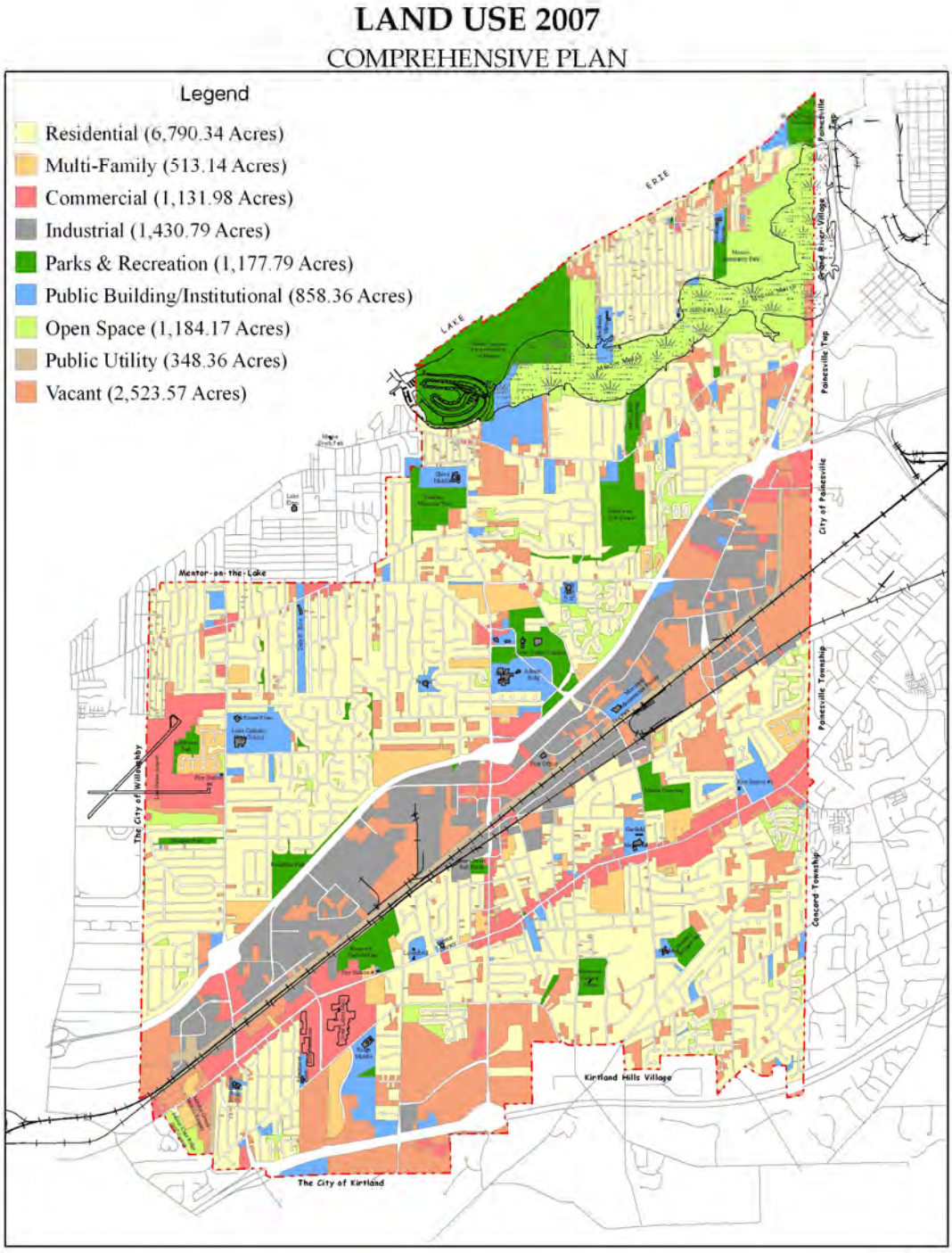
Significant events that shaped the present land use distribution include:

- Construction of the Lakeland Freeway (SR2) and I-90
- Development of the Great Lakes Mall
- Development (and widening) of major corridors including Tyler Blvd. , Mentor Avenue, Heisley Rd., SR 306, SR 614 and SR 84.
- Construction of the Mentor Lagoons
- Opening of the SR 615/I-90 interchange

Map 4.1: Land Use Change, 1937-2007



Map 4.2: 2007 Land Use

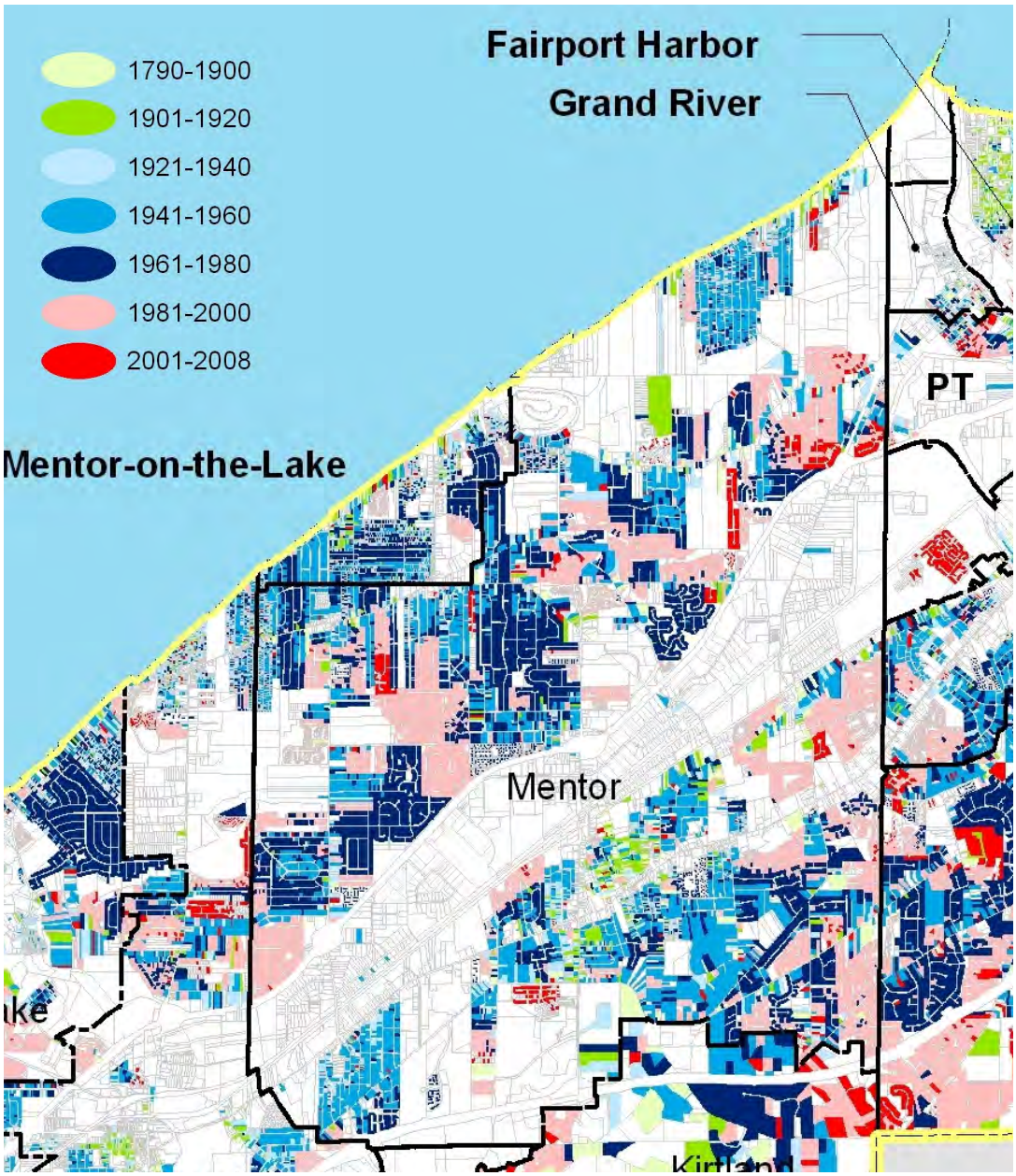


Residential

In 2007, approximately 40% (7,300 acres) of Mentor's land base was residential. The vast majority (37%) is single family dwelling units. The style, density and timing of developments vary greatly.

Similar to other Lake County Communities, Mentor has styles ranging from century homes, early 1900s lakefront cottages, standard conventional suburban-scale developments characterized by curvilinear streets and cul-de-sacs, and more recently, mixed used communities such as Newell Creek.

Map 4.3: Year Structure Built



The green shading on Map 4.3 clearly reveals the early settlement pattern of Mentor Village along the north side of Mentor Avenue between Center Street and Hopkins Rd. Approximately 50 of these buildings are more than 100 years old which makes them eligible to be designated as Heritage Homes or structures.

Many of these structures are distinguished by their architectural style. All types of architecture are represented. The majority of which are an amalgamation of the Federal and Greek Revised style.

As with other large cities, Mentor developed in an outward manner from its nucleus. This growth accelerated after WWII and continued until the 1980s. As noticeable in the Mentor Headlands neighborhood, post WW II developments provided affordable ranch (and cape code) single family houses on a rectilinear grid bisected by connector streets, with few cul-de-sacs (Map 4.4).

Federal loan and mortgage programs in the 1950s and 1960s offered preferential treatment to those purchasing suburban homes. The construction of I-90 and the Lakeland Freeway (SR 2) enabled workers to easily commute to jobs in Cleveland, East Cleveland and Euclid.

Beginning in the 1970's through the present day, the street pattern departed from its gridiron past, and rights-of-way in residential developments were platted with a series of loops and cul-de-sacs. Street connections between adjoining subdivisions were limited (Map 4.5). Homebuyers also began to demand larger homes and larger lots. This land was found north of the SR 2 corridor and in the eastern portions of the City (see red shading on Map 4.3).

Map 4.4: Post WW II development pattern

Map 4.5: Current development pattern

Other residential land uses include:

- Multi-family developments- scattered throughout the city but are primarily located along major transportation arteries.
- Mixed use developments

    - Upon completion, Newell Creek will be comprised of residential (single family, multi-family, assisted living), professional office, commercial, retail and recreational land uses within the same area.
    - Center Street Village is a one of a kind mixed use and adaptive reuse development located in the Old Village area of Mentor. The cornerstone of the site is the redevelopment of the old elementary school into condominium units. Commercial and carriage houses are also incorporated into the site.

Commercial

In 2007, approximately 6% (1,132 acres) of Mentor's land was commercial. This represents a 41% increase since 1984. The number and diversity of retail and service businesses serve to meet both neighborhood and regional needs.

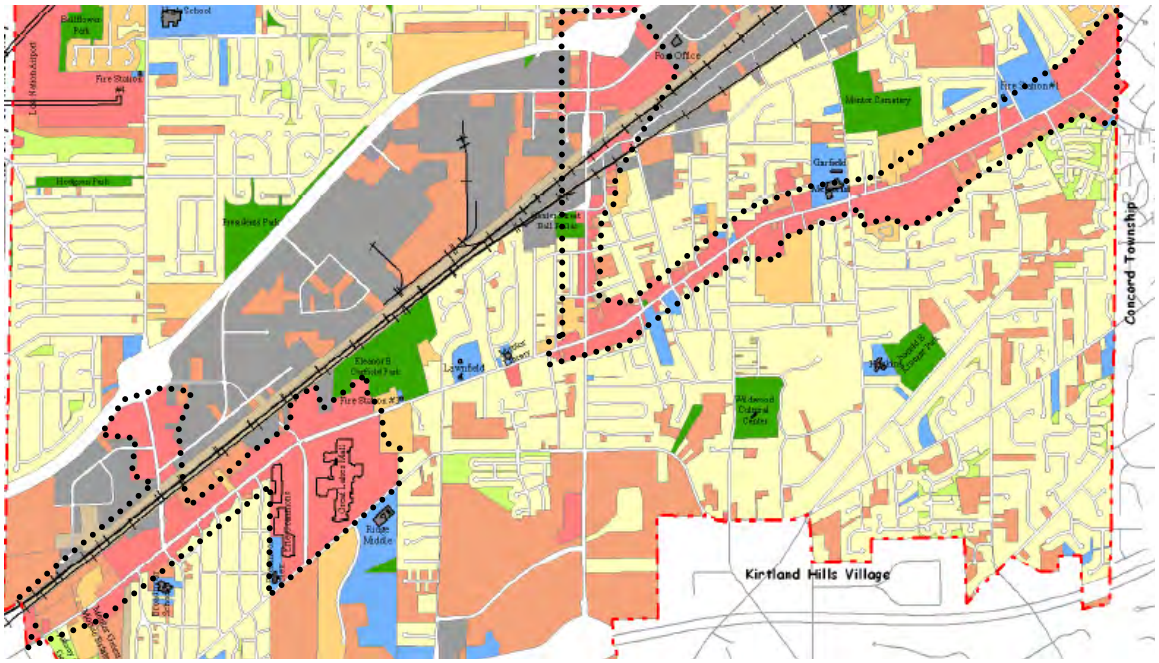
As expected, the larger commercial and retail developments are predominately concentrated along the major transportation arterials of Mentor Avenue (U.S. 20), Heisley Road and Center Street (S.R. 615) (Maps 4.7, 4.8). Developed in 1963, Great Lakes Mall is considered the traditional anchor of the retail sector of Mentor's land use. More recent big box retailers have developed along the eastern fringes of the City off Heisley Road, capitalizing on the proximity to SR 2 and the continued population shift to central and eastern Lake County.

Smaller, neighborhood scale commercial nodes are located at various points along Lakeshore Blvd., providing daily and convenience goods and services (Map 4.6).

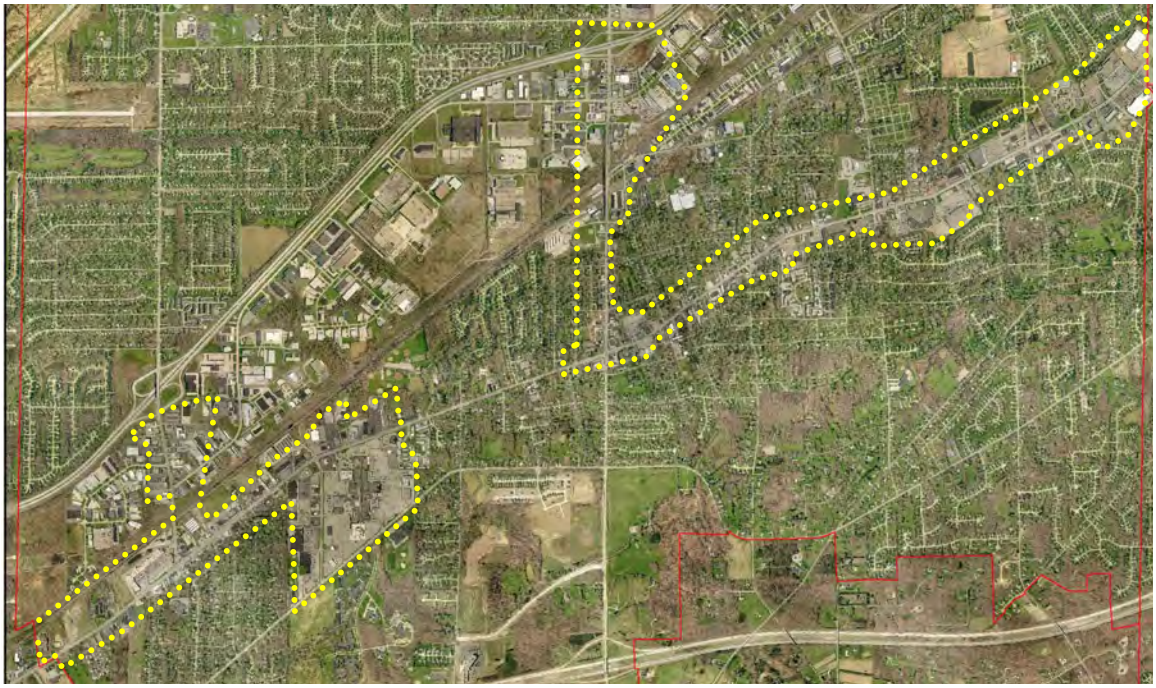
Map 4.6: Neighborhood retail (Lakeshore Blvd./306)

Retail and commercial land use patterns are often the focal point for the community. In Mentor, the majority of the citizens and visitors are more likely to identify with retail land use because of their location on the most heavily traveled roads and the market they serve.

Map 4.7: Commercial land use (black outline)



Map 4.8: Commercial land use aerial (yellow outline)



The NOACA Northeast Ohio Regional Retail Analysis (August 2000), notes the challenges with the retail sector:

- **Visibility** The physical configuration and condition are critical to the city's image.
- **Health** Economic vitality of the city is associated with the ability of its business districts to thrive and remain prosperous and provide leisure time to customers.
- **Social character** Retail areas create a sense of place where residents and visitors can satisfy their consumer needs and encounter other residents. This creates a neighborhood marketplace.

In 2000, there was 28.59 square feet of retail space per resident for supermarkets, drug stores, and other day-to-day convenience goods. The average for Lake County was 18.31 square feet/resident. There were 47.61 square feet/resident for shopping goods and durable consumer products (department stores, clothing, shoes and furniture) compared to 9.44 square/resident for the County.

What is strip (multi-tenant) commercial development?

The roots of strip commercial development can be found along streetcar lines of the early 20th century. Commercial uses followed busy streetcar lines, awaiting commuters at the start or end of their trip.

Even after streetcar lines were abandoned, commercial development tended to follow streets with heavy vehicle traffic. Communities would often zone all lots adjacent to a busy street for commercial uses. Most strip commercial areas grew incrementally, with lots at their far end rezoned and developed for retail or office use as suburban development extended further from the central city. Because urbanization of Lake County began after World War II, when automobile ownership became widespread, the majority of commercial land use is found in linear strips.

One of longest commercial strips in the Cleveland area is US 20 (Mentor Avenue and Euclid Avenue), where suburban-oriented commercial development extends from Euclid, across the Cuyahoga county line, though Wickliffe, Willoughby, Mentor and Painesville, with smaller strips forming even further to the east. Strip commercial development can also be found on shorter north-south streets in western Lake County.

Strip commercial areas can contribute to traffic congestion, because many access points are required to serve development along the street. Turning movements at access points interrupt the flow of traffic. The street also serves as a destination, carrying more than through traffic. According to the *Northeast Ohio Regional Retail Analysis* from the Cuyahoga County Planning Department, retail development accounts for as much as four times the traffic volume generated by office uses, eight times the volume of light industrial uses, and twenty-four times the volume of residential uses, using an equal area of developed land.

Strip commercial areas can be unattractive, with varying building setbacks, gaudy standardized franchise architecture, large signs, a lack of landscaping, and large parking lots. Many Cleveland suburbs have adopted strict sign, landscaping and architectural design regulations in an effort to improve the aesthetic quality of strip commercial development.

Overbuilding retail development results in new retail space that competes with existing commercial districts for market share. This can lead to lower rents, more marginal businesses, increased vacancies in older retail areas, and reduced property revenues for school districts and communities.

In Mentor there are ten shopping centers of 50,000 square feet (or more) which represent approximately 2.8 million square feet of retail space of the City's 3.5 million total square feet of retail (see Table 4.2). The vacancy rate in Mentor increased from 3 percent to 6 percent with the largest vacancies being in the Great Lakes Plaza (41,600 square feet) and Great Lakes Mall (37,000 square feet).

There is almost 700,000 square feet of retail space in 27 shopping centers in Mentor which range in size from 11,000 to 45,800 square feet. The vacancy among these convenience centers is 13 percent, a 2 percent increase from the 2008 report. The overall vacancy rate in the City of Mentor's 37 shopping centers is approximately 8 percent, up from 5 percent in 2008.

At the time this plan was written (2008-09), the country was declared to be in an economic recession. Consumer spending is declining which may impact retail markets. It is too early to

note, but vacancy rates could likely increase in the commercial cores in Mentor and the rest of the nation.

Table 4.2 2009 Retail Analysis

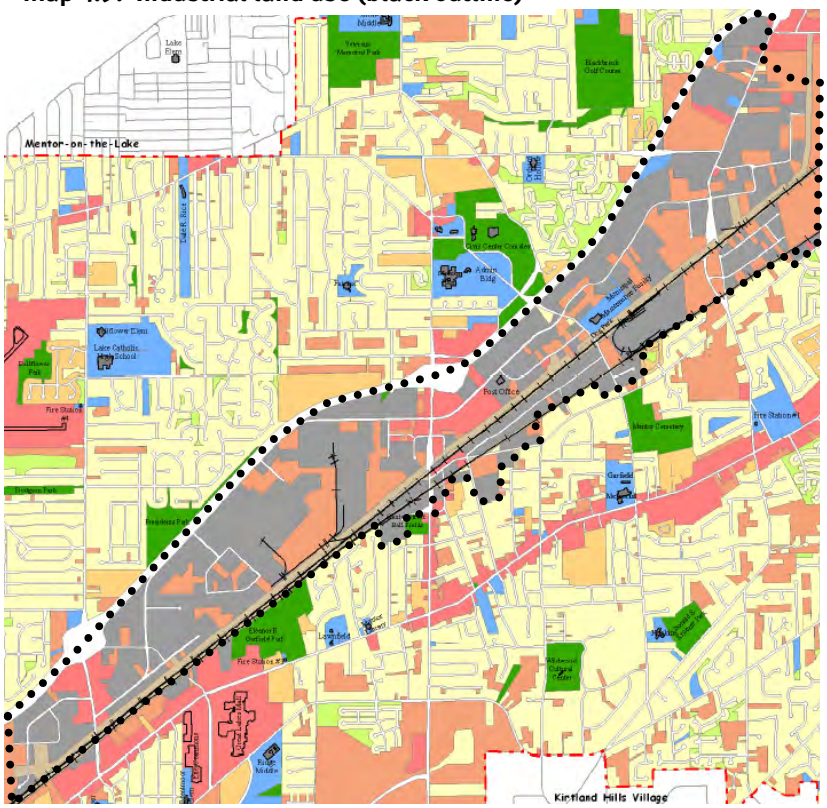
Name	*Location*	*Year*	*Sq. Ft.*	*Vacant sq. ft.*	*% Vac.*	*Classification*
Ames Plaza	Center St.	1988	136,000	2,500	2%	Major Neighborhood
Colonial Building	Mentor Ave.	1972	78,000	11,000	14%	Major Neighborhood
Points East Plaza	Mentor Ave.	1988	187,000	19,280	10%	Community Center
Levin	Mentor Ave.	1967	162,000	2,400	1%	Community Center
Town Square	Mentor Ave.	1978	76,700	7,600	10%	Community Center
Mentor Commons	Mentor Ave.	1994	290,000	32,490	11%	Community Center
Creekside Commons	Mentor Ave.	1995	190,000	2,667	1%	Community Center
Great Lakes Mall	Mentor Ave.	1963	1,300,000	37,000	3%	Regional Mall
Great Lakes Plaza	Plaza Blvd	1976	160,000	41,599	26%	Community Center
Erie Commons	Plaza Blvd	1973	201,500	19,284	10%	Community Center
TOTAL			***2,781,200***	***175,820***	***6%***	
Cardinal Corners	Center St.	1988	14,000	0	0%	Convenience
Center Station Plaza	Center St.	1986	18,000	1,500	8%	Convenience
Center Street Village	Center St.	2008	19,400	0	0%	Convenience
Headlands Plaza	Corduroy	pre-1963	21,500	2,000	9%	Convenience
Trask Towers	Diamond Center	1998	16,200	0	0%	Convenience
Trask II/Trask Plaza	Diamond Center	2004	23,200	12,391	53%	Convenience
Heavenly Ham Plaza	Heisley	1996	11,664	0	0%	Convenience
Parkview Plaza	Heisley	1994	12,200	1,030	8%	Convenience
Mentor Plaza	Lakeshore	1964	45,800	1,760	4%	Convenience
Eckley's Corners	Lakeshore	1972	23,300	23,300	100%	Convenience
	Lakeshore	1978	12,000	0	0%	Convenience
Midland Center	Mentor Ave.	2007	11,000	1,300	12%	Convenience
Dartmoor Plaza	Mentor Ave.	1977	10,700	2,240	21%	Convenience
Mentor City Center	Mentor Ave.	1976	80,000	4,000	5%	Convenience
Great Lakes II	Mentor Ave.	2001	30,000	0	0%	Convenience
Pier 1 Plaza	Mentor Ave.	1989	15,000	1,500	10%	Convenience
Realty One Plaza	Mentor Ave.	1987	22,500	4,560	20%	Convenience
Mentor Plaza-Drug Mart	Mentor Ave.	1987	37,200	3,107	8%	Convenience
Village Plaza	Mentor Ave.	1998	16,800	1,600	10%	Convenience
Mentor Corners	Mentor Ave.	1987	42,500	2,000	5%	Convenience
Avenue Plaza II	Mentor Ave.	2005	11,100	2,500	23%	Convenience
Avenue Plaza	Mentor Ave.	1988	13,000	1,200	9%	Convenience
Northgate	Mentor Ave.	1991	39,000	4,200	11%	Convenience
Staple Center	Mentor Ave.	1996	40,000	3,986	10%	Convenience
Enterprise Plaza	Mentor Ave.	1992	12,000	0	0%	Convenience
Heisley Pointe	Mentor Ave.	1991	24,000	13,000	54%	Convenience
Johnnycake Square	Mentor Ave.	1988	24,000	3,000	13%	Convenience
	Mentor Ave.	2008	19,208	0	0%	Convenience
Tyler Center	Tyler Blvd	1997	32,000	1,700	5%	Convenience
TOTAL			***697,272***	***91,874***	***13%***	
GRAND TOTAL			***3,478,472***	***267,694***	***8%***	

Source: City of Mentor Economic and Community Development Department, Retail Analysis

Industrial / manufacturing

Table 4.1 indicates approximately 8% (1,431 acres) of Mentor's land is used as manufacturing or industrial types uses. Developments are concentrated in the Tyler Blvd. industrial corridor that weaves through the center of Mentor. The corridor, planned by Eleanor Garfield and Ray Dawson in the 1960s, is bounded by the Lakeland Freeway (S.R. 2) to the north and railroad right of way to the south providing buffers from the residential areas of Mentor (Map 4.9, 4.10). Areas south of the CSX tracks should be evaluated for appropriate zoning and land use in the future.

Map 4.9: Industrial land use (black outline)



This industrial sector continues to provide a substantial economic base for the city and employment hub for residents. According to CB Ellis 2008 Market View for Greater Cleveland, Mentor contains 12,565,933 sq. ft of western Lake County's 27,009,075 sq. ft. of industrial space. This is nearly 50% of the available space.

In 2008, approximately 1,460,165 sq. ft. (13%) of the industrial space in Mentor was available. The largest available space is 490,000 square feet in the former Caterpillar building, 416,000 square feet in the former George Worthington building, 180,000 square

Map 4.10: Industrial land use aerial (yellow outline)

feet in the former CE Tyler building. These industrial facilities account for approximately 3/4 of the total available space in the City. A survey of the City of Mentor indicates approximately 2.1 million square feet of vacant industrial space; virtually unchanged from 2008.

The proximity to SR 2, rail spurs, infrastructure (including high speed cable service in the future) and available workforce will continue to make this area attractive for industrial type uses. The City should not consider rezoning these areas from non-industrial type uses unless other areas in the City present themselves. Furthermore, the 2010 extension of Plaza Blvd. to Tyler will improve access to the industrial corridor.

Tax base

Tax value-per-person ratios are indicators of the relative values of the tax base in a community. The tax value indicates the community's ability to pay for community services and facilities. The following chart shows the tax value per person in Lake County's communities.

Mentor has a tax value of $32,613, 11th out of Lake County's twenty-three communities The high tax value per person in North Perry Village can be attributed to the presence of the Perry Nuclear Power Plant. With large residential estates, Waite Hill and Kirtland Hills have corresponding high tax values (Table 4.2).

Table 4.2 Tax value per person 2000

	Tax value per person ($)
North Perry Village	286,964
Waite Hill Village	110,243
Kirtland Hills Village	91,396
Concord Township	44,113
Lakeline Village	41,219
Kirtland	40,868
Grand River Village	38,292
Willoughby Hills	36,769
Leroy Township	33,223
Perry Village	33,009
Mentor	32,613
Willoughby	29,288
Perry Township	28,889
Painesville Township	27,951
Eastlake	27,393
Madison Village	26,061
Wickliffe	25,693
Timberlake Village	25,445
Madison Township	21,940
Fairport Harbor Village	20,807
Willowick	20,228
Mentor-on-the-Lake	18,840
Painesville	15,751

(Lake County Auditor, US Census)

Non-profit organizations – colleges, schools, churches, and 501 (c)(3) organizations -- are an asset to their host communities. However, their lack of property tax revenue can be a burden when such organizations have a disproportionately large presence in a community. This is not a concern in Mentor.

Communities can conduct property tax yield studies to determine the fiscal benefit of various types of land uses. For instance, residential uses offer fewer fiscal benefits because the uses increase demand for schools and parks. Uses that are a fiscal liability should be offset with uses offering a fiscal benefit, such as commercial and industrial development. A cost of community services study is not recommended at this time due to the amount of vacant land remaining in the city.

Owners of commercial and industrial properties pay more in taxes than it costs to provide public services to the properties. This encourages communities to compete for these properties by providing tax concessions or extra services, which can weaken their fiscal condition. The burden of paying for services to properties subject to tax incentives is often passed on to all other city property owners.

Table 4.3 provides a comparison of the taxed acreage of land per land use per community. As expected, Mentor contains 23% of the taxed industrial land. With the exception of Painesville Township (this figure may be skewed in light of recent rezoning activities in Painesville Twp.), Mentor is clearly the industrial center of the County. Mentor also has a high percentage of Lake County's residential (13%) and commercial (14%) taxed acreage.

Table 4.3 Taxed acreage of Lake County communities 2008; use as percentage of county total

(ex: 33% of agricultural use in Lake County is in Madison Township)

Community	*Agriculture*	*/%*	*Industrial*	*/%*	*Commercial*	*/%*	*Residential*	*/%*	*Exempt*	*/%*	*Utilities*	*/%*	***Total***
Concord Township	2,199	6.67%	461	5.38%	978	7.13%	7,816	14.00%	2,008	9.60%	0	0.00%	13,462
Eastlake	0	0.00%	269	3.14%	789	5.75%	1,257	2.25%	475	2.27%	0	0.00%	2,790
Fairport Harbor Vlg	0	0.00%	169	1.97%	119	0.87%	77	0.14%	65	0.31%	0	0.00%	430
Grand River Village	0	0.00%	69	0.81%	85	0.62%	20	0.04%	109	0.52%	0	0.00%	283
Kirtland	1,692	5.13%	43	0.50%	642	4.68%	5,349	9.58%	2,658	12.71%	0	0.00%	10,384
Kirtland Hills Village	1,077	3.27%	0	0.00%	0	0.00%	1,412	2.53%	846	4.05%	0	0.00%	3,335
Lakeline Village	0	0.00%	0	0.00%	0	0.00%	37	0.07%	1	0.00%	0	0.00%	38
Leroy Township	7,312	22.18%	60	0.70%	274	2.00%	5,743	10.28%	2,312	11.06%	0	0.00%	15,701
Madison Township	10,879	33.00%	72	0.84%	2,233	16.27%	7,401	13.25%	2,721	13.01%	0	0.00%	23,306
Madison Village	1,106	3.35%	175	2.04%	216	1.57%	1,106	1.98%	216	1.03%	0	0.00%	2,819
Mentor	639	1.94%	2,027	23.65%	1,912	13.93%	7,332	13.13%	3,083	14.75%	0	0.00%	14,993
Mentor-on-the-Lake	0	0.00%	0	0.00%	182	1.33%	293	0.52%	73	0.35%	0	0.00%	548
North Perry Village*	696	2.11%	20	0.23%	1,505	10.97%	651	1.17%	209	1.00%	0	0.00%	3,081
Painesville (city)	6	0.02%	1,168	13.63%	370	2.70%	1,210	2.17%	506	2.42%	17	77.27%	3,277
Painesville Township	815	2.47%	2,189	25.54%	1,349	9.83%	3,203	5.74%	1,183	5.66%	5	22.73%	8,744
Perry Township	4,732	14.35%	775	9.04%	778	5.67%	3,564	6.38%	729	3.49%	0	0.00%	10,578
Perry Village	583	1.77%	1	0.01%	40	0.29%	503	0.90%	249	1.19%	0	0.00%	1,376
Timberlake Village	0	0.00%	0	0.00%	0	0.00%	118	0.21%	1	0.00%	0	0.00%	119
Waite Hill Village	605	1.84%	0	0.00%	43	0.31%	1,603	2.87%	404	1.93%	0	0.00%	2,655
Wickliffe	0	0.00%	271	3.16%	372	2.71%	526	0.94%	465	2.22%	0	0.00%	1,634
Willoughby	62	0.19%	768	8.96%	1,236	9.01%	1,514	2.71%	1,237	5.92%	0	0.00%	4,817
Willoughby Hills	567	1.72%	26	0.30%	446	3.25%	4,809	8.61%	1,294	6.19%	0	0.00%	7,142
Willowick	0	0.00%	7	0.08%	156	1.14%	297	0.53%	63	0.30%	0	0.00%	523
Lake County total	**32,970**	**100.01%**	**8,570**	**99.98%**	**13,725**	**100.03%**	**55,841**	**100.00%**	**20,907**	**99.98%**	**22**	**100.00%**	**132,035**

(Lake County Auditor)

** Perry Nuclear Power Plant is considered "commercial"*

Recreation and Open Space

The City of Mentor has approximately 2,340 acres of recreation and open space. The majority of this property is located in the northern portion of the City in the Mentor Lagoons Nature Preserve and Marina and the nationally recognized Mentor Marsh State Nature Preserve. Other significant open space exists at Veterans Park and the Mentor Civic Center. Chapter 7 discusses this topic in greater detail.

Land Use Conclusion

Mentor is a residential community with a well-integrated mixture of other land uses, which serve to meet the needs of its residents. Conflicts between land uses have been minimized due to the separation of residential areas from other more intensely developed uses, particularly the Great Lakes Mall area and locating of the city's manufacturing enterprises in the industrial corridor. The amount of vacant land left in the City of Mentor allows for a full

range of residential, recreation and open space, commercial, and industrial development opportunities. Furthermore, development opportunities may exist in older commercial areas of the city, including portions of the Great Lakes Mall (see p. 61-64).

4.3 CURRENT ZONING REGULATIONS

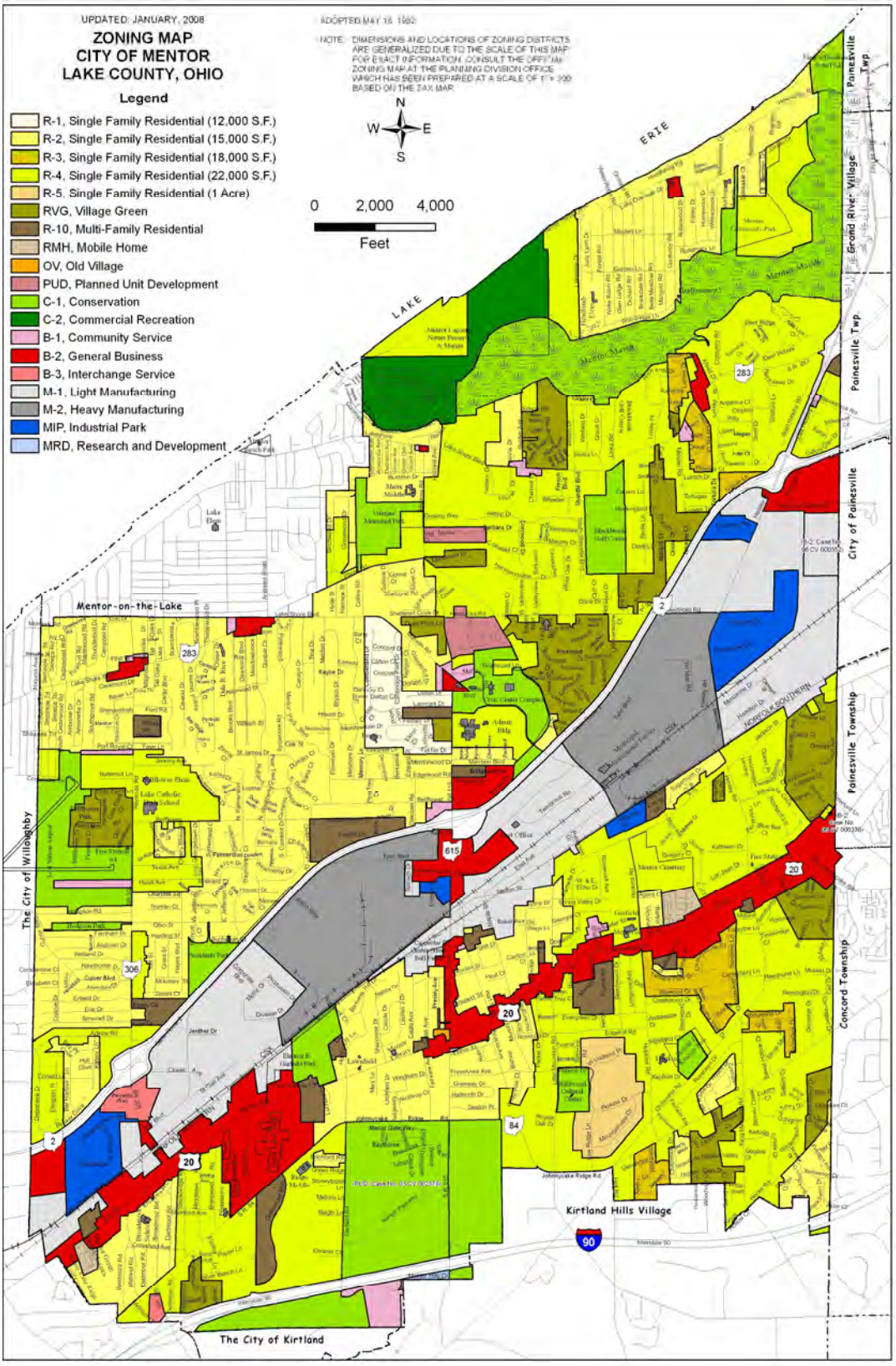
Zoning is the primary form of land planning control for local communities in North America. Zoning codes are comprehensive guides for day-to-day development activity in a community. They expand on the information in the comprehensive plan by providing parcel-specific regulations for the location of different land uses, regulation of those uses, and detailed specifications for the site planning and design of proposed development.

Mentor regulates the use and development of its land through its zoning code and codified development regulations. The original City ordinance was adopted in 1963. Numerous revisions have been made over the years to reflect emerging trends and changes in the market place, which often dictate the development style of an area.

The zoning code contains 20 types of districts (Map 4.11). Each district sets standards for the type and intensity of permitted development within its boundary.

- R-1 Single Family Residential (12,000 sq. ft.)
- R-2 Single Family Residential (15,000 sq. ft.)
- R-3 Single Family Residential (18,000 sq. ft.)
- R-4 Single Family Residential (22,000 sq. ft.)
- R-5 Single Family Residential (1 acre)
- RVG Village Green
- R-10 Multi-Family Residential
- RMH Mobile Home
- OV Old Village
- PUD Planned Unit Development
- C-1 Conservation
- C-2 Commercial Recreation
- B-1 Community Service
- B-2 General Business
- B-3 Interchange Service
- M-1 Light Manufacturing
- M-2 Heavy Manufacturing
- MIP Industrial Park
- MRD Research and Development
- FH Flood Hazard *(not a true zoning classification)*

Map 4.11: Zoning Map



Note: Prepared by the City of Mentor, Department of Economic & Community Development

Residential zones

Mentor has ten zoning districts for residential uses; ten zones that allow single family detached units (including RVG and C-1), three multi-family zones and one mobile home district. Residentially zoned land accounts for 64% (not including the C-1, Conservation area) of the City. Lot size and development standards are the primary difference in the single family zones (Table 4.4). In general, fee simple lot sizes range from 12,000 sq. ft. to 5 acres in the C-1 zone. Lot sizes and setbacks in the RVG and OV zones are established by the approved development plan.

Table 4.4 Single Family residential zoning district bulk requirements
This table represents a summary of standards. Refer to Chapter 1153 of the Codified Ordinances

Attribute	*R-1*	*R-2*	*R-3*	*R-4*	*R-5*	*C-1*	*RVG*	*OV^*
Building height (maximum)	35'	35'	35'	35'	35'	35' *	35'	30'***
Front yard (minimum)	50'	50'	50'	60'	75'	100'	**	**
Side yard (minimum)	10'	10'	10'	15'	30'	20'	**	**
Rear yard (minimum)	50'	50'	50'	50'	75'	50'	**	**
Lot area per family (minimum)	12,000 sq. ft.	15,000 sq. ft.	18,000 sq. ft.	22,000 sq. ft.	1 acre	5 acres	**	**
Density (maximum)	3 du/ac.	2.5 du/ac.	2 du/ac.	2 du/ac.	1 du/ac.	.2 du/ac.	2.5 du/ac.	8 du/ac.
Lot frontage (minimum)	75'	80'	90'	100'	150'		**	**

* higher with a conditional use permits
**established by development plan
*** could be higher based on approved development plan
^ The OV is considered a special zone (overlay zone) and shall overlay the regular zoning classification and the regulations and standards associated with such special districts shall apply in addition to the requirements of the regular zoning classification.

In addition to the R-10, the OV and PUD zones could also be considered residential multi-family. The R-10 zone is the traditional high density zone (10 du/ac) most commonly associated with multi-family development. The majority of the R-10 (and RMH) area is appropriately located throughout the Mentor Avenue corridor and other major roadways including public transit, and providing access to shopping and employment.

The OV and PUD districts can be considered mixed use zoning. Along with moderate density residential, various commercial and office uses are permitted within the same development areas. Mixed use zoning is an innovative strategy to create unique and vibrant areas within the City. Regional examples include Legacy Village in Beachwood, Crocker Park in Westlake and First and Main in Hudson.

Locally, while zoned C-1 (Conservation), Newell Creek will yield a diverse land use pattern with residential (all types), office and commercial uses within the same development. These planning principles are encouraged in areas adjacent to Great Lakes Mall when redevelopment needs arise (see pp. 30-35).

Commercial/business zones

Mentor has three primary commercial zoning classifications which account for 7% of the City's land base.

- B-1 Community Service
- B-2 General Business
- B-3 Interchange Service
- *As noted above, the OV and PUD also permit various commercial uses.*

The development standards for the B-1 and B-2 districts are nearly identical with larger setbacks and building heights in the B-2 (Table 4.5).

As noted in the land use discussion, Mentor Avenue contains the vast majority of the commercially zoned land, notably B-2, General Business (Map 4.2). This zone permits uses that generate not only local customer markets, but act as a regional magnet as well (Table 4.6). The B-1, Community Service zone is slightly more restrictive and is intended as a commercial area that is more compatible with adjacent residential areas.

Table 4.5 Business zoning district bulk requirements

This table represents a summary of standards. Refer to Chapter 1153 of the Codified Ordinances

Attribute	*B-1*	*B-2*	*B-3*
Building height (maximum)	35'	35' **	50'
Minimum lot area	None	None	None
Lot frontage (minimum)	None	None	None
Maximum building coverage			
Front yard setback	30'	30'	100'
Rear yard setback	*	*	***
Side yard setback	*	*	***

* Rear and side setbacks established by site plan. When adjacent to residential, setbacks shall be in accordance with Se. 1161.02.
** Higher with a conditional use permit
*** Adjacent to residential, setbacks shall be a minimum of 20'.

The B-3, Interchange Service, zone provides locations for activities most associated with highway interchange access (Table 4.6).

Tremendous opportunity for infill development exists in the B-2 zoning surrounding the Great Lakes Mall present. According to the "21st Century Land Development Code" (Freilich and White, 2008), the benefits of redevelopment of these sites include:

- Converting underutilized parking areas into a preferably pedestrian and transit friendly streets
- Providing a optional, new uses for landowners holding economically struggling retail sites
- Allow landowners to charge economic rents in lieu of free parking
- Eliminating the urban heat island and stormwater run-off issues created by large surface parking areas.
- Promote density rather than sprawl.

This strategy may also require creative public/private finance packages and tax incentives to encourage large scale redevelopments.

Table 4.6 Commercial zoning district permitted uses*

Uses	*B-1*	*B-2*	*B-3*
Offices	P	P	P
Financial	P	P	P
Hospitals	P	P	P
Libraries	P	P	
Clinics	P	P	P
Museums	P	P	
Nursing homes	P	P	
Art and photographic studies	P	P	
Radio and TV studios	P	P	
Public facilities	P	P	
Churches	P	P	
Traditional retail		P	
Traditional retail limited solely to small stores providing convenience goods or services to a customer base primarily located within the surrounding neighborhood only upon issuance of a conditional use permit	C	C	
Child day care centers	C	C	C
Any retail activities from tents and other similar temporary structures	C	C	C
Independent living development	C	C	
Assisted living facility	P	P	
Restaurants		P	P
Private Clubs		P	
Dry cleaners		P	
Furniture re-upholstering		P	
Auction houses		P	
Funeral home without cemetery		P	
Motels		P	P
Nurseries for flowers, plants, shrubs		P	
Health spas		P	
Theaters		P	
Barber and beauty shops		P	
Non-traditional retail solely as an accessory use to the main use of traditional retail		P	
Vehicles, the sales, service, and leasing of vehicles, including, but not limited to, automobiles, trucks, mobile homes, boats, recreational vehicles, airplanes and motorcycles, except rental truck facilities, but subject to the provisions of Section 1161.05		C	
Bars, cocktail lounges and night clubs		C	
Drive-in or drive-thru facilities		C	C
Service stations		C	P
Pet shops		C	
Commercial recreational facilities		C	
Contractors shops		C	
Pool halls and game rooms		C	
Newspapers, printers and publishers		C	
Car washes		C	
Wholesaling and warehousing		C	
Sexually oriented business		C	
Outside dining and/or drinking		C	C
Independent living development		C	
Other similar uses	C	C	C

** This table represents a summary of the permitted uses.. Refer to Chapter 1153 of the Codified Ordinances*

There are four industrial zoning districts in the City accounting 16% of the land base.

- MIP Industrial Park
- M-1 Light Manufacturing
- M-2 Heavy Manufacturing
- MRD Research & Development

Development standards are the same for the MIP and M-1 zones. Larger frontage and setback requirements exist in the M-2 district and all dimensions in the MRD zone are based on the approved development plan (Table 4.7).

With the exception of a small portion of the MRD on Mentor Hills Dr., all of the industrial zoned property is located in a linear east-west pattern in the central portion of Mentor. The area is bounded to the north by SR 2 and to the south by proximity to the Norfolk-Southern railroad line. This area is ideally suited for such uses with access to major transportation modes and limited land use conflicts with residential areas.

Table 4.7 Industrial zoning district bulk requirements

This table represents a summary of standards. Refer to Chapter 1153 of the Codified Ordinances

Attribute	*MIP*	*M-1*	*M-2*	*MRD*
Minimum lot area	None	None	None	***
Lot frontage (minimum)	150’	150’	250’	***
Maximum building coverage	n/a	n/a	n/a	***
Front yard setback*	50’	50’	50’	***
Rear yard setback*	10’	10’	20’	***
Side yard setback*	10’	10’	20’	***
Building height (maximum)**	45’	45’	45’	***

* Rear and side setbacks adjacent to residential in accordance with Section 1161.02, Screening and buffering required in industrial and commercial zones
** Accessory structure may be higher with a conditional use permit
*** All bulk requirements established by development plan.

Light industrial land uses generally include facilities that manufacture, process, fabricate, assemble, package, or provide incidental storage and distribution of previously prepared materials, finished products or parts. Research facilities are also included. Light industrial land uses would typically have all finished processing within buildings, require limited exterior storage, generate small amounts of truck traffic, and be reasonably free of hazardous or objectionable externalities. Absent is any type of heavy machinery, primary metal or related industries, refineries, wrecking and salvage yards, hazardous materials, and so on. Also absent are retail and residential uses.

While the MIP, M-1 and M-2 allow similar uses, the M-2 provides development areas for land uses that may exceed existing standard performance standards including noise, heavy traffic and outdoor storage areas (Table 4.8). These more intensive uses would require a conditional use permit with suitable controls established by the City on a case by case basis. It is important to maintain the heavy industrial zoning classification in the most isolated areas for future development business attraction. Often, these can be major employers.

Conversely, the MRD zone is for facilities suited to research and development of *new* products and processes. Manufacturing in this zone should be incidental to the main use of the site. As the manufacturing sector continues the current shift to alternative energy, high tech bio-sciences and other “new” manufacturing segments, the need for additional MRD zones may become a priority. The creation or assessment of future research and development parks is a recommended strategy for the city.

Table 4.8 Industrial zoning district permitted uses*

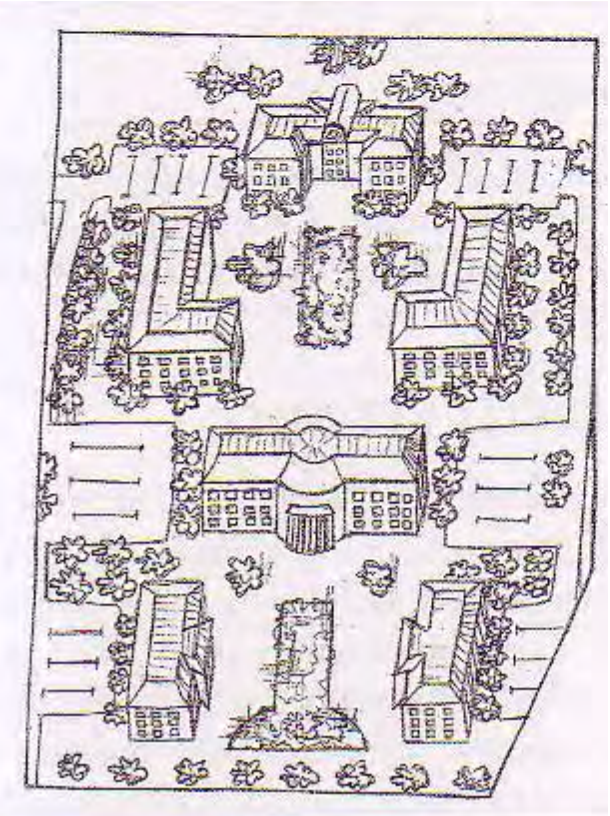
Uses	*MIP*	*M-1*	*M-2*	*MRD*
Research, experimental or testing	P	P	P	
Offices	P	P	P	
Warehousing and storage	P	P	P	
Printing and publishing	P			
Photographic processing or blueprinting	P			
Making of cabinets, furniture and upholstery	P			
Bottling and distribution plants	P			
Welding or machine shops	P			
Manufacture or assembly of medical and dental equipment; drafting, optical and musical instruments; clocks, toys; games; electrical or electronic apparatus	P			
Manufacture of rugs, mattresses, millinery, clothing, fabrics, and other textiles; and the finishing of textiles and fibers into fabric goods	P			
Manufacture of pottery and ceramics	P			
Manufacture or assembly of boats, electrical appliances, tools, motors, firearms, dies machinery, hardware and sheet metal products	P			
Manufacture, compounding, processing, or packaging of bakery products, candy, cosmetics, dairy products, drugs and pharmaceuticals, soap, toiletries, and food products, (other than meat)	P			
Assembly plants	P			
Manufacture of paper products	P			
Manufacture of cigars and cigarettes	P			
Manufacture of glass or glass products	P			
Manufacture of cork products	P			
Manufacture of products of precious metals	P			
Metal fabricating and spinning	P			
Manufacture of signs	P			
Manufacture and assembly of watches and jewelry	P			
Manufacture of wood products	P			
Wholesale trade	P	P	P	
Restaurants	C	C		
Manufacture of laser devices	P			
Manufacture, processing and assembly of products of plastic, petroleum base, or other synthetic materials	C			
Traditional retail sales incidental to permitted MIP	C			
Child day care centers	C	C		
Similar uses as determined by the Planning Commission	C			
Outside dining and/or drinking	C	C		
Non-traditional retail	P			
Sales, service and rental of agricultural and construction equipment		P	P	
The shops of tradesmen, such as carpenters, plumbers and upholsterers		P	P	
Terminal facilities for motor freight transportation, not including truck stops		C		
Animal hospitals and kennels		C		
Automobile repair shops		C		
Recreational facilities	C	C		
Traditional retail activities incidental to permitted M-1 uses and further subject to Section 1161.03 (CUP required at present)	C	C		
Rental truck facilities		C		
Child day care centers	C	C		
Hotels and motels		C		
Sexually oriented business with		C		
Crematory		C		
Other similar uses with Cond. Use Permit	C	C	C	
Research and development facilities, with incidental manufacturing and office facilities				P
Industrial uses not permitted by right in the M-1			C	

* *This table represents a summary of the permitted uses.. Refer to Chapter 1153 of the Codified Ordinances*

4.4 AESTHETICS AND URBAN DESIGN

Site plans

Map 4.12: Retail Village layout



Unlike other Lake County communities, site plans have been a requirement in Mentor since 1969 (Section 1133). They are "intended to insure ample provisions for the efficient use of land and to promote high standards in the layout, design, architecture, landscaping and construction of development." Site plans are required for all projects reviewed by the Planning Commission.

In addition to the existing text, this plan recommends adopting site planning requirements that encourage a hybrid site plan, with parking split between the side and rear of a building, and "retail villages," where many buildings are oriented towards an internal drive or road network that recreates the feel of a village street (Map 4.12). This plan also recommends standards that will promote a pedestrian-friendly environment inside shopping centers, such as requiring internal plazas and a walkway system connecting buildings and parking areas on the site. Requiring improved pedestrian connections between buildings and parking by use of crosswalks and sidewalks are also recommended.

Past development styles usually have one of two forms. On larger lots, a commercial building will be placed in the far rear end of the lot, separated from the street by a large, parking lot, much of which usually stands empty. On smaller, narrower lots, the primary building is usually close to the right-of-way, usually separated from the street by a small, often unpaved parking area. The rear of the lot remains empty and unused, an inefficient use of land. The resulting development pattern reinforces the linear character of commercial areas in the City.

Design guidelines

Design Standards are an effective tool to help shape the appearance and function of the built environment. Design guidelines should contain appropriate examples and graphics to accurately portray the style and type of commercial development desired by Mentor. The standards should be flexible enough to accommodate both small-scale retail and big box development and all uses in between. Regardless of scope, all projects should consider the following:

- Surrounding neighborhood: developments should contribute and enhance the area by respecting the scale, proportion and architecture of area.
- Improve vehicular / pedestrian circulation between project site and adjacent land uses
- Minimize impact of visual character, noise and light through buffering techniques.
- Use environmentally sensitive development practices (bio-swales, pervious pavement)

In 1994, the City prepared the "Design Guidelines for Commercial and Industrial Corridors." This useful resource has not been codified. This plan recommends the codification of official guidelines. These should be reviewed during the site plan review process by the Planning Commission as the city's architectural review board. As noted in the manual, architectural regulations for commercial structures should address, among others, the following:

Building mass
- Prohibit large simple building footprints near less substantial buildings; require variations in the footprint that are not superficial.

Exterior walls
- Materials: brick, stone, or a combination of masonry materials and wood. Metal pre-fabricated structures and block walls should not be permitted.
- Pattern: require repeating, offset, and reveal, pilaster, projecting ribs, fenestration patterns, piers, color change, texture change, and material module change.
- Base: require recognizable wainscot.
- Top: require cornice treatments, overhangs, brackets, stepped parapets.
- Four sided design: walls must include materials and design characteristics consistent with those on the front.
- Projections and recesses: require wall plane projections and recesses for long walls.
- Street facing walls: require breaking up walls with change in plane, texture, windows, or other equivalent elements that divide the wall into human scale proportions.
- Facades: require divided and proportioned using features such as windows, display areas, entrances, arcades, arbors, and awnings along a percentage of the façade.
- Building entrances: require clear definition with an awning, arcade or portico.
- Transparency: require window coverage along a percentage of a wall.
- Garage doors: require segmentation, windows, recession behind a building façade, positioning where they don't face the street.

Roof
- Require overhangs, minimum slope, regulate maximum continuous plane of roofline.
- Rooftop mechanical equipment: require screening

Building colors
- Require muted colors, limit use of primary or corporate colors.
- Limit color changes to change of plane or reveal line.

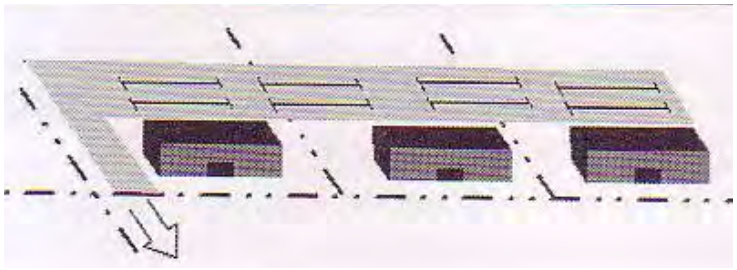
Gas station canopies
- Require canopies with support pole covers.
- Require recessed lighting, limit number of fixtures and lumens.
- Prohibit corporate branding and colors along the entire fascia.

Parking

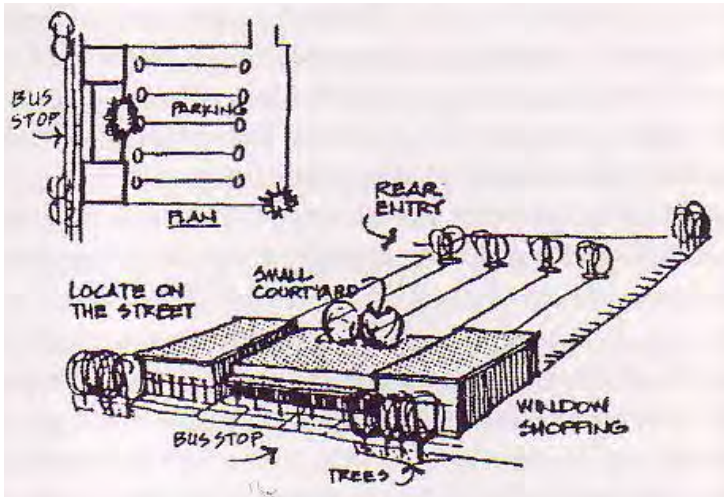
- Encourage parking to the rear of structures or in centralized locations of retail shopping centers.
- Encourage pedestrian accommodations from parking area to structures. Design parking areas so pedestrians travel parallel to moving vehicles.
- Should be designed with a clear hierarchy of traffic circulation.
- Should include proper interior and perimeter landscaping treatment. Proper interior landscaping can assist with traffic circulation pattern as well as storm water requirements.
- Encourage shared parking and access between adjacent businesses.
- Adequate drainage

Industrial and other non-residential uses should be subject to similar, but slightly less rigorous requirements.

Map 4.13: Shared Parking Example



Map 4.14 : Commercial Parking Layout *(parking in rear, building oriented close to right-of-way)*



Signs

Signs are regulated in Section 1171 of the ordinances. Field verifications of signs within recent commercial developments indicate satisfactory results with the current regulations.

Height and landscaping requirements are two improvements for signage as you view the Mentor Avenue corridor from west to east. The city has an adequate height requirement for free standing signs (8') which reduces the

Figure 4.1: Low Impact Corporate Signage

visual clutter along Mentor Avenue, notably near the western city border. Proper landscaping around the pedestal mount signs create unifying and welcoming feature to the development site. Newer signage is also designed in conformance with the appearance of the structure itself.

Figure 4.2: Pole Mounted Signage

Conversely, older commercial signs have higher poles, lack landscaping and aesthetically have no connections to the structure in which it is advertising.

Small businesses give more attention to the size of their sign than the overall quality. Small businesses often make the mistake of trying to convey too much information in a limited space, so their signs become unreadable. The problem is worse for signs identifying multiple tenants.

When everybody shouts, nobody is heard. For signs to be effective, they must not barrage viewers with information that will soon be forgotten, but stand out on their own.

While many businesses instinctively view small signs as less effective than larger signs, the message they convey is distinct and better understood with less competition from other signs competing for the viewer's attention. The presence of smaller signs reduces visual clutter, and thus improves the appearance of a commercial area.

The city should examine a long-term replacement plan for legal non-conforming signs.

Landscaping

Landscaping requirements are a standard feature in most modern land use regulations. Landscaping on commercial and industrial sites serves the following functions:

- Buffers between incompatible uses or site areas (as noted in Section 1161.02).
- Shade and climate control.
- Air purification and control airborne particulates
- Wildlife habitat.
- Erosion and stormwater runoff control (extremely important along the Mentor Avenue corridor with the amount of impervious surface).
- Control of noxious weeds, invasive plants and exotic plants.
- Encourage native and/or adaptive plants.
- Preserve existing trees and vegetation.
- Provide an attractive appearance in areas of public use or view.

- Compliment natural and recreational areas.
- Screen service areas and structures.
- Reinforce a pedestrian friendly environment.
- Break up building mass and soften architectural materials.
- Enhance the quality and appearance of the built environment.

The City of Mentor revised their landscaping guidelines in 2009 to address the items listed above. Highlights of the new ordinance include:

- Tree clearing permit required for sites in excess of one (1) acre.
- Required screening of all service structures and loading dock facilities.
- Interior parking lot landscaping required for lots with twenty (20) or more spaces.
- Standards for vegetation size and type.
- Maintenance plan, including provisions for irrigation.
- Bonding requirement
- Buffer requirement between residential and non-residential uses.

Parking requirements

Map 4.15: Great Lakes Mall area (excessive parking)

Parking volume requirements in Mentor are typically excessive resulting in vast areas of impervious surfaces or small commercial centers with insufficient areas that restrict proper traffic and pedestrian circulation of the site. These should be re-evaluated for change.

With the exception of the traditional holiday season, the majority of Mentors major retail parking areas is underutilized and represents substantial infill development opportunities (Map 4.15).

Similar to most other parking ordinances, Mentor's code has not kept pace with development and design trends of the past few decades. The Chagrin River Watershed Partners and American Planning Association recommend an evaluation of the following parameters:

- Local demand
- Building types and sizes
- Surrounding land uses
- Current and expected populations

- Potential for additional commercial, industrial and institutional development
- Placement of parking on the side or rear of primary structure
- Are there pedestrian corridors through large parking areas?
- Does your code have effective landscaping/stormwater management provisions?

In future development or redevelopment activities shared parking should be permitted on a case by case basis between adjacent landowners. Shared parking involves an agreement between two or more landowners and the City to approve the required amount of parking across property boundaries. As noted by the CRWP, it is appropriate where parking demand patterns and peaks vary by time of day. Other parking considerations include: land banking, park and ride transit options, and improved parking lot design through pervious pavement, compact car spaces, minimize stall dimensions and requiring bio-retention and landscaping features.

Instituting maximum (and minimum) parking standards is another option for controlling the ineffective use of impervious parking areas. While this may difficult to present to the development/retail industry, it is an option used in other parts of the country.

4.5 LAKE ERIE BALANCED GROWTH PROGRAM

The City of Mentor Comprehensive Plan will be included in the Chagrin River Balanced Growth Plan. This plan is being developed based on a state wide program for balanced growth being promoted by the Ohio Lake Erie Commission. In 2004 the Ohio Lake Erie Commission finalized the Balanced Growth Program, defined as a *local planning framework to coordinate decisions about how growth and conservation should be promoted by State and local investments*. Through this program, CRWP has been working with local communities to develop Priority Conservation Areas (PCA) and Priority Development Areas (PDA) throughout their community.

- **Priority Conservation Areas (PCAs)** are locally designated areas targeted for protection and restoration. PCAs may be important as ecological, recreational, heritage, agricultural, or public access areas. PCAs represent areas where land use change is predicted to have a high impact on the watershed in terms of flooding, erosion, and water quality.

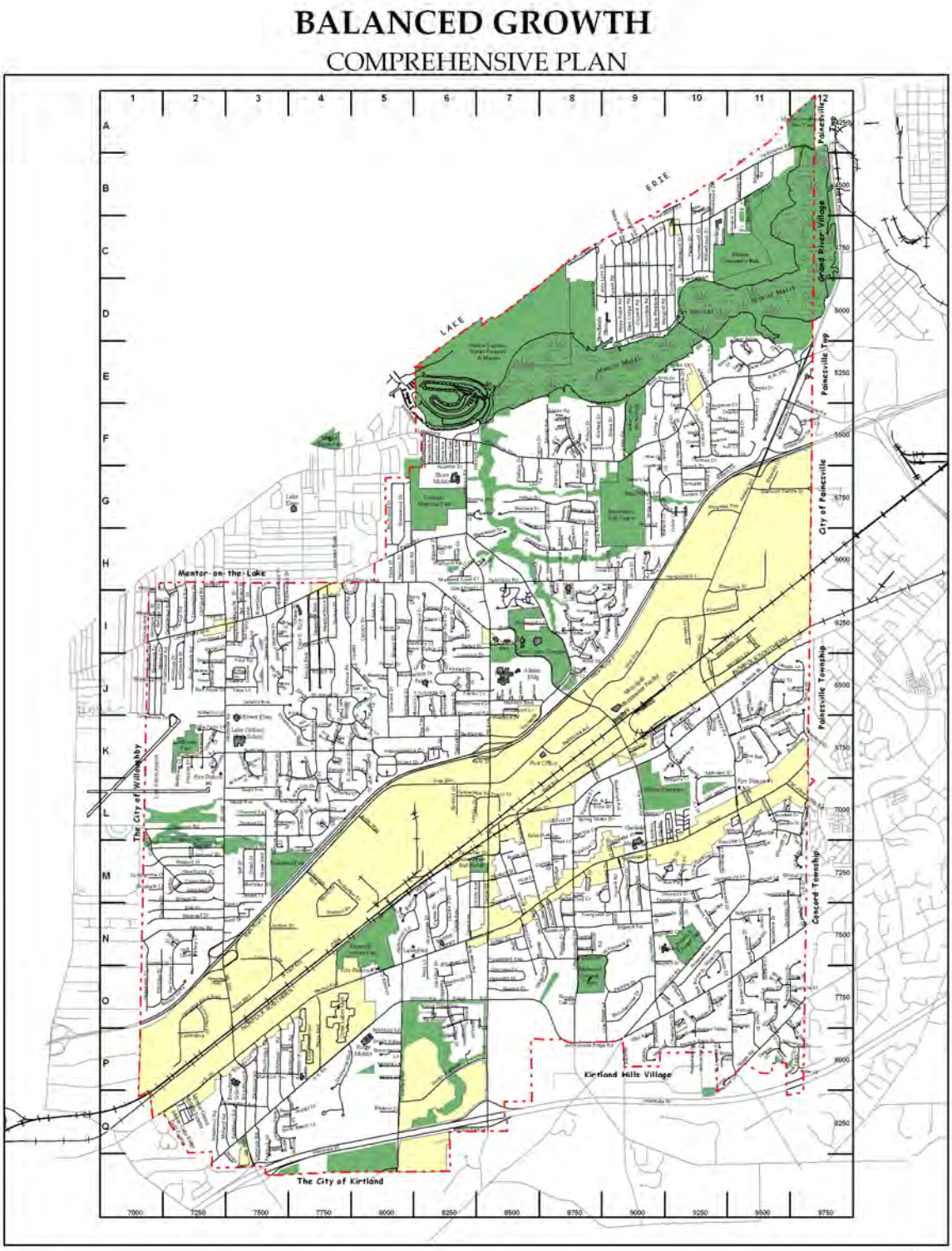
- **Priority Development Areas (PDAs)** are locally designated areas where growth and/or redevelopment is to be especially promoted in order to maximize development potential, efficiently utilize infrastructure, revitalize existing cities and towns, and contribute to the restoration of Lake Erie. PDAs represent areas where land use change is predicted to have minimal impact on the watershed and where other conditions, such as access to highways, existing or planned utility service areas, and existing development, suggest that additional development may be appropriate.

The Priority Development Areas (PDAs) and Priority Conservation Areas (PCAs) were recommended by the Chagrin River Watershed Partners, Inc. (CRWP). Maps were modified and refined with input from the Mentor Planning Commission, Administration, and Council to align with the City's planning goals (Map 4.16). These maps have been included in the Chagrin River Balanced Growth Plan. It anticipated this plan will be endorsed in the Fall of 2009.

The PDA locations on the Map 4.16 (yellow shading) reflect areas where future growth and redevelopment activities may be encouraged. Land in a PDA may be eligible for state policy and funding initiatives to encourage and support its development.

The PCA locations shown (green shading) on Map 4.16 reflect areas that are existing parks and protected properties and also include sensitive slopes, streams (Blackbrook, Kellogg, Two Town, Marsh), floodplains, and wetlands. These site characteristics suggest that an area has unique ecologic or historic considerations or may be particularly difficult to develop flooding and erosion concerns. Designation of these areas as PCAs does not indicate that these areas will not be developed, however communities could save time and money working with property owners for preservation or interested developers for alternative site designs that enable development but limit impacts to natural resources on these PCA parcels.

Map 4.16: Priority Conservation Areas *(green)* and Priority Development Areas *(yellow)*



The PCAs and PDAs designated by the City of Mentor have been included as part of the *Chagrin River Balanced Growth Plan*. This plan will include designation of PCAs and PDAs throughout Mentor and in the Chagrin River watershed.

A key component of the Balanced Growth Program is that, where possible, the state should align policies, programs, and incentives to support the implementation of locally designated Priority Conservation Areas and Priority Development Areas. Communities endorsing the locally designated PDAs and PCAs will be recognized by the State as participating in the *Chagrin River Balanced Growth Plan*. This participation has a number of benefits to local communities. Some of the benefits of participation in the Chagrin River balanced growth planning process include:

- Increased state assistance for local projects.
- Support for local zoning.
- Additional state incentives, such as points on grant applications and lower interest rates on state loan programs.
- General local benefits, including minimizing long-term infrastructure and stormwater management costs and advancing the preservation of the semi-rural character of the city.

This plan encourages the utilization of this tool during the preliminary stages of long-term development discussions in the City.

4.6 PRIORITY PLANNING ISSUES

Old Village Area

The Old Village District (OV) is intended to preserve and redevelop a predefined area commonly referred to as the "Old Village." This district is further intended to "create a vibrant residential, office and retail district in the heart of the City benefiting property owners, residences, and visitors and all citizens in general, economically, socially, and culturally." In addition to land uses, architectural and design features are also regulated in this zoning district to protect the historic character of the area.

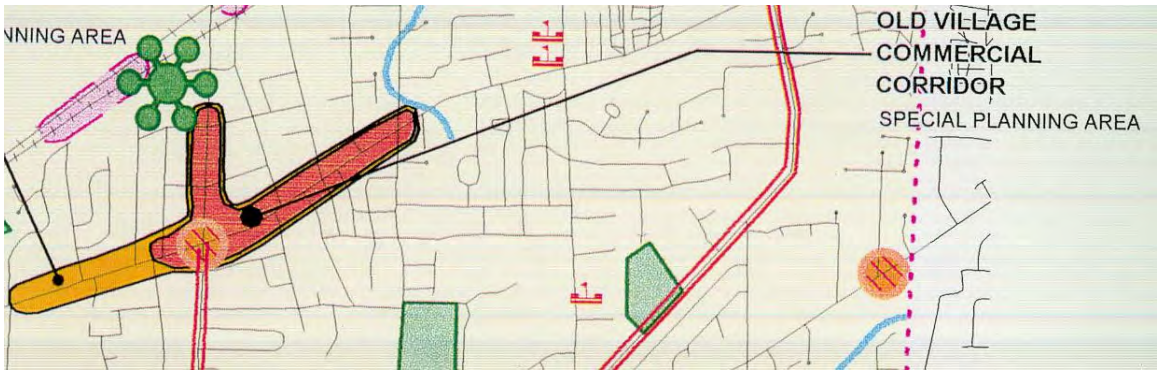
This mixed used zoning can be implemented on parcels within or adjacent to those areas designated within the Comprehensive Plan as "Old Village Commercial Corridor." The 1997 plan indentified this area along Mentor Avenue from Center Street to Jackson Street and north along Center Street to Nowlen Street (Map 4.17).

This plan recommends expanding the applicable area toward the south along the heavily traveled Center Street corridor to help create a gateway as you approach the intersection. Consideration should be given to a westward expansion as well should the land use pattern begin to shift in this predominately residential area (Map 4.18). This expansion would be in conformance with the Community Reinvestment Area (CRA) currently under review. This plan recommends the creation of this CRA as noted on Map 4.18.

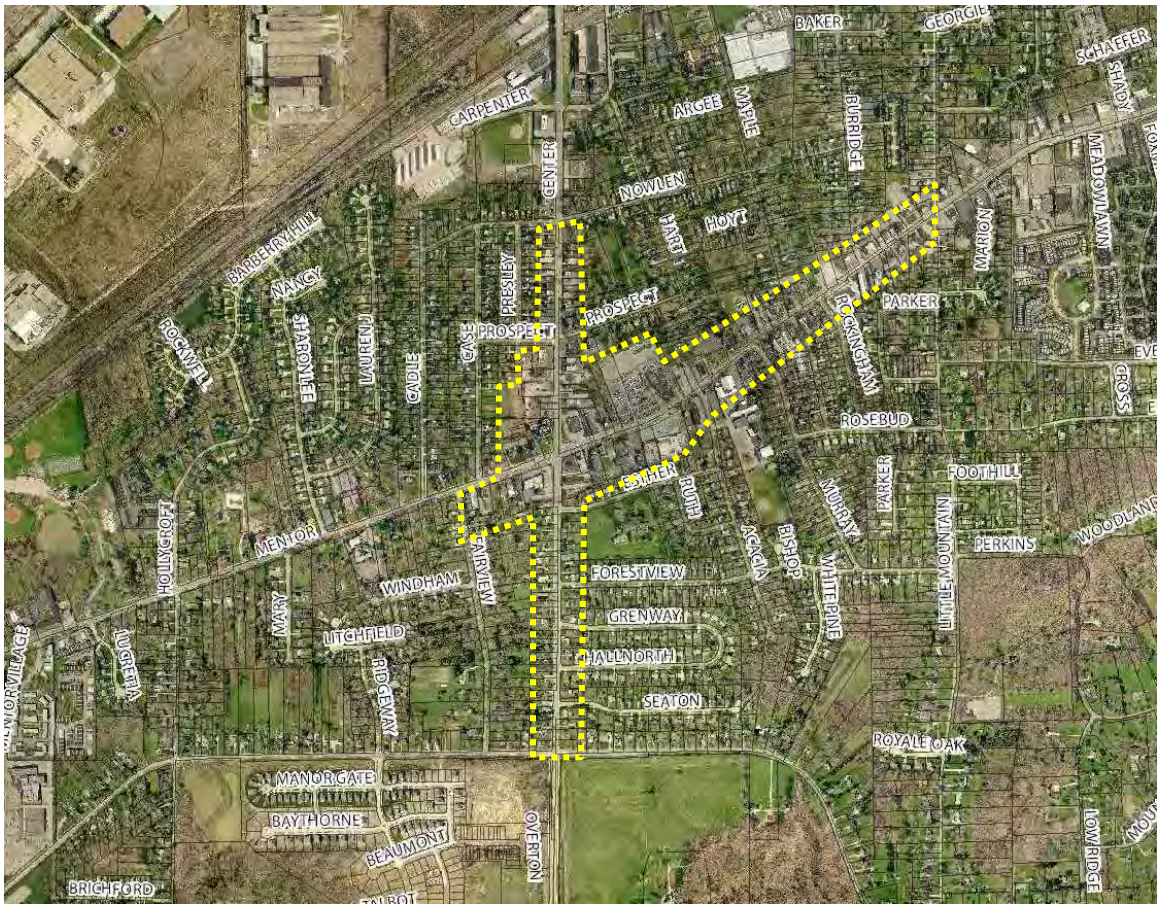
The principles outlined in the OV zone may be suitable for areas surrounding Great Lakes Mall as well. Future commercial uses shall be compatible with the surrounding residential nature

of the area. Shared parking, low-impact signage and lighting and pedestrian accommodations should be required in all OV developments. A historic overlay zone could also be created in this same area to address only structural components of the area and not land use. This would be applicable to residential and commercial structures and could address among others, paint color, window fenestration and signage.

Map 4.17: Old Village Commercial Corridor (1997 Plan)



Map 4.18: Proposed Old Village Commercial Corridor



Redevelopment Great Lakes Mall

Great Lakes Mall and the surrounding area has been the retail heart of Lake County for 40 years. A review of similar facilities in the region and Ohio (age, layout and functionality) indicates that enclosed regional malls generally have fallen out of favor with customers and the development community. The ability of the consumer to buy goods from the internet has also decreased the potential customer base.

In order to maintain a vibrant retail center, this plan recommends a new mixed use zoning strategy, potentially resembling the OV.

A site analysis indicated the following characteristics of the area:

- Zoned B-2, General Business
- Approx. 104 acres (12 parcels, 9 owners)
- Approx. 1,346,459 sq. ft. of gross leasable area
- 6,900 parking spots (excessive)
- 2 curb cuts along Mentor Ave.
- 4 curb cuts along Plaza Blvd.
- 2 curb cuts along Johnnycake Ridge Rd.
- Inconsistent signage among uses
- Minimal, parking lot landscaping and traffic control
- Inconsistent architectural design with a common back dock appearance.
- Minimal pedestrian-friendly accommodations

Communities, including Mentor, have traditionally separated land uses via three primary zoning schemes: residential, commercial and industrial. This strategy has resulted in 'islands of development types, vast tracts of residential developments separated from commercial and office areas. Referred to as Euclidean zoning, this method has lost some it's applicability with today's land use planning tools, most notably mixed use zoning and town center development.

Mixed-used zoning is often found in urban core areas (Cleveland) and small community downtown areas (Willoughby, Madison Village, Hudson, Chagrin Fall). Over the past decade, suburban communities have successfully adopted modified versions of mixed-used zoning in an attempt to provide similar town center development patterns. Examples can be found in Hudson, Columbus, Westlake, Lyndhurst and Green (near Dayton).

General characteristics of mixed-use zoning include:

- Permissive ordinance that allows residential (typically at a higher density than found in the community), business and recreational uses on a single development plan.
- Elevated design standards to create a unique sense of place.
- Accommodations for pedestrian mobility throughout development.
- Increased building height standards to create buildings with unique character.
- Relaxed setback and parking provisions

Understanding the challenges presented with multiple owners, future projects should attempt to enhance the existing feel of the site with the design principles discussed below and indicated on Maps 4.19-22.

- Reduce parking requirements to facilitate the development of underutilized (and valuable) parking areas. Based on available data, approximately 6,900 parking spaces are available. This is about 900 more than is required by some standards.
- Incorporate stormwater best management practices into all new redevelopment activities.
- Encourage and facilitate outlot development thru flexible zoning parameters. Opportunities exist along the Plaza Blvd. and Johnnycake Ridge Rd. frontage. Medium density residential uses would be appropriate on the south end of Plaza Blvd. Retail and restaurant will transition the frontage moving north.
- All new construction, regardless of owner, should follow a consistent city established architectural theme throughout the site.
- On larger sites, incorporate New Urbanist design strategies including increased density, rear parking, minimum front setbacks, pedestrian accommodations, grid like street pattern and centrally located public green spaces that link the development together.
- In phases, require parking area reconfiguration to provide organization and safe, efficient mobility for pedestrian and vehicular traffic. Enhancements with islands can be included into progressive storm water management techniques.
- Examine the feasibility of elevated parking.
- Consider a central greenspace area flanked with smaller scale retail, restaurant and residential uses.
- Enact a more detailed streetscape within the site to reduce the "sea" of pavement feel of the area. Resource agencies such as the Ohio State University Extension can provide a detailed program of sustainable vegetation to achieve the intent of development program. This program and design can be implemented along the Plaza Blvd. right-of-way.
- Incorporate landscaping and storm water management requirements through the use of bio-retention and vegetated swales.

Diamond Center

Future development of the Diamond Center shopping area should continue to focus on new retail that does not currently exist in the City, hotels and entertainment type uses. Light industrial uses should be encouraged along Tyler Blvd. and portions of Heisley Rd., but not in the interior of the site.

Moving existing businesses provides minimal gain for the city, especially if the former location experiences significant vacancy. Long range-planning should evaluate a secondary ingress / egress point to the area for improved traffic circulation and safety.

Lost Nation Airport

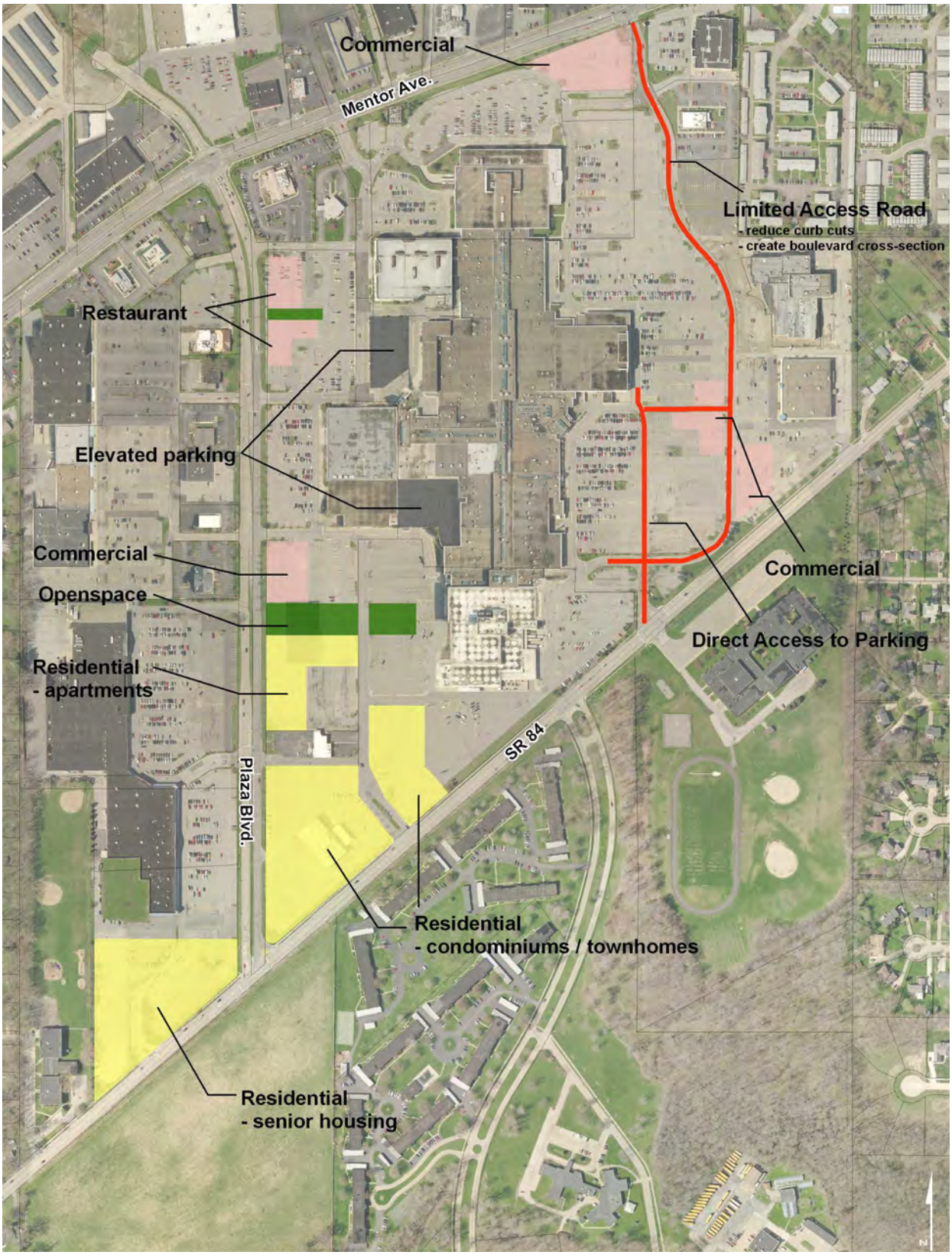
Significant portions of Lost Nation airport are within the City of Mentor. At the time this plan was completed a feasibility analysis of the airport was beginning to determine the long-term viability of the operation. The area within Mentor is currently zoned C-1, Conservation. City officials should pursue a specialized study of this area for the highest and best use of the property should it cease to exist as an airport in the future. Based on the surrounding land use pattern, residential and open space uses may be appropriate for the site. Limited industrial may be feasible in a predefined area.

This plan also recommends examining future land use options with the City of Willoughby as the parcels abut one another and decisions by both communities may have significant land use impacts with each other.

Northeast Corner of I-90 / SR 615

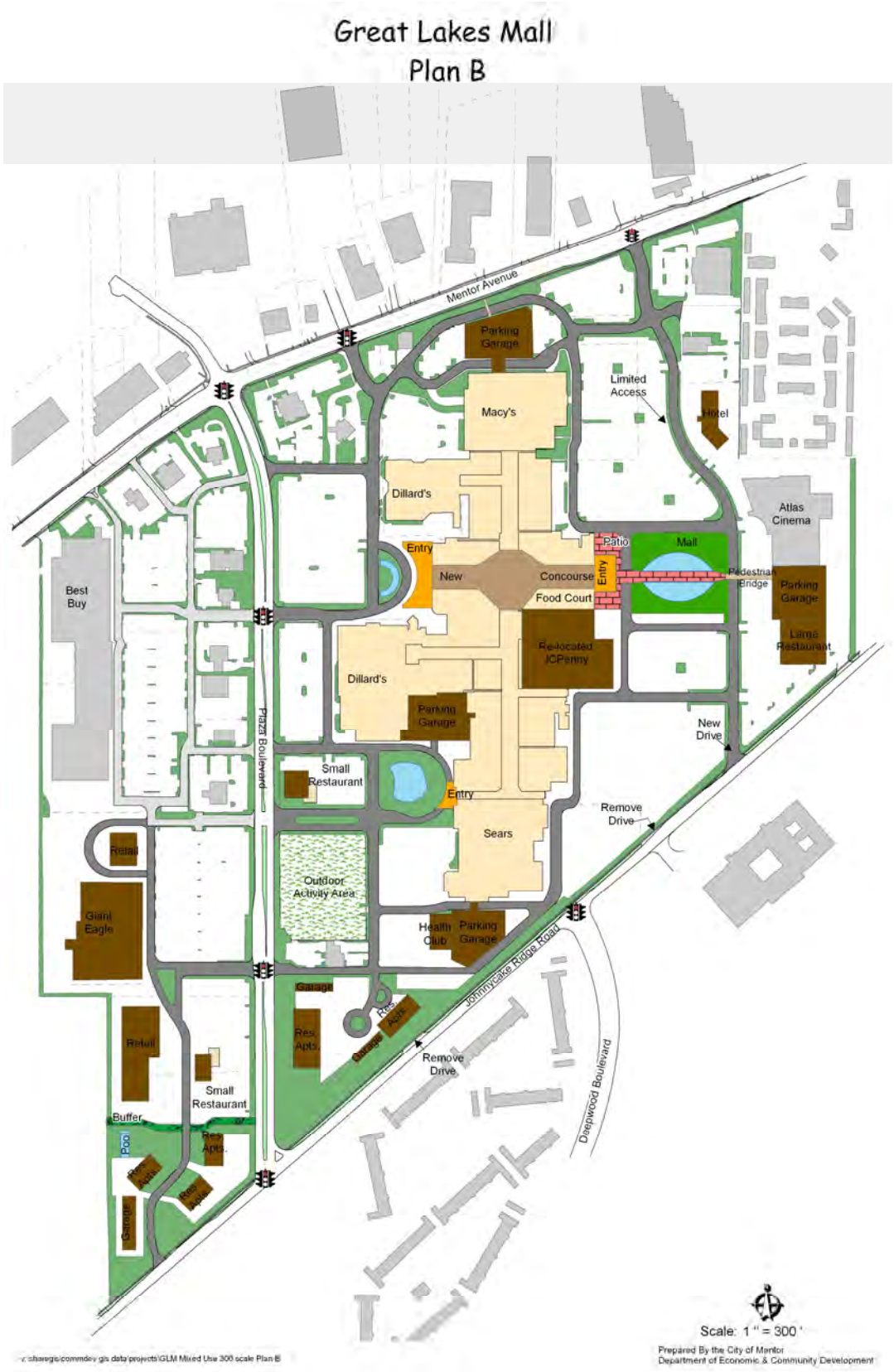
While no development plans exist for the area, the City should consider this a special planning area due to its large size and proximity to I-90. The current zoning is C-1, Conservation and future development would be single family residential on five acre lots. Upon buildout of Newell Creek, the land use composition and traffic pattern of this area will change. This may potentially affect the useful and initial intent of the C-1 zoning along an area adjacent to a highway interchange.

Map 4.19: Great Lakes Mall conceptual land use



Map 4.20: Great Lakes Mall conceptual land use

Map 4.21: Great Lakes Mall conceptual land use



Map 4.22: Great Lakes Mall conceptual land use

RVG Zoning

The Residential Village Green zoning district is intended to provide "locations for low density residential developments which contain quality neighborhood open space, through the preservation of natural areas, provision of recreation space and grouping of units." Open space is a key variable to achieve this vision.

Currently, a development is required to preserve 15% of the development site. However, open space is often unusable; it may include areas behind houses that serve as an extension of a rear yard, areas under high tension power lines, and other areas that are wasted space. The zoning resolution should be amended to ensure that open space is accessible, and functions as such. Open space in an RVG development should have the following characteristics:

- *All open space must be accessible to all residents of the development.*
- *At least one half of the open space in a development, or 7.5% of the gross acreage, must be one contiguous block. The minimum size of a single open space block must be at 1/2-3/4 acre.*
- *At least 50% of the perimeter of an open space block must front on an internal road.*
- *Except riparian and lakefront areas, open space must not take the form of narrow strips. At least one half of the area of each individual, contiguous block of open space must have proportions of 1:1 to 1:2.*
- *Open space must not function as de facto backyards.*
- *Areas within 25 feet of a residential building footprint cannot be classified as open space as they are often unusable by most residents of the community.*
- *Retention ponds, wetlands that stay saturated through half the year or more, areas under high tension power lines, traffic islands and medians, and entrance features cannot be classified as open space. More than likely these areas will not be developed anyways.*

This plan also recommends increasing the percentage of required open space in an RVG project to 20-30%. A maximum density for the site that is greater than the R-1, R-2, R-3 and R-4 districts should be permitted, to provide an incentive for RVG development by providing the potential for an equal or greater financial return compared to a conventional subdivision on the site. The plan recommends a maximum density of 3-5 units per acre of the entire site, not including undevelopable areas (utility and pipeline rights-of-way, wetlands, ponds and streams).

Providing the potential for a density bonus should also be examined. For example, if the developer protects the minimum amount required by the code no bonus is awarded. If the developer preserves additional lands, a small density bonus may be granted to the site plan so long as the ultimate density of the land conforms to the existing land use pattern of the neighborhood.

The minimum development area for a RVG zoned parcel is five acres. Increasing the minimum contiguous gross acreage of a parcel eligible for RVG zoning from five acres to ten acres is also recommended to achieve a more desirable layout and protect significant portions of valuable greenspace.

4.7 SMART GROWTH

Smart growth is a movement whose goal is accommodating development and growth, while also considering and addressing its negative effects, to create more livable, sustainable, and humane communities.

The American Planning Association adopted the following definition of smart growth.

"Smart Growth is the planning, design, development and revitalization of communities to promote a sense of place, the preservation of natural and cultural resources, and the equitable distribution of the costs and benefits of development. Smart Growth enhances ecological integrity over the short and long term and improves quality of life by expanding the range of transportation, employment, and housing choices in the region in a fiscally responsible manner."

Spurring the smart growth movement are demographic shifts, a strong environmental ethic, increased fiscal concerns, and more nuanced views of growth; all issues in Mentor. The result is both a new demand and a new opportunity for smart growth.

General principles to follow include:

Create a range of housing opportunities and choices. Many young adults are finding they can't afford to buy a home in Lake County, where they were born and raised. Many senior citizens, now empty nesters or living alone, can no longer maintain or heat large homes that were originally built to accommodate a large family.

Create walkable neighborhoods. Walkable communities are seen as desirable places to live, work, and play. Walkable neighborhoods are seen as desirable, because housing, retail and entertainment uses, and places of employment are conveniently located an easy and safe walk from each other. Walkable communities also make pedestrian activity possible, thus expanding transportation options, and creating a streetscape that better serves pedestrians, bicyclists, transit riders, and automobiles.

Encourage community and stakeholder collaboration. Growth can create great places to live, work and play, if it is channeled into a community's own sense of how and where it wants to develop. Communities have different needs and will emphasize some smart growth principles over others. Villages and townships that are defined by their rural or estate environment can preserve their identity through well-crafted architectural design and site planning requirements. Rapidly growing communities with robust economic growth may need to improve housing choices. Older suburbs that may face disinvestment may emphasize infill development and retrofitting existing commercial areas. Newer vehicle-oriented suburbs with separated uses may be looking for the sense of place provided by mixed-use town centers.

Foster distinctive, attractive communities with a strong sense of place. Retail architecture conforming to corporate prototype design, or residential development in a standard subdivision of large lots and cul-de-sacs, dilute the identity and character of a community. Smart growth encourages communities to craft a vision and set standards for development that responds to community values of architectural beauty and distinctiveness, as well as expanded choices in housing and transportation. It seeks to create interesting, unique communities that reflect the values and cultures of the people who live there, and foster the type of physical environments that supports a more cohesive community fabric. Smart growth promotes development that uses natural and man-made boundaries and landmarks to create a sense of defined neighborhoods, towns, and regions. It encourages the construction and preservation of buildings that contribute to the unique look and feel of a community.

Make development decisions predictable, fair and cost effective. For smart growth to be successful, it must be embraced by the private sector. Only private capital markets can supply the large amounts of money needed to meet the growing demand for smart growth developments. If investors, bankers, developers, builders and others do not earn a profit, few smart growth projects will be built. Fortunately, local government can help make smart growth profitable to developers. Since the development industry is highly regulated, the value of property and the desirability of a place are largely affected by government investment in infrastructure and government regulation. Governments that make sound infrastructure and regulatory decisions will foster fair, predictable and cost effective smart growth.

Mix land uses. Zoning emerged as a response to the unregulated nature of land use in the early 20th century, and the noxious character of many businesses and industries of the time. Early zoning codes were intended to protect homeowners from uses such as slaughterhouses, tanneries and glue factories, which would be a nuisance that could devalue residential properties. Today, some contemporary zoning codes prevent the mixing of residential and commercial uses, even for a well-planned project where the threat of a nuisance is nonexistent.

Smart growth supports the integration of mixed land uses into communities as a critical component of achieving better places to live. By putting uses in closer proximity to one another, alternatives to driving, such as walking or biking, once again become viable. Mixed land uses also provides a more diverse and sizable population and commercial base for supporting viable public transit. It can enhance the vitality and perceived security of an area by increasing the number and attitude of people on the street.

Preserve open space, farmland, natural beauty and critical environmental areas. Smart growth uses the term "open space" broadly to include natural areas, both in and surrounding communities that provide important community space, habitat for plants and animals, recreational opportunities, farm and nursery land, places of natural beauty and critical environmental areas. Open space preservation supports smart growth goals by protecting the character of rural and semi-rural communities, preserving critical environmental areas, improving the county's quality of life, and guiding new growth into existing communities and areas where there will be less impact on the natural environment.

Protection and maintenance of open space provides fiscal benefits that include increasing local property value, encouraging tourism, and reducing the cost of providing new infrastructure. Open space protects animal and plant habitat, places of natural beauty, and agricultural lands by removing the development pressure and redirecting new growth to existing communities. Mentor's participation in the Balanced Growth Program provides a tool to achieve this goal.

Provide a variety of transportation choices. Providing people with more choices in housing, shopping, communities, and transportation is a key aim of smart growth. Communities are increasingly seeking these choices – particularly a wider range of transportation options with supportive development patterns.

Take advantage of compact building design. A new house in Lake County occupies about three times as much land as a house from the 1950s. Smart growth provides a way for the county's communities to incorporate more compact building design as an alternative to conventional, land consumptive development. Compact building design suggests that communities be designed in a way which permits more open space to preserved, and that buildings can be constructed which make more efficient use of land and resources.

Compact building design is necessary to support wider transportation choices, and provides cost savings for localities. A minimum level of density is required to make public transit networks viable. It is less costly to provide and maintain services like water, sewer, electricity, phone service and other utilities in more compact neighborhoods than in dispersed communities.

In addition to the goals listed in section 4.8, the plan recommends the City view future development and, more importantly, redevelopment initiatives with the Balanced Growth and Smart Growth principles in mind. Of note, mixing land uses, protecting critical environmental resources (PCA's), creating a distinctive sense of place and providing opportunities for housing choice are critical to the long-term health of a community.

Furthermore, building codes and development styles should be encouraged to pursue styles that use less energy and adhere to Leadership in Energy and Environmental Design (LEED) compliance measures.

4.8 LAND USE GOALS

GOAL 1

"CONTINUE TO ENCOURAGE THE PREDOMINANTLY SINGLE FAMILY CHARACTER OF THE COMMUNITY WHILE PROVIDING A VARIETY OF ALTERNATIVE HOUSING OPPORTUNITIES TO MEET THE NEEDS OF ALL RESIDENTS."

Policies:

A. Require that the styles and densities of proposed housing developments be designed appropriately relative to the availability of residential services and amenities. Recognize that sites must be evaluated for density and housing type suitability on their own merits and in accordance with the other policies and general design concepts of this plan.

B. Encourage innovative design and marketability in new housing through flexible, modern zoning and building codes. Examine residential land uses in traditionally commercial areas such as the Great Lakes Mall.

C. Require use of buffers between various residential density developments and between adjacent nonresidential uses to visually and audibly protect our residential neighborhoods.

E. Encourage a range of housing types and prices to enable residents to remain in the community as their housing needs change.

F. Consider the use of overlay districts for preservation in the Old Village area. This district should have a historical structure component to protect the unique architecture that remains in the area.

GOAL 2

"PROVIDE ATTRACTIVE, USABLE OPEN SPACE ACCESSIBLE TO ALL RESIDENTIAL NEIGHBORHOODS."

Policies:

A. Encourage the provision of public/private open space in all neighborhoods of the city which provides suitable areas for child and adult play; for light and air for support and protection of wildlife; for environmental balance; for aesthetic value; for buffering incompatible land uses.

B. Encourage the provision of high quality open space accessible to residential areas consisting of both usable areas and areas with aesthetic value such as water surfaces, streams, marshes and steep terrain.

C. Provide technical assistance to private homeowners and homeowner associations to insure the continued maintenance of private open spaces.

D. Examine a larger open space requirement in the RVG district and dimensional requirements to avoid unusable open space areas.

E. When feasible, examine the acquisition of properties that posses unique recreational and environmental features.

GOAL 3

"IMPROVE THE QUALITY AND APPEARANCE OF EXISTING COMMERCIAL AREAS."

Policies:

A. Encourage commercial sites to be brought into conformance with the city's building and zoning codes at such times as changes of use or occupancy shall occur in areas such as landscaping, signage, parking and buffers.

B. Require continued enforcement of the city's property maintenance codes in order to ensure high quality appearance of existing commercial structures.

C. Provide assistance (such as grants, loans, technical advice, etc.) to select commercial interests in order to improve existing development (façade improvements, signage conformance, wi-fi accommodations).

D. Encourage compatibility among commercial uses through design review, amendment, and approval of sites plans and architectural treatment of new and rehabilitated structures.

E. Codify the existing Design Guidelines for Commercial and Industrial Corridors.

F. Where site conditions warrant, encourage a hybrid site plan, with parking split between the side and rear of a building, and "retail villages," where many buildings are oriented towards an internal drive or road network that recreates the feel of a village street.

G. Determine appropriate reductions to the parking requirements in all commercial zones. Consider parking maximums and minimums. Encourage shared parking between adjacent land owners.

H. Continue the replacement of pole signs with landscaped pedestal mount signs that do not impact view corridors at ingress/egress points.

I. Work with major landowners to examine outlot development on valuable property.

GOAL 4

"ENCOURAGE THE QUANTITY, TYPE, AND LOCATION OF COMMERCIAL DEVELOPMENTS TO MEET THE NEEDS OF THE NEIGHBORHOODS AND OF THE COMMUNITY."

Policies:

A. Where new commercial development occurs, insure it is adjacent to existing developments in order to minimize incompatible uses, maximize aesthetic values, and encourage efficient commercial markets.

B. Require the installation and maintenance of adequate buffers between commercial and residential uses.

C. Commercial establishments providing shopping goods should be located where adequate transportation facilities are available to support regional traffic.

D. Commercial developments shall be located in accordance with the locational guidelines of the comprehensive plan with the understanding that each site must be evaluated on its own merit after consideration of the development policies of this plan.

GOAL 5

"ENHANCE THE PRESENCE OF CHAIN / INDEPENDENT COMMERCIAL ENTERPRISES."

Policies:

A. Focus commercial recruitment efforts on the Great Lakes Mall area & Newell Creek.

B. Focus recruitment efforts in the *"Old Village"* and independent locations in general through joint meetings between businesses and property owners.

C. Monitor retail space vacancies, in order to promote opportunities for interest.

GOAL 6

"PROMOTE QUALITY DEVELOPMENT IN A MANNER WHICH ENHANCES EXISTING DEVELOPMENT."

Policies:

A. Encourage compatible land use development adjacent to established uses. Employ "buffers" such as mounds, fencing and/or landscape where necessary to minimize negative impacts.

B. Continue to prohibit land uses having characteristics which are dangers, create noxious fumes, odors, smoke, radiation, or other negative environmental impacts upon surround land uses.

C. Promote visual compatibility among adjacent developments, giving attention to site layout, landscaping, and architectural elements such as façade design, scale, height and mass. These concepts are also encouraged in the City's "Design Guidelines For Commercial and Industrial Corridors".

D. Maximize the conservation of natural amenities such as topography, trees and other vegetation, and vistas.

E. Develop Gateway Features at key locations (e.g. major intersections and large parcels).

GOAL 7

"PROVIDE FOR THE ACQUISITION OF SUITABLE LAND FOR PARK AND RECREATIONAL EXPANSION."

Policies:

A. Encourage land donations for all large developments adjacent to existing parks on land rezoned to residential.

B. Plans should provide for the development of recreation land and facilities based on demand.

C. Encourage acquisitions that link existing facilities or provide public lake access.

D. Continue to plan for alternative activities and facilities at the Mentor Lagoons Nature Preserve and Marina.

GOAL 8

"EXAMINE ALTERNATIVE PLANNING AND ZONING STRATEGIES"

Policies:

A. Continue participation in the Chagrin River Watershed Balanced Growth Plan, in conjunction with Chagrin River Watershed Partners, Inc.

B. Continue to pursue development in accordance with the OV zone to protect the historical nature of the Old Village area of the City.

C. Encourage staff and volunteer boards to participate in regional planning activities and training seminars.

D. Incorporate Best Management Practices in all aspects of development (most notably storm water management)

E. Perform an annual assessment of the zoning ordinance.

F. Ensure that land use controls do not unreasonably limit the diversity of businesses permitted in the industrial and commercial districts. Revise unnecessary or cumbersome regulations and procedures which limit the community's ability to take advantage of changes in markets and technology.

G. Examine a new mixed use zoning district for the Great Lakes Mall area following Smart Growth and New Urbanism design principles.

Chapter 5

Transportation

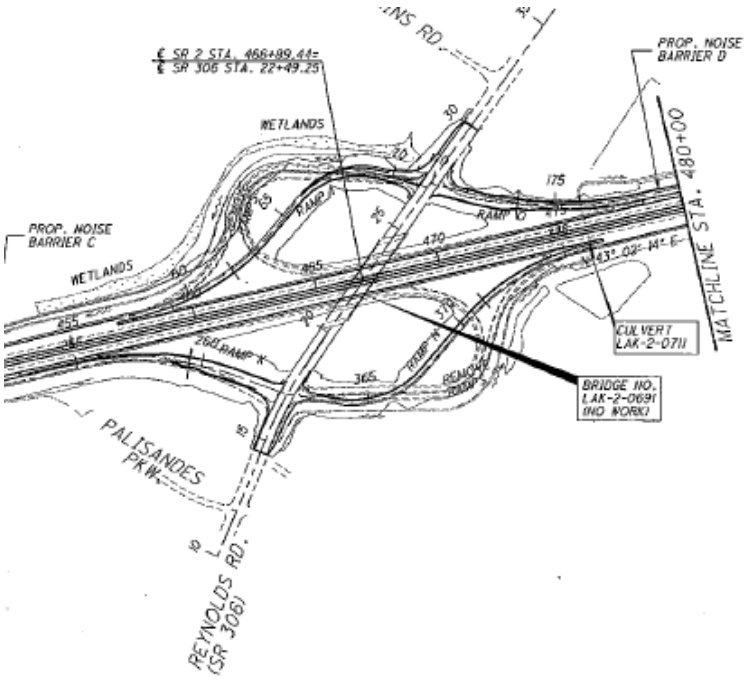
5.1 INTRODUCTION

Mentor has an ideal position in the transportation network of Northeast Ohio. It has direct access to two east-west limited access highways, State Route 2 and Interstate 90. A major north-south limited access contactor highway, State Route 44 is located less than 1/2 of a mile east of the City providing for a connection between Interstate 90 and State Route 2. It is the only limited access highway located between I-271 (western Lake County and Cuyahoga County) and State Route 11 in Ashtabula County. Mentor is also located on two major east-west rail corridors, CSX and Norfolk Southern. Lost Nation Airport is located on land that is in both Mentor and Willoughby and Cuyahoga County Airport is located within ten miles of the community. Mentor also has easy access to bulk freight docks that are located in Grand River Village and Fairport Harbor Village.

Mentor strives to incorporate traffic planning into the various proposed developments within the City. As major developments are planned, Mentor requires the developer to produce a traffic impact study to address the development's impact to the adjacent streets.

Currently, major planning efforts are under way along the Heisley Road corridor in relation to a large scale development directly adjacent to Mentor's Diamond Centre and the City of Painesville.

Figure 5.1: SR 2 / SR 306 Interchange Improvements



A third lane addition is being built for State Route 2 from Vine Street to between State Route 306 and State Route 615 by the Ohio Department of Transportation (ODOT). The plans also call for traffic and ramp improvements along State Route 2 at the SR 306 exits (Figure 5.1). The third phase of the Route 2 upgrades will include an additional lane from Newell Creek, which is east of the SR2 and SR 306 interchange, to State Route 44 South. The plans also call for ramp improvements for State Route 615, and sound walls and lights to be installed from the Willoughby border to SR 615.

Mentor will continue its traffic planning efforts into the future. In addition to the studies that will occur relating to future development, the City will continue to assess its network of streets and traffic signalization. As areas for improvement are identified, steps will be taken to address indentified traffic issues. This may result in signal retiming, traffic calming and additional traffic projects to be incorporated into the Capital Improvement Program (CIP).

5.2 ROADS

There are four distinct functional classifications used to describe the various thoroughfares which make up the road network (Map 10.1). The following NOACA classifications are:

1. Principal arterials or Major Collectors– a highway facility primarily used for through traffic, usually a continuous route.
2. Minor Collectors (roads or streets) – a facility in an intermediate functional category connecting smaller local road and street systems with larger arterial systems.
3. Local roads or streets – a facility to provide access to residences, businesses or other abutting properties.

The city continues to experience a rapid rate of growth as it is Lake County and the region's premier retail center and the sixth largest retail center in the state. It is strategically located in a prosperous northeast Ohio location, and is served by two limited access highways (I-90 and SR-2) which pass through the city. The only part of Mentor that is not served effectively by limited access highways is the southeast corner, near the Concord Township border. Mentor is also served by a US 20 (Mentor Avenue) and five state routes, SR 44, SR 84, SR 283, SR 306, and SR 615.

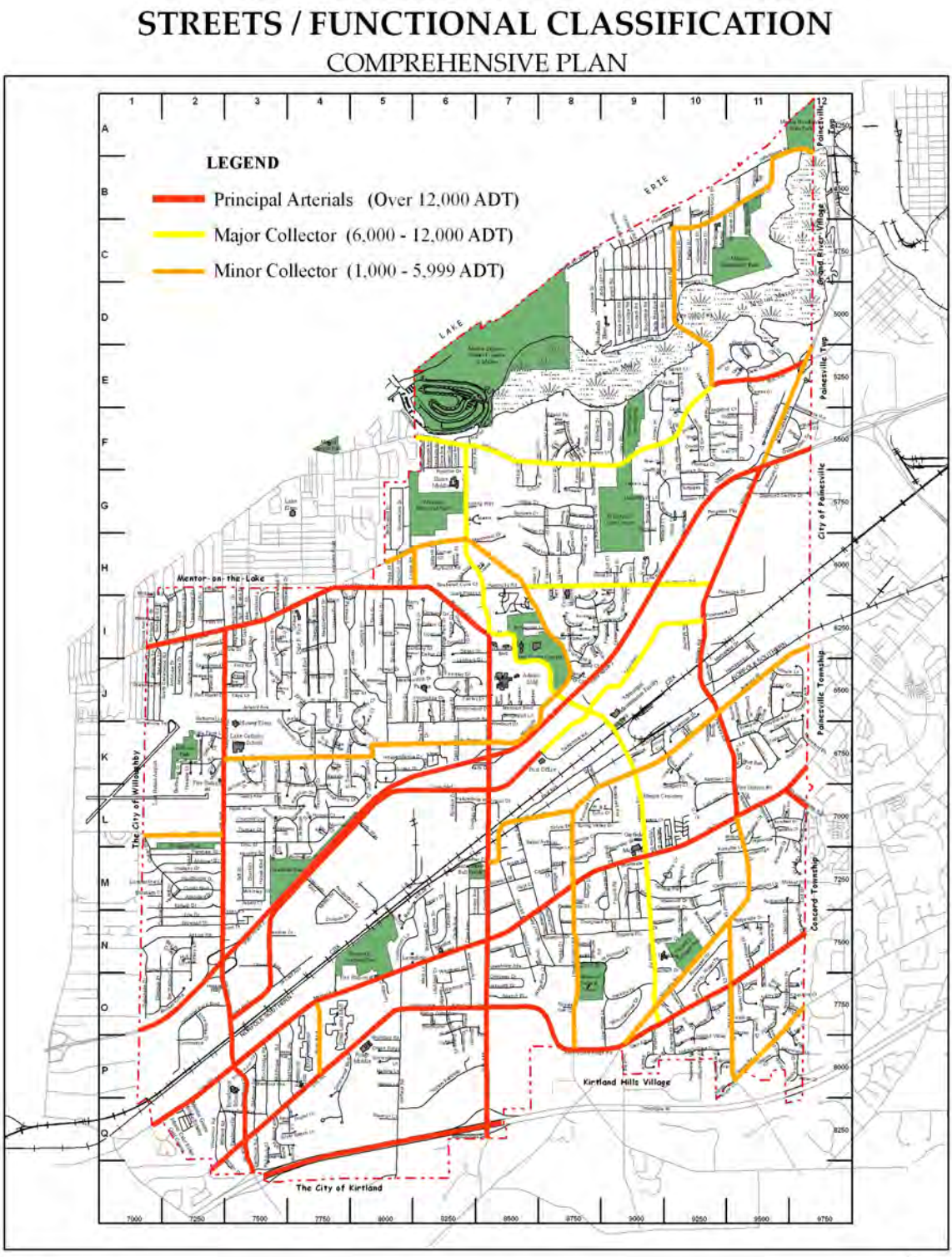
Local interchanges on State Route 2 at Lost Nation Road, Reynolds Road (SR 306), Center Street (SR 615) and Heisley Road/SR 44 and local interchanges on I-90 at Broadmoor Road (SR 306) and Center Street (SR 615) provide access to the city and feed traffic into the circulation network.

Table 5.1 Local roads per square mile

	Area	*Road Mileage*			
Community	*Sq. Mi.*	*Local*	*County*	*State*	*Federal*
Eastlake	6.58	138.68	0	13.18	0
Mentor	***28.4***	***225***	***0***	***30.09***	***7.35***
Willoughby	10.21	68.32	0	12.68	6
Lake County		954.48	151.79	143.72	99.11

Mentor has 225 miles of local roads, all of which are paved with asphalt or concrete (Table 5.1). Mentor has the most mileage of local roads with Eastlake as second in the county with the most amount of local roads. Mentor is the largest city in the county in population and in land area, but it ranks second in linear mile of road maintenance per square mile. Mentor has to maintain 7.9 miles of road per square mile and Eastlake has to maintain 21.1 miles of road per square mile.

Map 5.1: Street Classification



Streets

Constraining Factors – Because it bisects the city, the location of State Route 2 has been a factor which has influenced the traffic flow and development in the City of Mentor. While it is an asset to development of all types, it is essentially a barrier to the north-south flow of traffic. North-south traffic is funneled onto five streets to cross the expressway. There are interchanges or access points to the expressway at three of these five streets. These streets automatically handle higher traffic volumes as other streets feed traffic to them to obtain access to the expressway.

Interstate 90 skirts the southern portion of the city. Interchanges at S.R. 615 or Center Street and Route 306 or Broadmoor Road currently serve the city from I-90. The SR 91 interchange is six miles to the west of SR 306 and the SR 44 interchange is five miles to the east of SR 615 and there are two miles between SR 306 and SR 615. The net effect of this constraint on the system is traffic congestion in the southwest area of the City.

A second constraining factor influencing traffic patterns is the existing street network. The two major continuous east/west streets which connect to adjacent communities are located in the southern portion of the City. Mentor Avenue and Johnnycake Ridge Road traverse the entire city and link Mentor with the adjacent communities. They are subject to transient traffic, that is traffic not beginning or terminating in Mentor but which is traveling through the City to another destination.

A third constraining factor influencing traffic patterns is the railroad tracks. The railroad tracks like State Route 2, divide the City north and south and is a barrier to north and south flow of traffic.

Route 283 in the northern portion of the City also connects to adjacent cities, but is not a continuous and direct traffic movement as it utilizes both Lakeshore Boulevard and Andrews Road through the City of Mentor-on-the-Lake. These three routes also connect to Routes 306 and 615 which funnel traffic to the expressway interchanges.

These constraining factors pose a limitation on the circulation options when moving about the city. They serve as magnets to traffic, thus increasing the traffic volumes regardless of the traffic generated by adjacent land uses.

The City of Mentor has experienced a steady economic and population growth since 1960 when 60 percent of the land was vacant. By 1984, vacant land decreased to 40 percent, and by 2007 to 14 percent, with most of this decline attributable to population growth in the northeast quadrant of the City. While growth will continue at a slower rate in Mentor over the next decade, traffic issues will continue to present themselves due to the central location of the community and the continued growth of central and eastern Lake County.

5.3 AIR, RAIL AND WATER

Air

There are several air transportation facilities accessible to Mentor residents and businesses. Hopkins International Airport and Burke Lakefront Airport provide regularly scheduled passenger flights by major airlines. Locally, Lost Nation Airport and Cuyahoga County Airport

provide service to corporate aircraft, cargo planes and pleasure aircrafts. Approximately twenty-five percent of the operation at the Willoughby Lost Nation Airport, which straddles the Mentor-Willoughby Corporate Line, is business traffic. It is estimated that with its improved runways and navigational aids the airport will continue to service business and pleasure flying as well as corporate aircrafts. At the time this plan was being written, funding for a feasibility study to determine the long-term strategy of the facility was being researched. Results of this research may have a significant impact on the land use composition of the area and should planned utilizing the results of the feasibility analysis.

Rail

There are two major railroad lines traversing the middle of the city. The CSX and Norfolk & Southern lines are located at the southern boundary of the industrial corridor. Both provide freight service to major population centers along this corridor to the east and west of Mentor. Several industries make extensive use of these facilities through the use of rail spurs. The availability of rail service has been an asset in attracting business to the city.

The rail facilities are not currently used for daily passenger service to Cleveland. During the spring of 1985, a six-week pilot rail bus project was conducted. As a cooperative effort between Laketran and the Greater Cleveland Regional Transit Authority (RTA), the rail bus provided daily commuter service between Mentor and downtown Cleveland. The rail bus was well received and provided valuable insight into the potential for this form of mass transit. This concept was studied again in the mid 1990's as the Northeast Ohio Regional Project by NOACA. Another six week trial was conducted with a rail bus in 1997. This time, the passengers were taken from the Euclid Transit Center, St. Clair Road at Babbitt Road to Downtown Cleveland. Interstate passenger rail service is provided by Amtrak. The closest Amtrak Station is located in Cleveland, Ohio and the next closest station is located in Erie, Pennsylvania.

Water

Mentor currently has the Mentor Lagoons Marina and Nature Preserve, which is a man made harbor and a marina for private pleasure boats. It can also be used as a safe harbor for boaters in case of storms. Only Mentor Lagoons and the breakwall at Fairport Harbor qualify as safe harbors in Lake County. The Mentor Yacht Club is also located in this area. The two closest marinas in the adjacent counties are Wildwood State Park in Cuyahoga County and Geneva State Park in Ashtabula County.

There is also a full service bulk freight area in the adjacent community of Grand River with docks that usually ship salt. Currently Mentor is teaming up with adjacent communities to study the feasibility of a crossing Lake Ferry between Lake County and a community in Ontario, Canada.

5.4 ACCESS MANAGEMENT

Access management varies from community to community. Uncontrolled access increases congestion, and decreases the carrying capacity of the road. There are many ways a community can implement access management requirements that will help improve traffic flow and safety along their roads, as well as aesthetics.

Businesses along any street and at cross streets that have unfettered access to the road create traffic problems and a feeling of congestion. Businesses all too often have two or more driveways or curb cuts from the street to provide access when one or a joint access with an adjacent business would be safer and help to reduce congestion. A similar problem occurs in residential areas on main thoroughfares and collector streets. These problems can be reduced by using common drives or drive access points and on corners, where possible, have lot access provided on the adjacent local street in order to reduce the points of potential conflict.

There are many areas where businesses have continuous curb cuts, where the pavement of a business parking lot will meet the road surface along the entire frontage, with no landscape buffer or physical barrier separating them. This causes the street, parking lot, and sidewalk to bleed together as a mass of pavement. Continuous curb cuts create a very unsafe pedestrian environment, because vehicles can cross a pedestrian path anywhere. Continuous curb cuts make it difficult for a driver to find the correct entrance to a business. They also increase stormwater runoff, eliminate any visual buffer between the street and a building, and present an unkempt, unappealing and makeshift appearance of a commercial district. Many access problems along streets in business areas are the result of poor subdivision, zoning and site planning requirements and practices in the past.

Access management is a process for providing access to land development, while preserving traffic flow on surrounding roadways in terms of safety, capacity, and speed. This is done by managing the location, design and operation of driveways, median openings, and street connections along a road. It also includes use of dedicated turn lanes or bypass lanes, to keep turning vehicles from blocking through traffic.

Access management is used to improve vehicular and pedestrian safety, maintain road capacity and reduce congestion, and enhance community character and aesthetics. By maintaining the capacity and level of service of the road, access management protects the substantial public investment in transportation, and reduces the need for expensive improvements. Studies conducted in Florida and Colorado suggests that poor spacing, design, and location of driveways lower average travel speed, and improvements in access management can increase roadway capacity. Research has also shown that access management helps reduce the rate and severity of traffic accidents. Good definition and spacing of driveways also improves pedestrian and bicycle safety, by reducing the potential for conflicts with turning vehicles (Figure 5.2).

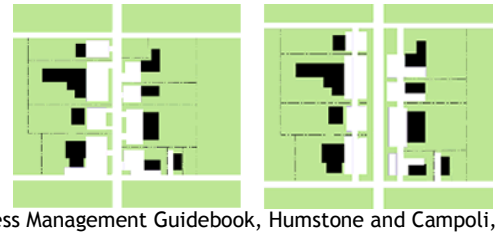
From a land development perspective, access management requirements further the orderly layout and use of land and help discourage poor subdivision and site design. The quality of site access is also important to the success of a development project. The Urban Land Institute *Shopping Center Development Handbook* warns that poorly designed entrances and exits not only present a traffic hazard, but also cause congestion that can create a poor image of the center. Reducing the number and frequency of driveways and median openings also improves the appearance of major corridors. More land is freed for landscaping, the visual dominance of paved areas is reduced, and scenic or environmental features can be protected. Access management requires coordination of land use and transportation objectives. The City can address the interdependence of land division and access and add access management regulations in its zoning code. Access management techniques usually include the following:

What is access management?

Access management is a group of strategies, tools, and techniques that work to improve the safety and efficiency of roads – not by adding lanes but by controlling where vehicles can enter, leave and cross a road.

For example, consider a commercial strip that has developed over several decades along both sides of a four-lane road. Without access management, the businesses with frontage on the road would all have individual curb cuts for their driveways that let drivers get into their often small parking lot. People trying to pull off the street would slow traffic behind them, and if turning left across the oncoming traffic lane, a number of risks arise.

- To cars in the oncoming lane, or cars slowing behind the turning vehicle, who risk accidents.
- To pedestrians trying to walk along the road, at risk when they cross a driveway.
- To bicyclists riding along the shoulder, facing risk as traffic behind the turning vehicle try to use the shoulder to get around the bottleneck.



(Access Management Guidebook, Humstone and Campoli, 1996)

Multiply this by 100 businesses, and there can be a real mess. Safety would be highly compromised, and the resulting traffic snarls frustrate shoppers and commuters alike. The many driveways also reduce the space that could be devoted to landscaping, making the area less attractive. Everyone loses: businesses, residents, and travelers.

This is the situation today along US 20 in Mentor City.

Access management is one solution to this problem. It helps residential developers build safer neighborhoods. It offers ways to group businesses, their customer access, and their parking lots together, reducing costs and maximizing efficiency. It facilitates left turning without slowing traffic or compromising safety. It makes roads safer and more inviting for drivers, pedestrians, and cyclists. It also increases traffic capacity, without having to spend millions to add lanes or build frontage roads.

- Regulation of driveway spacing, corner clearance, and sight distance.
- Increased minimum lot frontage and setback requirements along thoroughfares.

- Restriction on the number of driveways for existing lots, and consolidating access wherever possible.
- Requirements for driveway design elements and conditions requiring their use.
- Requiring internal connections, unified circulation and parking plans between adjacent properties.
- Treating properties under the same ownership and those developed as a unified project as one property for the purpose of access control.

Figure 5.2 Continuous curb cuts are unattractive and unsafe, and make it difficult to tell where a road ends and a parking area begins.

- Using frontage and rearage roads to serve as a common access drive for properties along a corridor.
- Restriction of flag lots and regulate private roads and access easements.
- Minimizing commercial strip zoning and promote mixed use and flexible zoning.
- Minimizing casual lot splits to prevent access and right-of-way problems.

Driveway location and design

Driveway location and design affects the ability of a driver to safely and easily enter and exit a site. If not properly placed, exiting vehicles may be unable to see oncoming vehicles and motorists on the roadway or not have adequate time to stop. If driveways are too narrow or have a small turning radius, vehicles will be unable to maneuver quickly and easily off the road. If the turning radius and width are very wide, fast maneuvers on and off the site pose safety hazards for pedestrians, bicycles, and vehicles. Without an adequate throat or stacking lane, vehicles may block traffic while waiting to enter a site, or block parking rows while waiting to leave.

Driveway location and design can be regulated by amending parking lot design standards in the zoning code.

Driveway number and spacing

There are too many driveways that access our highways, and they are too close together. Decreasing the number of driveways and increasing their spacing can increase safety and traffic flow.

Many businesses along commercial streets, even those on narrow lots, have two or more driveways. Business owners sometimes perceive these driveways as offering easier, more convenient access to potential customers, but they increase the number of conflict points

along the road, and reduce the spacing between driveways. Redundant driveways increase the points where traffic can back up and accidents can occur (Figure 5.3).

Figure 5.3 Redundant driveways along US 20 add points of conflict that make traffic patterns unpredictable, increase the risk of accidents, and contribute to traffic delays.

Reasonable spacing between driveways is also important to the safety and capacity of a road, as well as the appearance of a corridor. Managing driveway spacing is essential on roads intended for higher speeds and intense land use, such as US 20. At higher speeds drivers have less time and distance to react to unexpected situations. In most access management codes, the minimum distance between driveways increases; based on the classification, design speed, and traffic volume of the road.

Driveway number and spacing should be regulated by the zoning code parking area standards. Required shared access, discussed later in this section, can also help fix problems with closely spaced and redundant driveways.

Corner clearance

Driveways located too close to intersections are dangerous, and add to traffic congestion.

Corner clearance is the distance from an intersection to the nearest driveway. Corner clearance standards, and restrictions on driveways in acceleration, deceleration and right turn lanes, preserve good traffic operations at intersections, and the safety and convenience of access to corner properties. Having a larger minimum lot size requirement for corner lots will protect the development potential and market value of corner properties. It will also help assure that these properties do not experience access problems as traffic volumes grow.

Joint and cross access

Few businesses along arterial and collector streets like US 20 have shared or cross-access driveways. Their use can reduce the number of driveways accessing the road, and also cut the amount of short vehicle trips on the road.

Joint and cross access involves connecting neighboring properties, and consolidating driveways serving more than one property. This allows vehicles to circulate between adjacent businesses without having to re-enter the road. Joint access is also used to connect major developments, reduce the number of driveways, and increase driveway spacing where highway frontage has been subdivided into small lots, such as some areas of US 20. This allows more intensive development of a corridor, while maintaining traffic operations and safe and convenient access to businesses (Figure 5.4).

In many communities, larger parcels are often developed as a unified site, with joint and cross access planned from the start, even if the site will be subdivided into several commercial lots. In most commercial areas, land is usually subdivided and developed incrementally over a long period, with no unified plan for a site. Each of the resulting lots is developed individually, with no coordination of access.

Figure 5.4 Cross-access driveways connect the parking areas of three separate businesses in Amherst, New York.

One way that joint access can be implemented is by prohibiting direct access to the arterial or collector street from outparcels and lots that are carved from larger lots. Instead, the owner of the original parcel must provide access rights from the old lot to the new. If the original host lot is not immediately developed, the developer of the newer lot may be allowed a temporary driveway, which would be closed when the original lot is developed. The easement or access agreement is recorded with the property records, along with a joint maintenance agreement, and an agreement to close the temporary driveway when the joint access system is complete. As an alternative, property owners can also be required to create a binding joint access and cross easement plan before subdividing their property.

For new development on new and existing lots, access rights and stub-out drive aisles to adjacent parcels would be required by zoning code parking requirements, along with the appropriate access easements and/or agreements. For lots that are developed, creating stub-out driveways and recording access easements and/or agreements would be required if the business or use on the property changed, or as a condition of a building permit for major expansion or renovation.

Because access is shared, it will also be easier to share parking areas. The zoning code should be amended to allow a reduced number of parking spaces for a use if access is shared.

Another option is to declare a cross access corridor on the zoning map for parts of the corridor where retail and commercial development will be intense, along with design requirements; for instance, the travel corridor must extend the entire length of each block it serves, or at least 1,000 feet (300 meters) of linear frontage along the arterial, be able to accommodate two-way traffic, and have a design speed of 10 MPH (15 KPH). All properties developing on a corridor would have to include provisions for the cross access corridor.

To implement joint and cross access requirements, the City zoning code or the municipal zoning code and county or municipal subdivision regulations would need to be amended.

Frontage and rearage roads

There are no frontage or rearage roads along Lake County's major highway corridors. Frontage and rearage roads can reduce the number of driveways and conflict points along these highways, but they can also be expensive to build.

Frontage roads can be useful for eliminating driveway connections along major highways; they would serve almost as a collective driveway to a number of properties. However, if not carefully managed, frontage roads can create operational problems at intersections, especially when combined with high traffic volumes associated with commuter routes and commercial areas. If frontage roads connect close to major intersections, severe congestion, long delays, and high accident rates could result.

Frontage roads would be difficult and very expensive to implement along major highways, because the right-of-way is relatively narrow, and they could eliminate the parking area for many businesses. Frontage roads would also create a very wide traffic corridor that would be visually intimidating, and detract from the exurban or semi-rural character of the City.

Figure 5.5 Rearage roads behind businesses in suburban Denver, Colorado.

Rearage roads, also called backage roads, function much like frontage roads, only they are placed behind areas to be developed. Rearage roads allow for a greater distance between their connection with cross streets and the intersection of those cross streets with major highways, eliminating problems with congestion (Figure 5.5). Rearage roads can be implemented over time by acquiring right-of-way – a process that may be costly – or through a method similar to the cross access corridor scheme described in the previous section.

Medians

Most major arterials have a limited amount or no medians. Medians can control the location and reduce the number of left-hand turn points, and eliminate congestion caused by stopped cars turning from the passing lane.

Raised or grassy medians in the center of a road separate opposing lanes of traffic and restrict turning and crossing movements. Studies from around the nation show that roads with raised medians are safer than those with undivided thoroughfares or center two-way left

turn lanes, where traffic is far less predictable, and left hand turns can create accident- and congestion-prone conflict points.

As with driveways, the spacing and design of median openings is important to the safe and efficient operation of the highway. Safety benefits are reduced where median openings have inadequate storage – the length of the stacking area for cars waiting to turn – or are too close together, increasing the number of conflict points.

Medians also provide a refuge for pedestrians and bicyclists crossing a road, and can provide visual appeal and relief if they are landscaped. Considering the importance of the nursery industry in the City, landscaped medians can help reinforce a unique "sense of place" by showcasing the products of area nurseries. Some communities have "adopt-a-median" programs, where a small sponsorship sign is displayed to identify a business or group that paid to landscape and maintain a stretch of median.

Consider this: the fast-growing suburbs of Denver, Phoenix, Kansas City and San Francisco have some of the nation's strictest access management regulations. They also have prospering commercial districts, and access management has not deterred new businesses.

When highways are upgraded, it is recommended consideration be given to the use of landscaped medians instead of a continuous center turn lane to divide opposing lanes of traffic.

Possible Business Concerns

Businesspeople may object to access management because they believe it makes access less convenient for impulse customers and delivery vehicles. However, it has no effect on the demand for products and services they offer. Studies show access management generally does not harm local businesses.

Local businesses that depend upon drive-by traffic may raise concerns that their patronage will be hurt by medians and driveway limitations. Others may claim they will be affected because customers and delivery vehicles will find it less convenient turning into a dedicated driveway, rather than just pulling off the road into a parking lot with a continuous curb cut.

Several studies were conducted in the 1990s to find the potential economic effects of access management. Due to the proprietary nature of sales information and the factors that affect business activity, analysis of this issue has been difficult. Most studies have focused on business owner perceptions of impacts, before and after case examples, or generalized comparisons of business activity across corridors.

In 1999, the Kansas Department of Transportation studied 15 businesses that had filed inverse condemnation lawsuits on access related issues. In nearly every case, the landowner had claimed that access management would have devastating effects on their business and the highest and best use of their property. Some had been compensated for potential impacts. Each property was studied to find if the economic impacts had been realized.

In all but one of the cases either the claimant was still in possession of the property and operating the business, the property was being used for the same use by a different operator, or the use of the property had been upgraded. The only exception was where a main road was

relocated, and two gas stations remained on the old road, which was converted to a frontage road. In this case, drivers had to go miles out of their way to reach the frontage road, and the gas stations went out of business.

The Texas Department of Transportation conducted a study of the economic impacts of left-turn restrictions in the mid-1990s. Key findings included the following:

- Perceptions of business owners before a median was installed were more pessimistic than what usually happened.
- Business owners reported no change in pass-by traffic after median installations.
- Most business types (including specialty retail, fast-food restaurants and sit-down restaurants) reported increases in numbers of customers per day and gross sales, except for gas stations and auto repair shops, which reported decreases in the numbers of customers per day and gross sales.
- Most adverse economic impacts were realized during the construction phase of the median installations.
- Employment within the corridors experienced upward trends overall, with some exceptions during construction phases.
- When asked what factors were important to attracting customers, business owners generally ranked "accessibility to store" lower than customer service, product quality and product price, and ahead of store hours and distance to travel.
- About 94% of business owners reported that their regular customers were at least as likely or more likely to continue patronizing their business after the median installation.
- Along corridors where property values were studied, the vast majority of land values stayed the same or increased, with very few exceptions.

Iowa State University conducted a statewide study of the effects of access management on business vitality in 1996. Results showed that:

- Corridors with completed access management projects performed better in terms of retail sales than the surrounding communities. Business failure rates along access managed corridors were at or below the statewide average for Iowa. Although this suggests that access management projects generally did not have an adverse effect on the majority of businesses, some businesses may have been negatively impacted.
- 80% of businesses surveyed along access managed corridors reported sales at least as high after the project was in place. Relatively few businesses reported sales declines associated with the access management project, although these business owners clearly felt that they were hurt by the project. The firms perceiving negative impacts were a mixture of business types.
- Similarly, about 80% of businesses reported no customer complaints about access to their businesses after project completion. Those businesses that tended to report most complaints were highly oriented toward automobile traffic.
- In all cases, 90% to 100% of motorists surveyed had a favorable opinion of improvements made to roadways that involve access management. The vast majority of motorists thought that the improved roadways were safer and that traffic flow had improved.

Although several studies assessed the potential economic damage from access management, none have examined the potential long-term economic benefits. Poorly designed access not only hurts the character and efficiency of a corridor, but also its economic vitality over time.

Property values that have increased rapidly during commercial development tend to decline after the area is built out if the character and efficiency of the corridor is hurt in the process. The result is a pattern of disinvestment as successful businesses choose other, higher quality locations. This pattern is seen throughout the region, including Vine Street in Eastlake, and Euclid Avenue in Wickliffe and Painesville Township.

(Studies compiled in *Economic Impacts of Access Management*, Kristine M. Williams, AICP, Center for Urban Transportation Research, University of South Florida, 2000.)

5.5 TRAFFIC GENERATORS

Traffic generators are land uses which serve as magnets for attracting people. Uses such as educational facilities, retail malls, large apartment complexes or large industrial employers are common traffic generators.

Figure 5.6 Heisley Rd./ SR 2 Interchange

The locations of the primary retail and industrial generators has not changed substantially since 1967, however, a tremendous expansion has taken place. Great Lakes Mall has expanded and resulted in the development of the Erie Commons, Great Lakes Plaza and numerous other multi-tenant retail stores in that area. While the primary location of the retail trade has not changed, there has also been additional retail development on the eastern side of the city. Target has been built adjacent to the Creekside Commons which houses Kohls, Dicks and Borders.

Figure 5.7 Classic Auto Group campus

While new cars are generally thought of as retail, Classic Auto Group has been growing since its founding in 1979. Originally, only Classic Chevy was located on Center Street and Tyler Boulevard, Classic has expanded to include eight other brands. Classic Auto Group is a considerable traffic generator because it brings in customers from other communities inside and outside of Lake County.

In the industrial corridor, the development of industrial parks with major employers, such as Lincoln Electric and Steris, has increased the drawing power of that area. Other traffic generators in the area are Lakeland Community College, Mentor High School and Lake Catholic High School.

Major traffic generators locate to take advantage of the accessibility offered by expressways and arterials, often locating near interchanges which already generate traffic, thus compounding the traffic volumes. Retail facilities which wish to locate in areas of already high traffic volume further increase the volume by generating more traffic. The combined effect of both traffic generators and constraining factors is reflected in local traffic patterns and traffic flow. This is true in the rapidly developing Heisley Rd. / SR 2 area. Significant growth of all types has occurred over the past decade. Hotels, retail, industrial, and offices have been added to the area, creating a traffic generator.

Traffic patterns in Mentor are further influenced by the commuting patterns of the work force and the labor force. Almost three-fourths of the city's residents work outside the city. Their work locations are primarily to the west. Conversely over half of the work force coming into Mentor commutes into the city. As a result, the transportation system, primarily the expressway interchanges, must handle large volumes of traffic traveling in opposite directions at the same time. This mix of outbound and inbound traffic is a result of traffic patterns from both the residential areas to the interchange and from the interchanges to the industrial areas. It creates periods of peak traffic volumes which correspond to the morning and evening commuting "rush". The opening of the 615 / I-90 interchange and the major improvements to SR 2 will greatly aid in reducing peak flow issues.

The most consistent generator of traffic is residential development. While commercial, industrial and educational facilities generally have peak traffic times; residential developments can generate traffic practically all day. The volume is not as high but the rate of generation is the most consistent and continuous. The street layout of many of the residential developments has also influenced the traffic patterns and problems in the city. A substantial number of developments do not provide interconnecting streets with adjacent developments. This forces all traffic to exit at one location, generally on already heavily traveled arterials, for even local trips. The interconnection of developments could alleviate some of the city's traffic congestion. The plan recommends increased interconnectivity with future developments in the City.

5.6 TRAFFIC

Limited Access Highways

There are two limited access highways that serve Mentor, State Route 2 and Interstate 90. State Route 2 is more of a local limited access highway while I-90 serves more intercounty and interstate traffic. Each day there are 79,150 vehicles entering Lake County on SR 2 at the Euclid/Wickliffe border and only 18,980 vehicles use Route 2 where it merges with US 20 in Painesville Township.

64,300 vehicles use I-90 from the Cuyahoga and Lake County border and 52,890 vehicles use I-90 at the eastern border of Lake and Ashtabula Counties. Both limited access highways have seen increases in the amount of traffic that uses them, but I-90 has seen 117.3% increase since 1984 while State Route 2 has only seen a 58.1% increase (Table 5.3).

Table 5.2 Traffic Counts

Route	Location	1984	1992	2005	△% 1984-2005
US 20	West Corp. Line	17,600	29,260	18,900	7.4%
US 20	SR 306	26,900	33,240	23,220	-13.7%
US 20	SR 615	13,220	19,150	22,010	66.5%
US 20	Heisley Rd	13,550	17,880	15,890	17.3%
US 20	East Corp. Line	15,720	17,880	15,890	1.1%
SR 84	West Corp. Line	5,540	7,690	7,890	42.4%
SR 84	SR 306	18,450	17,640	13,230	-28.3%
SR 84	SR 615	10,620	13,200	13,440	26.6%
SR 84	East Corp. Line	7,060	9,390	13,400	89.9%
SR 306	At SR 84	12,730	13,450	16,500	29.6%
SR 306	At US 20	26,480	34,870	33,120	25.1%
SR 306	At SR 2	20,160	28,380	24,380	20.9%
SR 306	At I-90	26,730	28,870	27,190	1.72%
SR 283	West Corp. Line	13,850	15,090	15,390	11.1%
SR 283	At SR 306	15,540	16,510	16,970	9.2%
SR 283	At SR 615	13,720	11,810	11,670	-14.94%
SR 283	At Corduroy	10,550	13,800	12,400	17.54%
SR 283	Heisley Rd/SR 44	3,030	4,580	4,300	41.9%
SR 283	East Corp. Line	3,030	4,580	4,300	41.9%
SR 615	At I-90	2,520	2,610	18,100	618.3%
SR 615	At SR 84	7,800	9,640	16,040	105.6%
SR 615	At SR 2	17,060	28,880	14,410	-15.53%
SR 615	At US 20	15,150	22,020	24,030	58.6%

Source: 1984, 1992, 2005 ODOT Traffic Survey Reports

Table 5.3 Highway Traffic Counts

Route	Location	1984	1992	2005	△% 1984-2005
SR 2	West Corp. Line	49,060	67,070	71,810	46.4%
SR 2	SR 306	37,330	44,990	58,160	55.8%
SR 2	SR 615	35,550	45,230	55,090	55.0%
SR 2	Heisley Rd/ SR 44	33,120	45,230	55,170	66.6%
SR 2	East Corp. Line	33,120	42,190	55,170	66.6%
I 90	West Corp. Line	38,700	37,810	64,300	66.2%
I 90	SR 306	24,200	37,810	64,300	165.7%
I 90	SR 615	24,200	37,810	52,890	118.6%
I 90	East Corp. Line	24,200	37,810	52,890	118.6%

Source: 1984, 1992, 2005 ODOT Traffic Survey Reports

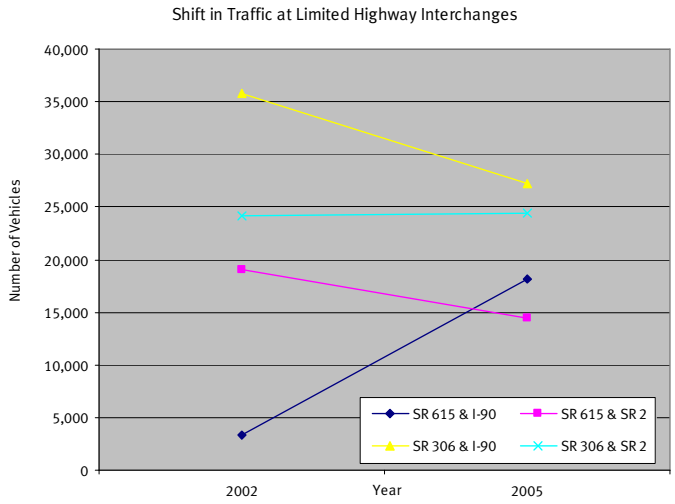
State 615 and Interstate 90 Interchange

One of the biggest changes to the Mentor road network was the building of the Interstate 90 and State Route 615 interchange. This new interchange has taken traffic away from the interchange at SR 615 and SR 2 and the interchange located at SR 306 and Interstate 90. This interchange has provided easier access to southeastern Mentor, along with access to Kirtland, Kirtland Hills, Concord Township and Chardon Township.

This improvement has also facilitated the Newell Creek mixed use development.

Table 5.4 Interchange Traffic Counts

Route	Location	2002	2005	△% 2002-2005
SR 615	At I-90	3,330	18,100	443.5%
SR 615	At SR 2	19,100	14,410	-24.6%
SR 306	At I-90	35,840	27,190	-24.1%
SR 306	At SR 2	24,190	24,380	0.8%



5.7 PEDESTRIAN AND BICYCLE ACCOMMODATIONS

Bikeways provide for an alternate form of transportation, and an increasingly popular form of recreation. The bicycle is an efficient alternative to the automobile, and is easy to park, non-air polluting, and a healthy form of exercise. The bicycle is also a noiseless transportation alternative which could alleviate some traffic congestion if properly blended into existing land uses and traffic patterns. The two primary drawbacks to cycling are: the weather, which can deter usage during several months of the year, and the lack of designated lanes, which separate bicycles from motor vehicles.

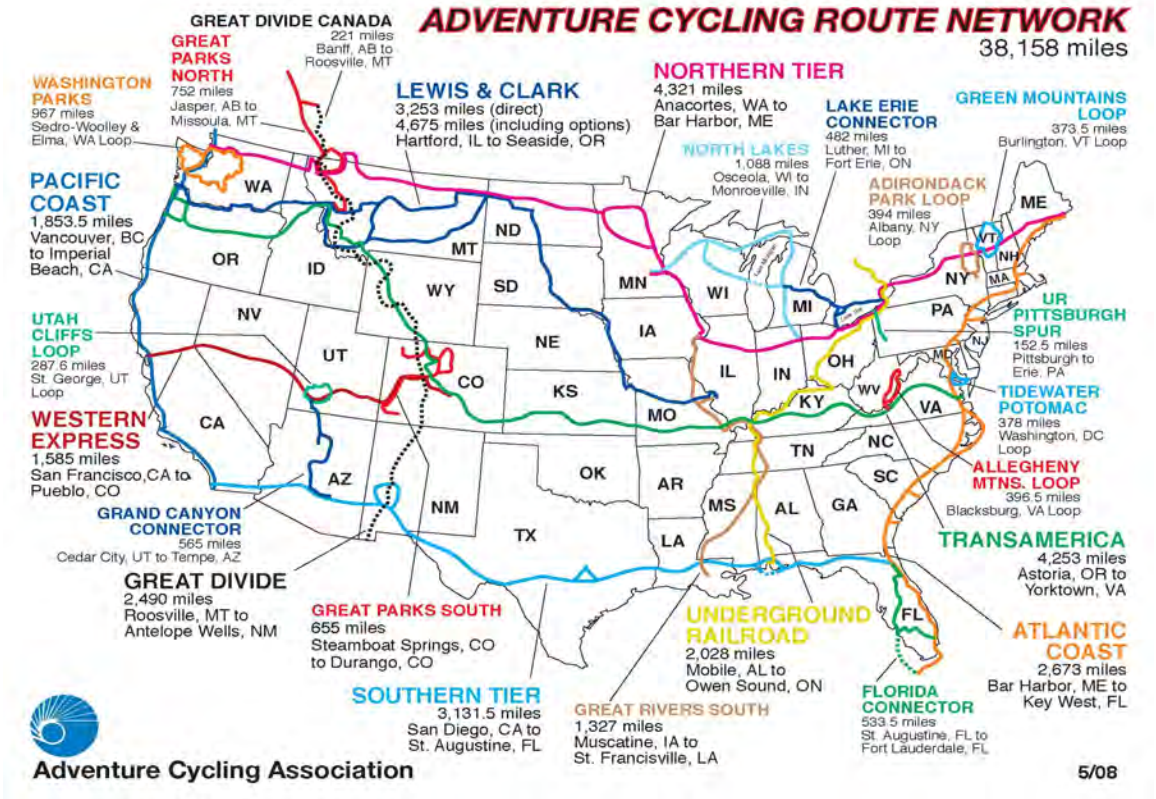
Mentor's city-wide bikeway system was designed to link the Civic Center with the most densely populated areas of the city. From 1987 to 1989 a multi-use path was constructed near and through the Civic Center complex. In 1989, a program objective of the Capital Improvement Program (CIP) was the development of a city-wide bikeway and sidewalk plan. By 1999, 2.75 miles of bicycle lanes had been constructed. Recently, Mentor, along with Oberlin and Avon Lake were named bicycle friendly communities by the League of American

Bicyclists. Construction continued and by the end of 2000, records indicate 6.25 miles of bicycle lane and 3.8 miles of multi-use path had been constructed. By 2005, Mentor had 8.3 miles of bicycle lane and 4.8 miles of multi-use paths. Currently, Mentor has completed 11.1 miles of bicycle lane and 4.8 miles of multi-use paths.

The first section of Mentor's city-wide bikeway system was designed to link the Civic Center with the two most densely populated areas of the city and is completed. Lakeshore Boulevard in the northern end of the City has been identified by The Northeastern Ohio Area-Wide Coordinating Agency (NOACA) as a location for a regional bikeway facility. It is included in the NOACA Lakefront Bikeway stretching from Lorain to Ashtabula, a portion of this stretch is completed. Additional bikeways are planned: class I (path), class II (lane), and class III (on-street bike route signs posted) with the goal of providing a connected city-wide system to improve safety and provide an alternative means of travel.

Adventure Cycling Association is a nonprofit organization that inspires people of all ages to travel by bicycle for fitness, fun, and self-discovery. It was founded in 1973 and has 44,500 members nationwide. They research and produce cycling maps for Adventure Cycling Route Network, one of the largest route networks in the world at 38,158 miles (and growing). One of their trails is the Northern Tier Trail that starts in Anacortes, WA, and ends in Bar Harbor, ME. This 4,322 mile trail divides in Cleveland into a northern and southern route. The northern route runs along Lake Shore Blvd. in Mentor and the southern route runs along Johnnycake Ridge Road, also in Mentor. The two trails rejoin in Painesville City.

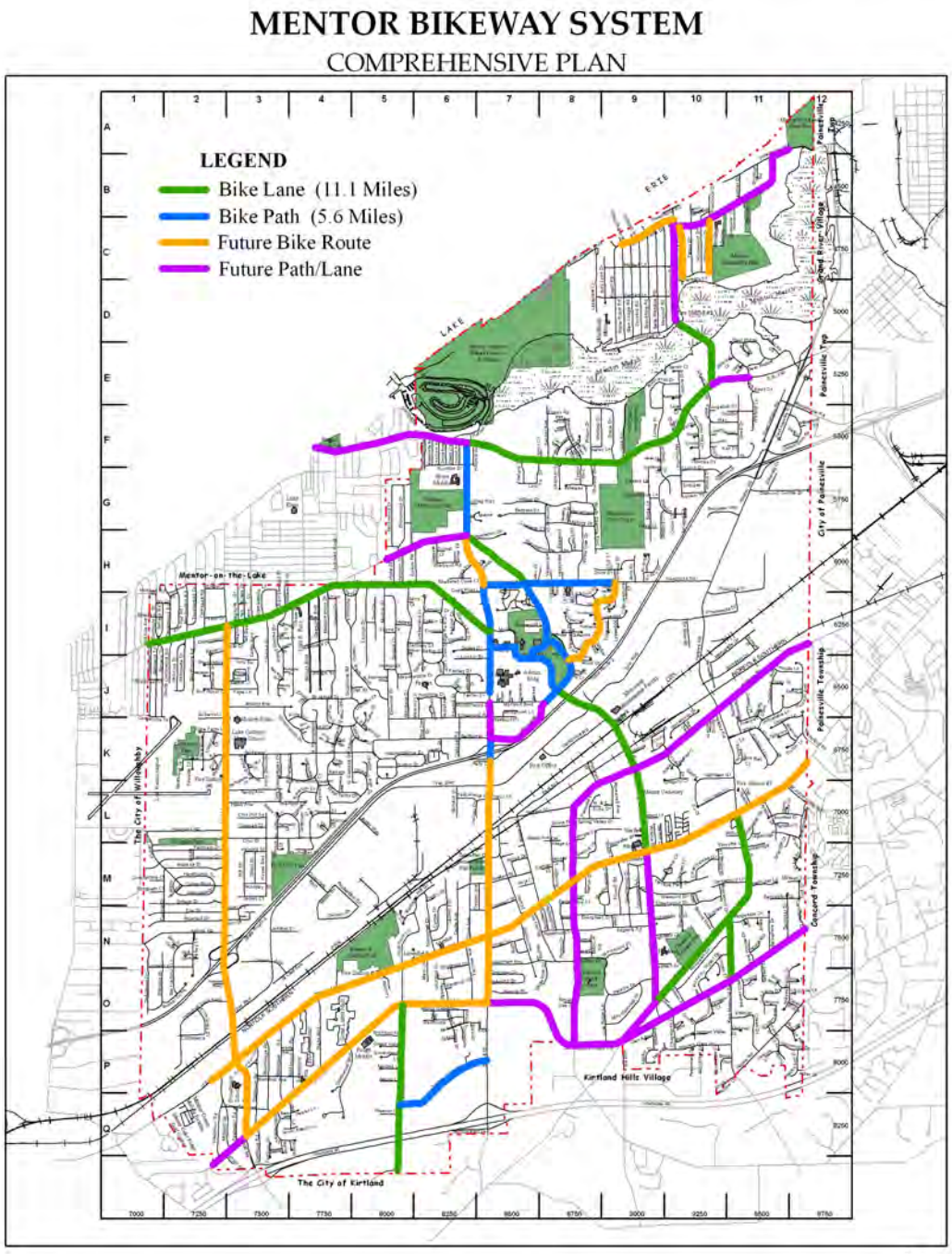
Map 5.2: Adventure Cycling Map



The City of Mentor is a regional leader in the provision of quality bikeway systems to its residents. This is a major quality of life issue. Bikeways are shown on Map 5.3.

Map 5.3 shows that the City plans on adding additional bike lanes and paths. The addition of these lanes will help make Mentor a safer bicycle community. Currently, NOACA rates parts of the road network as being suitable only for experienced bicycle riders. These roads are roads that have high levels of traffic and no bike lanes or paths.

Map 5.3: Bikeway System



The City has emphasized bikeways as part of the annual Capital Improvements Plan (CIP). New bike lanes are planned for Adkins Road and for Plains Road in the 2009 to 2013 Capital Improvement Plans. While the CIP includes additional bike lanes, attention should still be paid to including a bikeway component in the planning for the Mentor parks and recreational facilities as they are developed. In addition, the City should consider bicycle access in the planning and approval of new residential, commercial and recreational developments.

Sidewalks

The pedestrian system is an important aspect of an efficient transportation network. In a community with limited public transit, sidewalks become an important element for safe and efficient travel. Current subdivision regulations require the installation of sidewalks with all new residential and commercial development. Many new developments supplement the sidewalks with walkways which provide links to other neighborhoods, parks, schools and village green areas. There are, however, areas which do not have sidewalks. Many of these areas are adjacent to facilities such as schools and parks, which have a high volume of pedestrian traffic. Providing for pedestrian safety in these areas of the city should be a priority.

The program must be continued to address both the need for additional sidewalks or bikeway facilities in areas not currently served and the condition and maintenance of the existing sidewalks throughout the city.

The overall goal of the Safe Routes to Schools program is to encourage parents and children to consider alternatives for school travel that do not involve automobile travel, thus reducing congestion and improving air quality around our schools. This will result in a healthier lifestyle for those who choose to walk or bicycle to school. As part of the Safe Route to Schools Program, a School Travel Plan will be developed. The School Travel Plan will identify potential projects to encourage safe transportation of children to schools. Ways to promote safe travel include Encouragement (using events to encourage students to try walking and biking); Education (teaching students important safety skills for walking and biking and promoting driver safety); Engineering (creating physical improvements to the infrastructure surrounding the school, including the creation of safer crosswalks, sidewalks and pathways); and, Enforcement (using local law enforcement to ensure drivers obey traffic laws).

A comprehensive sidewalk plan identifying those areas currently served by sidewalks and identifying priority projects (unserved areas) should be undertaken. Any proposed crosswalk locations must meet the criteria of the Ohio Manual for uniform traffic control devices.

The Capital Improvements Plan also has line items that would improve the sidewalk system by providing handicap ramps. These ramps will conform to ADA guidelines. The Capital Improvements Plan also has a line item that would provide new school zone flasher signs for the 13 school zones in the city.

5.7 PUBLIC TRANSPORTATION

Bus

According to the 1990 Census Transportation Planning Package (CTPP), less than one-half of one percent of all employed Mentor residents used public transportation to reach their work destination. According to the 2000 Census, that percentage increased to 0.9%. In 2007 the figure increased to 1.7%, (2007 American Community Survey). According to the 2000 Census, there were more people walking to work, 266 commuters, than rode public transportation, 239 commuters. In the figures from 2007, the number of commuters taking public transport outnumbered the number of commuters walking to work, 440 commuters to 257 commuters.

Public transit service is provided almost exclusively by Laketran on four of its six fixed routes in Lake County.

Laketran fixed Route #1 runs from Lakeland Community College and connects the City of Mentor with the City of Painesville, Lake County's Government Center, and Lake Erie College, via SR-306 and SR-20, essentially an east-west crossing across the southern tier of the City.

Fixed Route #2 connects Mentor to Willoughby and Wickliffe via Route 20, while fixed Route #3 links Mentor with Eastlake and Willowick via SR 306 and Lakeshore Blvd.

Fixed Route #6 connects Mentor to Lakeland Community College, Shoregate Shopping Center, the Shops of Willoughby Hills and Great Lakes Mall via Vine Street and Mentor Ave. and Plaza Boulevard.

At Shoregate Shopping Center, Routes 3 and 6 interconnect with GCRTA (Greater Cleveland Regional Transit Authority) Route 39, which provides access to Downtown Cleveland. The Cleveland Hopkins Airport can be accessed by the Rapid Transit Red Line at Tower City at this point. At the Shops of Willoughby Hills, Route 6 interconnects with GCRTA Route 94, which provides access to Richmond Town Center, Legacy Village and Cuyahoga Community College East. Route 2 connects with GCRTA Route 28 at East 276 Street in Euclid. Route 28 provides service to the Rapid Transit Red Line at the Windermere Station. The Red Line provides Service to Public Square and Hopkins Airport.

In addition to the fixed routes, daily express commuter service is provided by Laketran to Cleveland's central business district leaving from Mentor's Market Street Park-and-Ride lots via SR-2 and I-90 with eight buses daily. Routes 1, 2, and 3 also provide access to the Lakeland Park- N-Ride facility.

Figure 5.8: Park N Ride

Laketran also provides a dial-a-ride service for all Mentor residents upon 48 hour notice. This service operates Monday through Friday 6:00 a.m. to 6:00 p.m. Laketran service routes are shown on Map 5.4.

Interstate Bus Service

Interstate passenger bus service is provided by Greyhound. The closest station is located in Cleveland, Ohio with the next closest station located in Ashtabula, Ohio.

5.8 GATEWAYS

The city's gateways are generally defined only by signage and/or plantings. The various entries have plantings maintained by the Mentor Beautification Committee.

While gateways are important along the I-90 and Route 2 entrances to the city, the existing interchange requires separate gateway features. An option to this extensive development would be to create a main entrance feature along Route 2, as opposed to each exit ramp, one on the east approach to the city and one on the west. With this option in place, features on the exit ramps could be minimized, or completely eliminated.

The primary emphasis for the development of gateways into the city is proper placement, and the level of expenditure to create the gateway should be relative to the volume of traffic moving through the area.

Existing and proposed gateways are shown on Map 5.5.

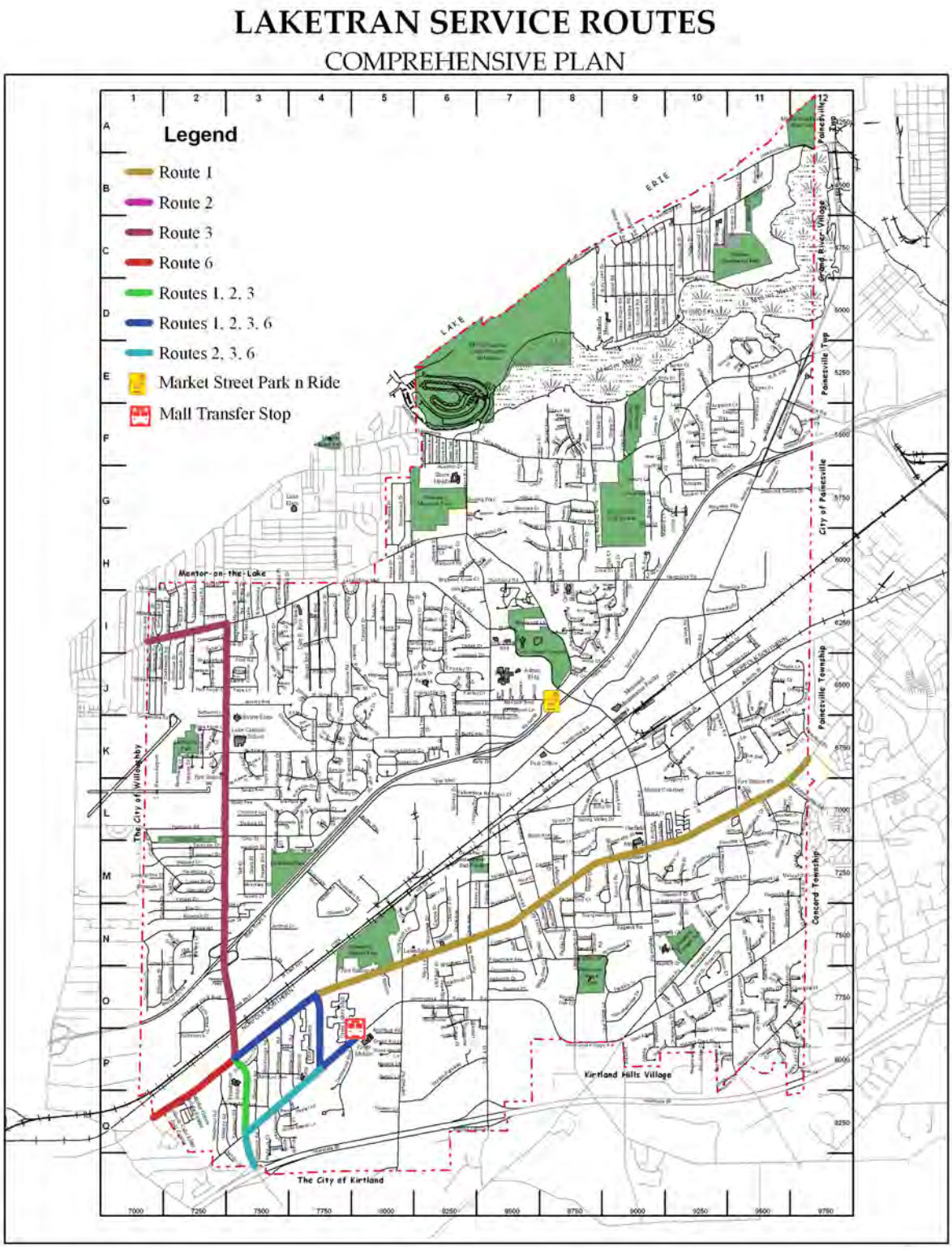
Highway Signage

The exit signs on the limited access highways give an indication of what is at the next exit. Only two of the six interchanges located in Mentor actually have signs that say 'Mentor', and one of those signs has another community listed. There are other signs located along SR 2 that indicate the three Mentor exits and the mileage to them. There is also a sign along I-90 just before SR 615 that states Mentor, Kirtland Hills next right.

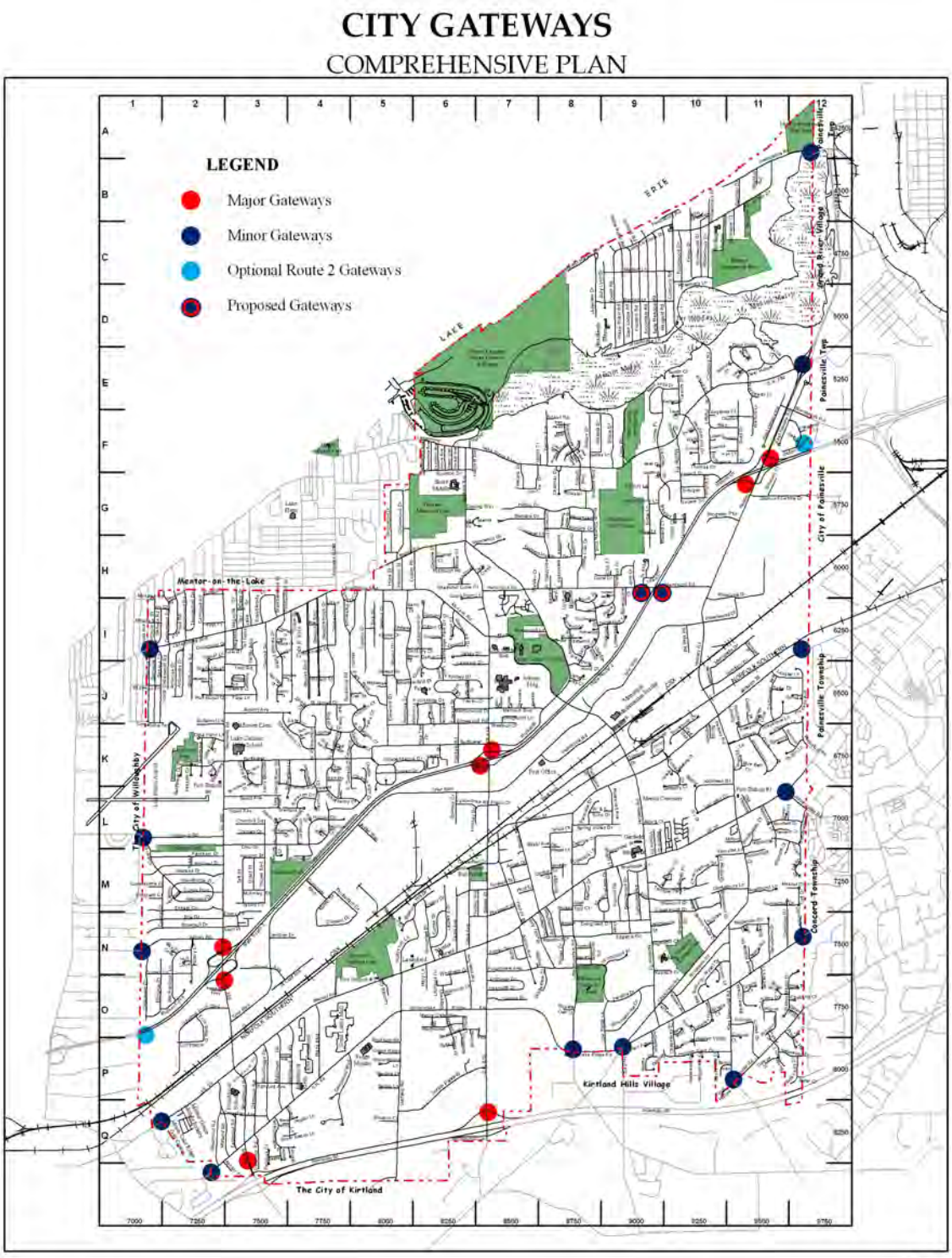
Table 5.5 Highway Signage

Exit	*Signage*
SR 2 & SR 306 N	Mentor on the Lake
SR 2 & SR 306 S	Kirtland
SR 2 & SR 615	Mentor
SR 2 & Heisley Road	Heisley Road, Headlands Beach, Grand River
I-90 & SR 306	Mentor, Kirtland
I-90 & SR 615	Center Street

Map 5.4: Laketran Routes



Map 5.5: Gateways



5.9 PROPOSED UPGRADES

Various intersections throughout the city have been upgraded with the addition of turn lanes that allow vehicles to turn left or right without delaying other traffic that wishes to continue along the road. This helps with flow of traffic throughout the city.

Additional intersections will be studied by the City, NOACA, ODOT and the County Engineer to determine if new lanes are warranted. These evaluations will be based on traffic counts and evaluations, current and future conditions and physical conditions. Additions of new lanes to streets are costly in design, building and right-of-way costs. Not every intersection studied will get an upgrade. The Capital Improvement Plans has identified Mentor Avenue at Sharonlee Drive, Mentor Avenue at Garfield Park/Lucretia Court, and SR 84 at King Memorial Road as intersections to be studied for possible left turn lanes.

The impact of increased traffic also impacts the road network resulting in the need for roadway widenings which may, or may not, require additional right-of-way. Currently these proposed widenings include:

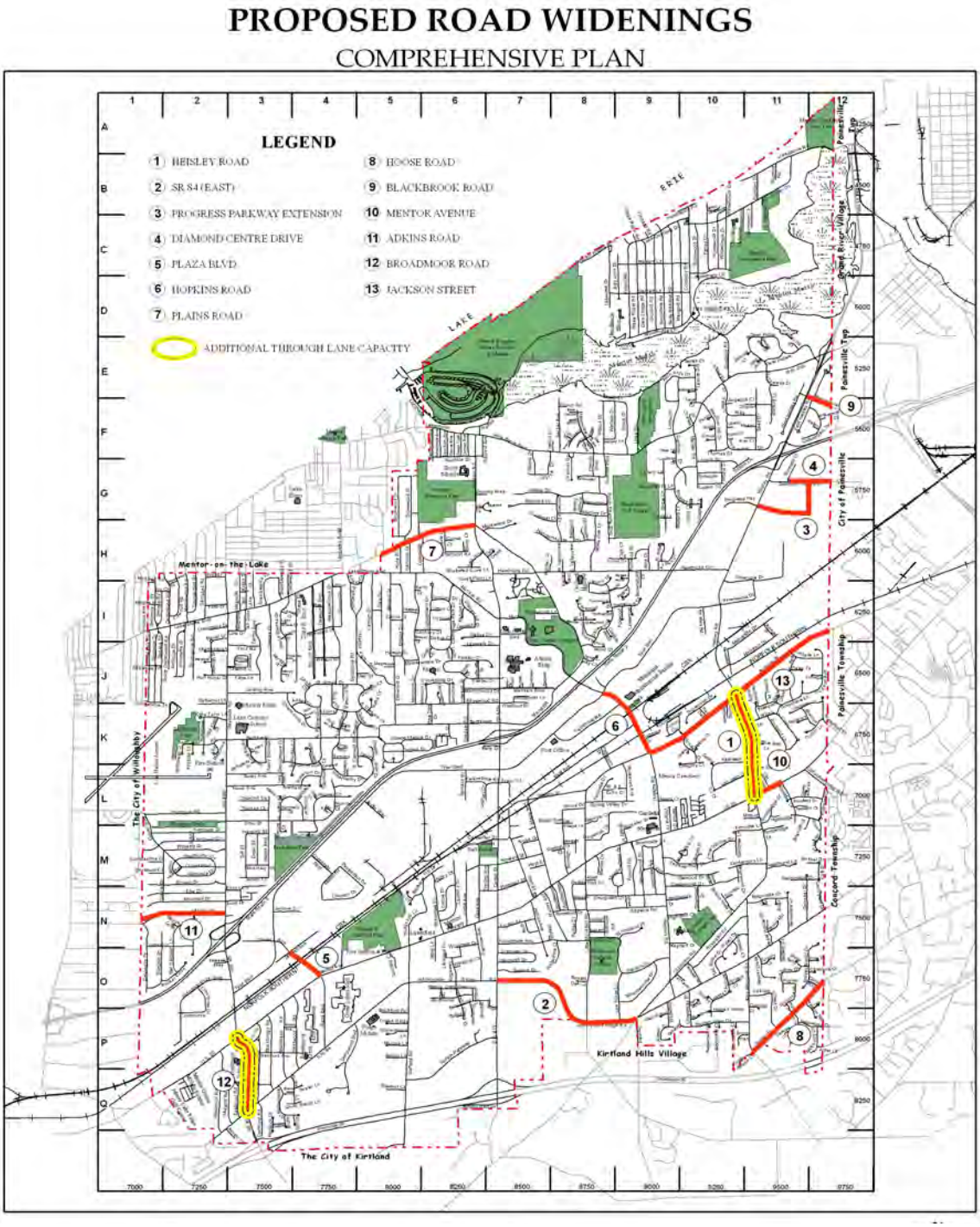
1. Widening of Heisley Road to four lanes between Jackson Street and Mentor Avenue.
2. Additional lane & intersection improvements to Sections of SR-84 from S.R. 615 east to Chillicothe Road. Additional lanes (to 3) with sidewalks.
3. Construction of a privately funded road connecting Diamond Center to Heisley Road south of current intersection of Diamond Center and Heisley Road.
4. Diamond Center Drive
5. Extension of Plaza Blvd., north to Tyler Blvd. via Clover Avenue.
6. Widening of Plains Road from Hopkins to Mentor-on-the-Lake border. The new road will have two eleven foot lanes and two 4 foot bike lanes.
7. Construction of Hopkins Road overpass at both the Norfolk Southern railroad and CSX tracks, subject to continuing evaluation of traffic needs.
8. Section of Hoose Road from King Memorial Road to East Corp. Line. Widening (30 ft.) storm sewer, curbing.
9. Section of Blackbrook Road from SR-44 to East Corp. Line. Widening and storm sewer system.
10. Mentor Avenue
11. Section of Adkins Road from SR-306 to West Corp. Line. Widening and storm drainage. This project will include a 10-foot wide bike bath from Kittery Lane to SR 306 and 5-foot bike lanes on either side of Adkins from Kittery Lane to the Willoughby border.
12. Section of Broadmoor Road (SR-306) from Mentor Avenue to SR 84. Additional lanes (to 4)
13. Section of Jackson Street from Hopkins Road to East Corp. Line: Widening

These are shown on Map 5.6

In addition to the changes resulting from widening, several new street alignments have been proposed by the city. These include:

- Construction of an access road from Lakeshore Blvd. to serve the Mentor Lagoons area (alignment not fixed).
- Pinecone/Diamond Center interconnect (alignment not fixed).

Map 5.6: Proposed Upgrades



5.10 GOALS AND POLICIES

GOAL 1:

"PROMOTE AND DEVELOP A TRANSPORTATION PLAN THAT PROVIDES FOR A DIVERSE RANGE OF USERS, INCLUDING RESIDENTS OF ALL AGES AND ABILITIES, SCHOOL ACTIVITIES, BUSINESS COMMUTERS, COMMERCIAL AND INDUSTRIAL LABOR FORCE, RETAIL SHOPPERS, VISITORS, AND PEDESTRIANS AND BICYCLIST."

Policies:

A. Provide access to the interstate system to minimize the number of non-local trips on the local street system.

B. Ensure that adequate roadway capacity is available for any new or modified land uses and that it fosters an orderly pattern of growth.

C. Promote standards that minimize City maintenance requirements.

D. Promote a local street system that encourages interconnections and alternative access.

E. Promote a local street system that discourages through traffic and promotes a free flow of movement by use of access management. Access management is a group of strategies, tools, and techniques that work to improve the safety and efficiency of roads – not by adding lanes but by controlling where vehicles can enter, leave and cross a road.

F. Consider the use of "Traffic Calming Techniques" where appropriate.

G. Develop unique, place making Gateway Features at key locations.

H. Utilize the municipal planning commission as a cursory review agency for future road projects regarding connectivity, access management and general traffic circulation.

GOAL 2:

"PROVIDE ALTERNATIVE TRANSPORTATION OPPORTUNITIES FOR RESIDENTS."

Policies:

A. Support the delivery of alternative modes of transportation by public and private suppliers including employer based programs.

B. Support the provision of transportation alternatives as part of selected City programs through available County and regional agencies as well as nonprofit institutions.

C. Consider the provision of bikeways along with any transportation improvement.

D. Provide access for the handicapped as an integral part of any transportation system.

E. Consider the needs of pedestrians in any transportation improvements.

F. Provide accessibility to pedestrians, bicyclists, and alternative mode users within and between neighborhoods, public spaces, park facilities, business districts and to regional facilities.

G. Consider additional water trails / hiking paths in long-term recreational planning.

GOAL 3:

"ENSURE PUBLIC SAFETY."

Policies:

A. Provide fire protection, emergency medical services and police service to the community through a cost–effective and efficient delivery system to maintain a safe environment for the public.

B. Implement, in accordance with the Capital Improvement Plan (and necessary financial resources) all intersection, road widening, and new alignment improvements as noted in this chapter.

C. Maintain subdivision regulations regarding the placement of sidewalks, and explore the installation of sidewalks in older areas of the city in which development predated these regulations. Provide sidewalks on public lands where they are needed, especially where access to schools and parks will enhance their utilization.

6.1 INTRODUCTION

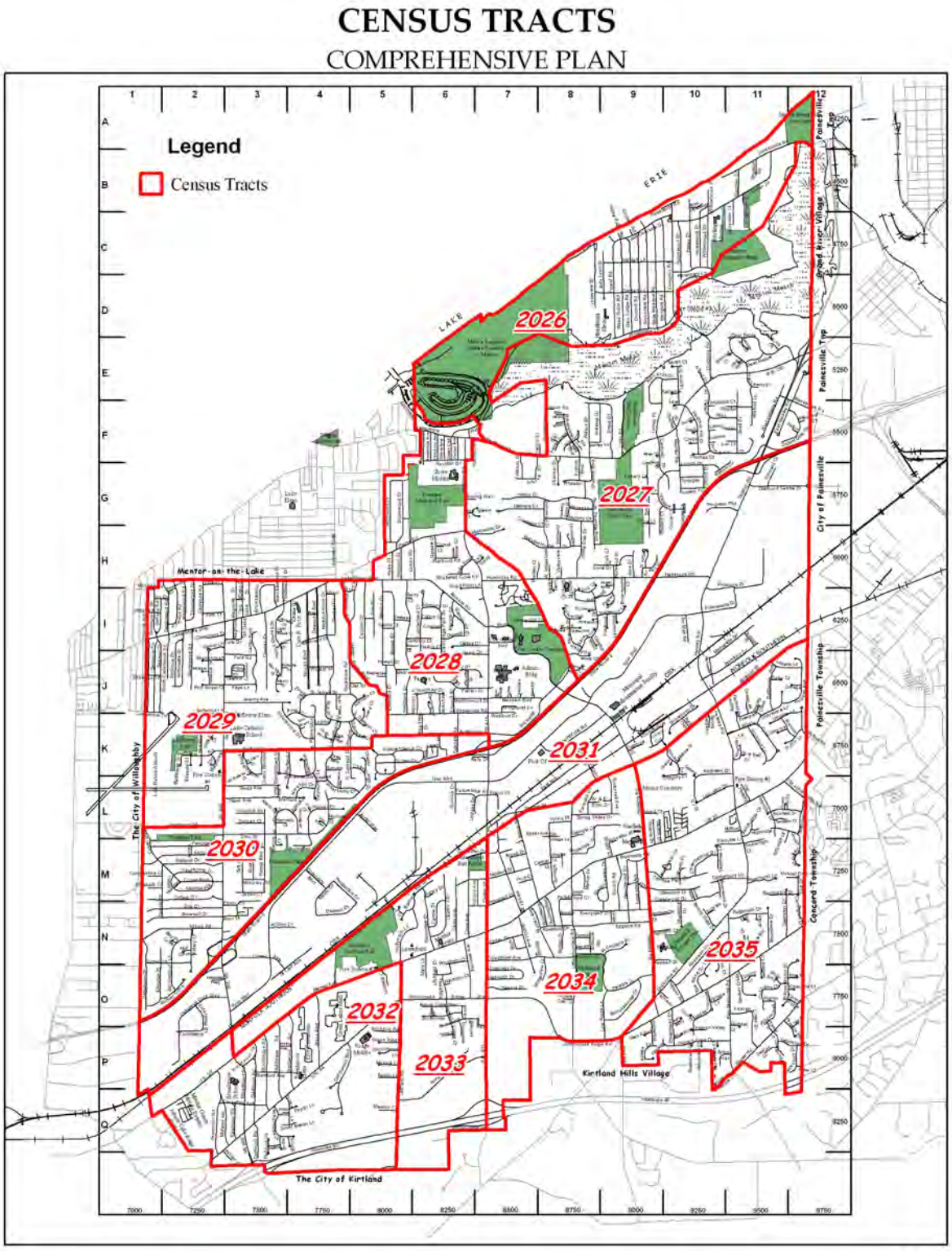
The housing element of the Comprehensive Plan establishes policy to guide development, maintenance, and redevelopment of housing resources in the City of Mentor. The aim of the housing element is to ensure that all current and future residents have access to safe, habitable, and affordable housing in livable neighborhoods; that the existing housing stock remains viable and desirable; and that housing types and residential community's appealing to a broader range of lifestyles and age groups are provided.

A typical housing element in a comprehensive plan includes an inventory of existing housing, a determination of future housing needs, and addresses concerns such as affordability, substandard housing, and issues affecting lower income residents. This plan addresses those topics, but also highlights broader concerns - the effects of shifting demographics, changing lifestyles, and evolving homebuyer preferences; the role of housing in urban life; and retaining and attracting residents by providing a variety of housing choices and experiences.

The housing element is closely tied to other elements of the Comprehensive Plan. All of the elements touch on factors contributing to the quality of life of residential neighborhoods found in the City. More in-depth analysis and discussion of land use, transportation, and recreational needs can be found in other Comprehensive Plan elements.

The City of Mentor is divided into 10 census tracts (Map 6.1). Census tracts are geographic divisions of larger political unit that U.S. Census department created for demographic purposes. The census tracts have population, economic, housing, and social data attached to them. This data allows us to analyze smaller parts of the city and compare different parts of the community. This chapter will be comparing the housing data.

Map 6.1: Census Tracts



6.2 HOUSING INVENTORY

"Age" – The age of the housing stock in Mentor is relatively young compared to the remainder of Lake County. Using data from the 2000 Census as the baseline, the largest proportion of the housing in Mentor is between 20 to 30 years old. The second largest segment is the 30 to 40 age bracket and third is 10 to 20 years old (see table 6.1 and 6.2). All three groups are fairly even. They are only divided by 3.1%. 10.1% of the housing in Mentor is more than 50 years old and 14% is less than 10 years old. This data is consistent with the 2007 estimate as indicated in Table 6.2

In contrast, the housing in the remainder of Lake County is fairly evenly distributed among all age categories. The County, in general, has a higher percentage of older homes than Mentor.

The age of the housing stock is directly related to the need for housing maintenance and the numbers of substandard houses in the city. Since most of the housing has been built in recent years and the City has a property maintenance code for all residential units, blight has not been a concern in the city. In addition, the City has a rental inspection and apartment inspection programs.

Table 6.1 Decade housing unit constructed

	Mentor City		*Lake County*		*Cleveland PMSA*	
Decade built	***Number of units***	***% of total units***	***Number of units***	***% of total units***	***Number of units***	***& of total units***
1999-2000	158	0.8%	1,180	1.3%	11,075	1.2%
1995-98	890	4.6%	5,159	5.5%	35,874	3.8%
1990-94	1,656	8.6%	6,080	6.5%	40,612	4.3%
1980-89	3,510	18.2%	10,429	11.2%	66,212	6.9%
1970-79	4,110	21.3%	17,579	18.8%	128,921	13.5%
1960-69	3,867	20.0%	15,854	17.0%	143,945	15.1%
1950-59	3,167	16.4%	19,925	21.3%	185,819	19.4%
1940-49	808	4.2%	6,696	7.2%	107,646	11.3%
Prior to 1939	1,135	5.9%	10,585	11.3%	235,044	24.6%

(US Census Bureau)

Table 6.2 Decade housing unit constructed, Estimate 2007

	Mentor City		*Lake County*		*Cleveland PMSA*	
Decade built	***Number of units***	***% of total units***	***Number of units***	***% of total units***	***Number of units***	***% of total units***
2005-07	191	0.95%	1,350	1.35%	10,110	1.01%
2000-04	660	3.29%	5,302	5.32%	42,741	4.29%
1990-99	2,612	13.02%	12,014	12.05%	76,953	7.72%
1980-89	3,510	17.50%	10,429	10.46%	66,212	6.64%
1970-79	4,110	20.49%	17,579	17.63%	128,921	12.93%
1960-69	3,867	19.28%	15,854	15.90%	143,945	14.43%
1950-59	3,167	15.79%	19,925	19.98%	185,819	18.63%
1940-49	808	4.03%	6,696	6.71%	107,646	10.79%
Prior to 1939	1,135	5.66%	10,585	10.61%	235,044	23.57%

(US Census Bureau, 2007 Estimate)

Map 6.2: Housing Units by Decade

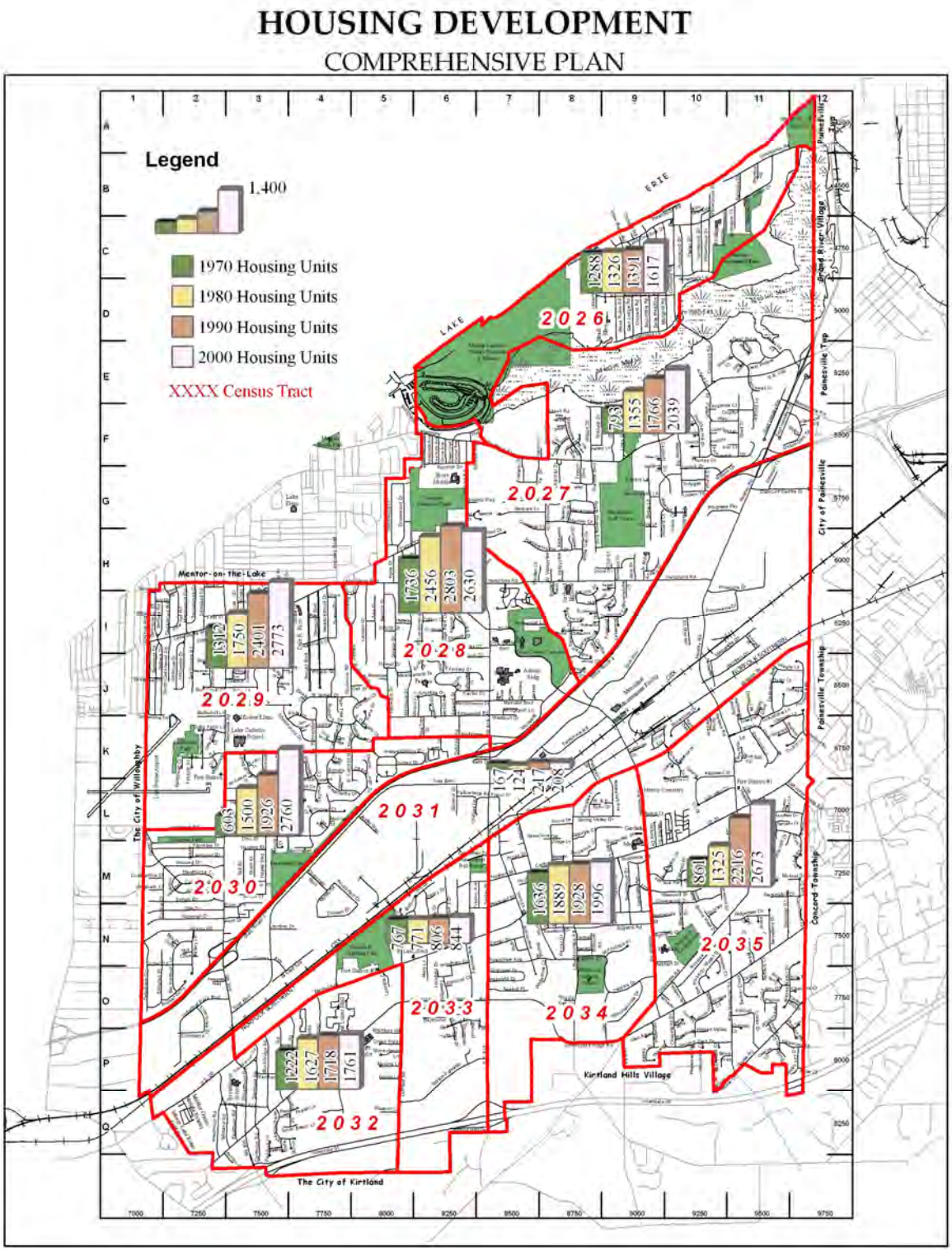


Table 6.3 and Maps 6.2 displays the number of housing units in 1970, 1980, 1990 and 2000 by census tract. Since 1960 there has been a 172% increase in housing units indicating a tremendous amount of development. The largest percentage of that increase occurred between 1960 and 1970. In 1970 there were 10,385 housing units. That number increased to 14,123 by 1980, a 36% increase throughout the city. Between 1980 and 1990 the percentage increase was 22% and it increased by 12.4% between 1990 and 2000.

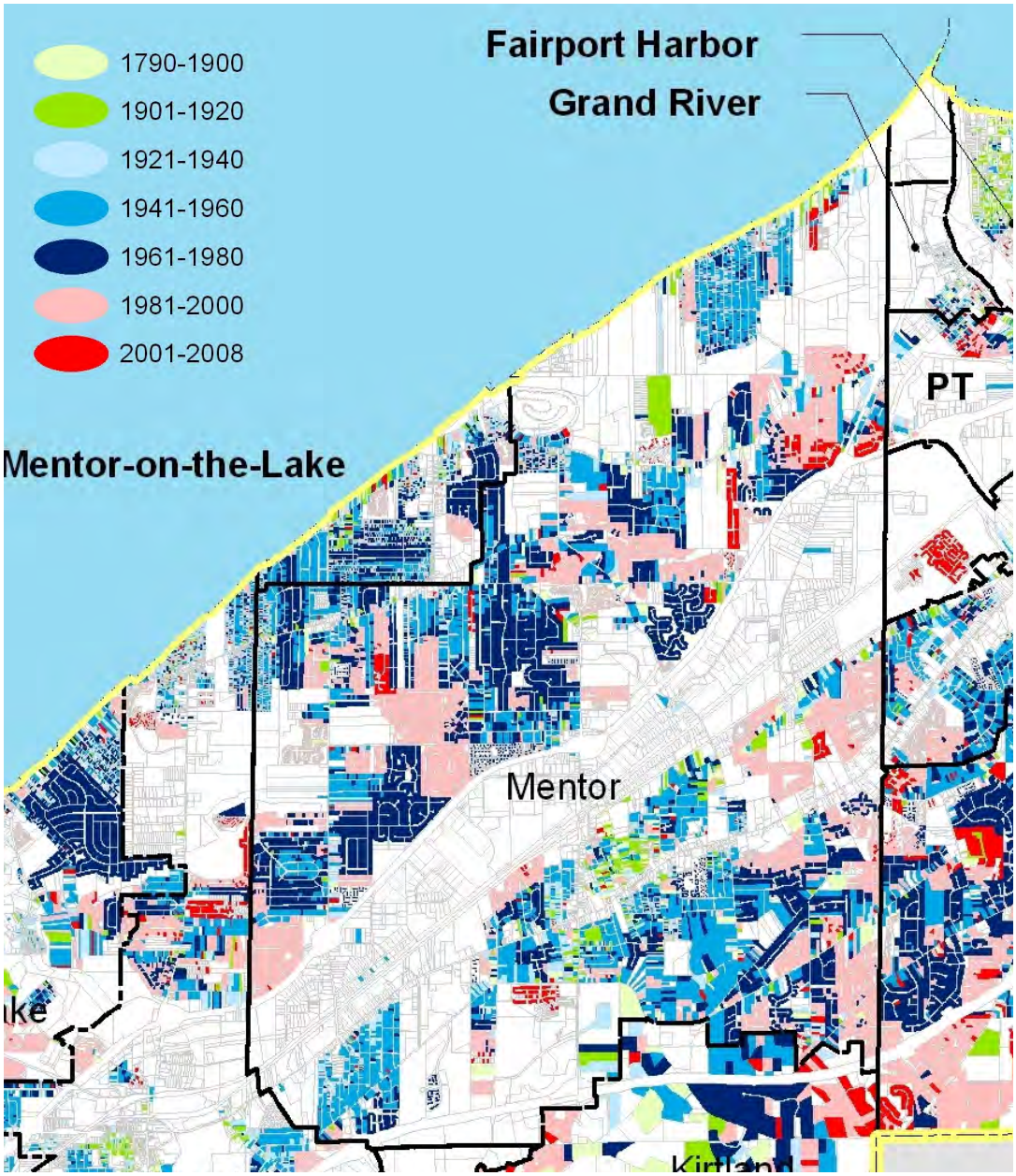
Table 6.3 Housing Units per decade, estimate 2007

	Mentor City			Lake County		
Decade built	***Number of units***	***Change # of Units***	***% Change***	***Number of units***	***Change # of Units***	***% Change***
1960	6,319			37,453		
1970	10,385	4,068	64.4%	47,100	9,647	25.89%
1980	14,123	3,738	36.0%	61,044	13,944	29.62%
1990	17,172	3,049	21.6%	84,658	23,614	38.68%
2000	19,301	2,129	12.4%	93,487	8,829	10.42%
2007	19,955	654	3.4%	98,049	4,562	4.88%

(US Census Bureau, 2007 Estimate)

Rates of growth and new construction have varied not only with time, but also from area to area within the City. Each census tract has grown at different rates and those rates have fluctuated with time (Table 6.3, Map 6.3). The most units built prior to 1939 were in tract 2034 (Map 6.1). As shown in the green shading on Map 6.3, this is the historic center of the center and was once Mentor Village.

Map 6.3: Year Structure Built, Lake County



Tract 2026 lead in having most housing starts from 1940 to 1959. Housing starts then shifted to tract 2028 during the 1960's and then to tract 2030 in the 1970's. Tract 2035 was the leader from 1980 to 1994. Housing shifted to tract 2027 in the last decade with developments along Lakeshore Blvd.

Tract 2026 has the highest percent of units built in the City prior to 1959. 10.75% of the 1,135 units built prior to 1939, 21.53% of the 808 units built between 1940 and 1949 and 20.65% of the 3,167 units built between 1950 and 1959 were built in census tract 2026. This is a development pattern typical of Post WWII bedrooms such as Wickliffe and Willowick.

Census Tract 2029 has developed over the years at a constant rate. It has had double digit percentages of no less than 13.19% and no more than 18.99% for 7 out of the 9 time periods listed. As of the 2000 Census, tract 2030 had the highest percentage of housing units in Mentor at 14.39% (Table 6.4).

Table 6.4 Percent of Units Built by Decade and by Census Tract

Mentor		Tract 2026	Tract 2027	Tract 2028	Tract 2029	Tract 2030	Tract 2031	Tract 2032	Tract 2033	Tract 2034	Tract 2035
Decade built	# of units	%	%	%	%	%	%	%	%	%	%
1999-2000	158	0.00%	47.47%	5.06%	18.99%	7.59%	0.00%	0.00%	11.39%	8.23%	1.27%
1995-98	890	4.83%	27.42%	12.58%	16.40%	15.96%	0.00%	2.58%	2.36%	1.24%	16.63%
1990-94	1,656	4.11%	9.12%	15.46%	20.59%	13.53%	0.54%	3.50%	2.78%	2.36%	28.02%
1980-89	3,510	3.22%	12.93%	10.14%	18.60%	13.87%	3.30%	4.56%	1.17%	4.30%	27.89%
1970-79	4,110	1.90%	12.09%	8.47%	9.15%	30.54%	0.15%	13.28%	2.41%	8.83%	13.19%
1960-69	3,867	9.44%	9.36%	27.41%	13.19%	9.03%	0.16%	9.96%	4.76%	9.08%	7.63%
1950-59	3,167	20.65%	5.21%	11.46%	15.88%	6.73%	0.66%	12.06%	5.75%	17.84%	3.76%
1940-49	808	21.53%	2.23%	7.30%	15.97%	3.59%	1.11%	14.60%	12.25%	15.72%	5.69%
Prior to 1939	1,135	10.75%	6.43%	5.99%	7.49%	5.81%	2.11%	9.25%	12.16%	33.13%	6.87%
Total	19,301	8.38%	10.56%	13.63%	14.37%	14.39%	0.99%	9.21%	4.29%	10.34%	13.85%

(US Census Bureau)

Mentor has had a huge impact on the housing stock of Lake County (Table 6.5). 20.65% of the housing built in Lake County is located in Mentor. Mentor has accounted for at least 10% of the new housing starts and it was averaging 25.74% from 1960 to 1999. It reached its peek during the time period of 1980 to 1989 when Mentor accounted for almost 34% of new housing starts.

Table 6.5 Percentage of Mentor Units Constructed by Decade

	Mentor	Lake County	Percent of Mentor
Decade built	# of units	# of units	Units
1999-2000	158	1,180	13.39%
1995-98	890	5,159	17.25%
1990-94	1,656	6,080	27.24%
1980-89	3,510	10,429	33.66%
1970-79	4,110	17,579	23.38%
1960-69	3,867	15,854	24.39%
1940-59	3,167	19,925	15.89%
1940-49	808	6,696	12.07%
Prior to 1939	1,135	10,585	10.72%
Total	19,301	93,487	20.65%

(US Census Bureau)

Housing Types

The housing stock in Mentor has been primarily single family since the incorporation of the City in the early 1960's. In 1960 approximately 97% of the homes in the area that would become Mentor City were single family. By 1970 the percentage of single family units had decreased to 85%.

In the 20 years after the 1970's, the composition of the housing did not change significantly. The percentage of single family homes in 1980 was approximately 80%. In 2000 Mentor's housing composition was as follows: 79.2% single family-detached, 7.8% single family-attached, 12.1% multi-family and 0.9% mobile home (Table 6.6, 6.7).

Table 6.6 Single-Family Units by Community

Community	*Number of single-family units*	*Percentage*
Mentor	**15,278**	**79.2%**
Concord Twp.	4,450	75.5%
Grand River	108	93.1%
Kirtland	2,216	86.6%
Kirtland Hills	237	97.5%
Mentor on the Lake	2,286	67.1%
Painesville Twp.	4,332	70.9%
Willoughby	5,353	50.0%
Lake County	68,094	72.8%
Cleveland PMSA	611,865	64.1%

(US Census Bureau)

Map 6.4: Single Family Construction

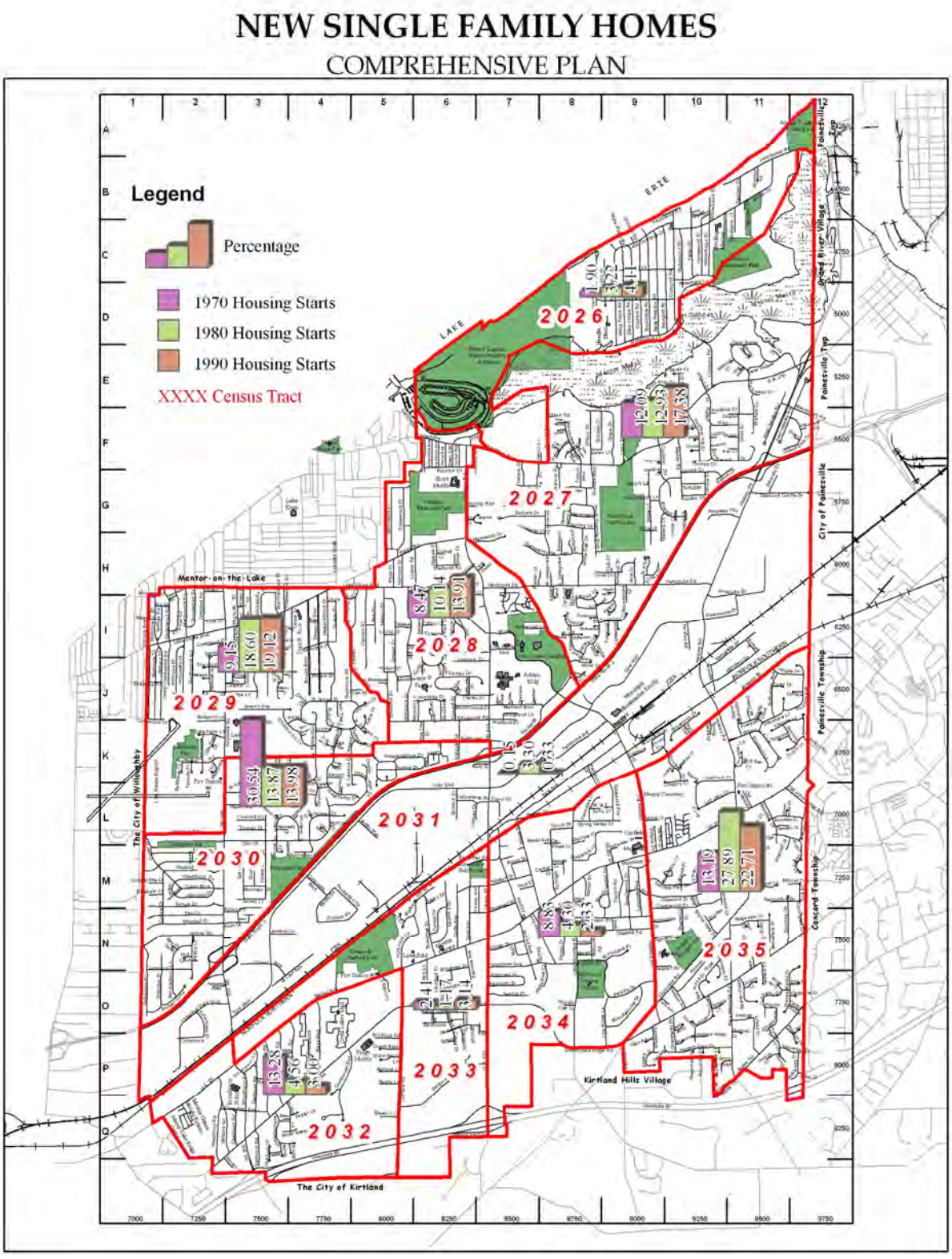


Table 6.7 Housing Unit Types

	Mentor City		Lake County		Cleveland PMSA	
Units in the Structure	Number of Units	Percentage	Number of Units	Percentage	Number of Units	Percentage
1 Unit, Detached	15,278	79.2%	68,094	72.8%	611,865	64.1%
1 Unit, Attached	1,505	7.8%	5,549	6.3%	52,285	5.5%
2 Units	112	0.6%	1,573	1.7%	70,934	7.4%
3 or 4 Units	513	2.7%	2,194	2.3%	33,702	3.5%
5 to 9 Units	447	2.3%	3,875	4.1%	37,657	3.9%
10 to 19 Units	531	2.8%	3,575	3.8%	41,359	4.3%
20 or more units	560	2.9%	5,999	6.4%	92,180	9.7%
Mobile Homes	355	0.9%	2,329	2.5%	14,996	1.6%
Boat, RV, van, Etc.	0	0.0%	9	0.0%	170	0.0%

(US Census Bureau)

It is unlikely that the composition of the housing stock will change substantially during the foreseeable future. A charter amendment adopted in 1977 requires a voter referendum on changes of zoning to the multi-family zoning district. There is very little undeveloped multi-family zoned land left within Mentor, and it is unlikely that any land would be rezoned to multi-family. This plan recommends multi-family zoning strategies strictly as part of mixed use development proposals.

Table 6.8 details housing types per tract. Census tract 2026 has the least amount of housing units, but it is predominately single family units. 98.9% of the units are single family units. Census tract 2032 has the second least amount of housing units, but unlike tract 2026, it is not dominated by single family units. 40.5% of the units are multi-family and 6.6% are mobile homes.

Table 6.8 Percent of Unit Types by Census Tract

Mentor		*Tract 2026*	*Tract 2027*	*Tract 2028*	*Tract 2029*	*Tract 2030*	*Tract 2031*	*Tract 2032*	*Tract 2033*	*Tract 2034*	*Tract 2035*
Unit Type	***%***	***%***	***%***	***%***	***%***	***%***	***%***	***%***	***%***	***%***	***%***
1 Unit, Detached	79.2%	98.9%	95.8%	76.3%	86.5%	73.6%	60.2%	46.7%	72.8%	68.9%	88.0%
1 Unit, Attached	7.8%	0.60%	2.90%	8.90%	10.7%	15.7%	39.8%	5.8%	0.70%	10.1%	3.10%
2 Units	0.60%	0.10%	0.30%	0.60%	0.00%	0.00%	0.00%	0.00%	1.00%	3.00%	0.80%
3 or 4 Units	2.70%	0.00%	0.10%	3.30%	0.30%	7.50%	0.00%	0.40%	3.00%	8.90%	0.00%
5 to 9 Units	2.30%	0.00%	0.80%	1.90%	0.30%	1.70%	0.00%	13.2%	2.20%	3.70%	0.00%
10 to 19 Units	2.80%	0.00%	0.10%	5.40%	0.00%	1.30%	0.00%	15.6%	2.20%	2.70%	0.00%
20 or more units	2.90%	0.04%	0.00%	3.50%	1.80%	0.00%	0.00%	11.7%	18.10 %	2.80%	0.00%
Mobile Homes	0.90%	0.00%	0.00%	0.30%	0.40%	0.30%	0.00%	6.60%	0.00%	0.00%	8.00%
Boat, RV, van, Etc.	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total units in City	19,301	8.38%	10.56%	13.63%	14.37%	14.39%	0.99%	9.21%	4.29%	10.34%	13.85%

(US Census Bureau)

Table 6.9 notes the percentage of housing types per census tract in relation to the City's entire housing stock. 15,278 single family units (1 unit, detached) are evenly spread out through out census tracts 2026, 2027, 2028, 2029, 2030 and 2035. Tracts 2029 and 2035 have the most single family units while tracts 2032 and 2033 have the least.

There are 2,163 multi-family units in the City of Mentor with most of those units located in census tract 2032. Census tract 2032 has over 50% of 5 to 19 unit buildings and 37.14% of the units that are located in buildings that have twenty or more units together. The proximity to employment, public transportation and shopping make tract 2032 a suitable location for multi-family development.

The majority of the mobile homes are located in census tract 2035 (60.28%) and census tract 2032. Census tract 2031, which is located between SR 2 and the railroad tracts, has the least amount of housing units. This tract is located on land that has been zoned industrial. The limited amount of housing that existed in this tract has been slowly converted into commercial, industrial or office uses or been removed. This trend will continue into the foreseeable future.

Table 6.9 Percent of Unit Types by Census Tract Relative to Entire City

Mentor Unit Type	# of units	Tract 2026 %	Tract 2027 %	Tract 2028 %	Tract 2029 %	Tract 2030 %	Tract 2031 %	Tract 2032 %	Tract 2033 %	Tract 2034 %	Tract 2035 %
1 Unit, Detached	15,278	10.46%	12.79%	13.13%	15.71%	13.38%	0.75%	5.43%	3.95%	9.00%	15.40%
1 Unit, Attached	1,505	0.66%	3.92%	15.48%	19.67%	28.97%	5.05%	6.84%	0.40%	13.42%	5.58%
2 Units	112	1.79%	5.36%	13.39%	0.00%	0.00%	0.00%	0.00%	7.14%	52.68%	19.64%
3 or 4 Units	513	0.00%	0.39%	16.76%	1.75%	40.35%	0.00%	1.36%	4.87%	34.50%	0.00%
5 to 9 Units	447	0.00%	3.58%	11.19%	2.01%	10.29%	0.00%	52.35%	4.03%	16.55%	0.00%
10 to 19 Units	531	0.00%	0.38%	26.74%	0.00%	6.97%	0.00%	52.35%	3.39%	10.17%	0.00%
20 or more units	560	1.25%	0.00%	16.25%	8.75%	0.00%	0.00%	37.14%	26.79%	9.82%	0.00%
Mobile Homes	355	0.00%	0.00%	1.97%	2.82%	1.97%	0.00%	32.96%	0.00%	0.00%	60.28%
Boat, RV, van, Etc.	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total	19,301	8.38%	10.56%	13.63%	14.37%	14.39%	0.99%	9.21%	4.29%	10.34%	13.85%

(US Census Bureau)

Housing Size

The decennial Census does not collect data for house square footage. Instead, the Census looks at rooms (living rooms, family rooms, bedrooms, kitchens, dining rooms, but not "three season rooms", bathrooms or closets). Table 6.10 provides a comprehensive comparison of rooms per unit for Mentor and surrounding communities.

Table 6.10 Rooms per unit

Community	1-3 rooms		4 rooms		5 rooms		6 rooms		7 rooms		8 rooms		9+ rooms		Med rooms
	Units	%	Units	%	Units	%	Units	%	Units	%	Units	%	Units	%	
Mentor	535	2.8%	1,473	7.6%	3,059	15.8%	4,152	21.5%	3,920	20.3%	3,605	18.7%	2,557	13.2%	6.6
Concord Township	17	0.3%	331	5.6%	654	11.1%	1,090	18.5%	1,089	18.5%	1,276	21.6%	1,439	24.4%	7.4
Grand River Village	4	3.4%	18	15.5%	16	13.8%	28	24.1%	16	13.8%	25	21.6%	9	7.8%	6.3
Kirtland	125	4.9%	197	7.7%	236	9.2%	444	17.4%	514	20.1%	467	18.3%	575	22.5%	7.0
Kirtland Hills Village	4	1.6%	4	1.6%	8	3.3%	32	13.2%	26	10.7%	45	18.5%	124	51.0%	8.4
Mentor-on-the-Lake	382	11.2%	438	12.9%	795	23.3%	828	24.3%	542	15.9%	281	8.3%	139	4.1%	5.6
Painesville Township	519	6.7%	1,027	13.2%	1,465	18.8%	1,959	25.2%	1,448	18.6%	807	10.4%	551	7.1%	6.0
Willoughby	1,394	13.0%	2,004	18.7%	2,325	21.7%	2,153	20.1%	1,332	12.4%	866	8.1%	634	5.9%	5.5
Lake County	6,857	7.3%	10,660	11.4%	18,369	19.6%	21,000	22.5%	15,876	17.0%	11,430	12.2%	9,295	9.9%	6.1

For each unit, rooms include living rooms, dining rooms, kitchens, bedrooms, finished recreation rooms, enclosed porches suitable for year-round use, and lodgers' rooms. Excluded is strip or pullman kitchens, bathrooms, open porches, balconies, halls or foyers, half-rooms, utility rooms, unfinished attics or basements, or other unfinished space used for storage. A partially divided room is a separate room only if there is a partition from floor to ceiling, but not if the partition consists solely of shelves or cabinets.
Census data may vary from Lake County Planning Commission data
(US Census)

Table 6.11 notes the median number of rooms of 6.6 rooms in Mentor. This is above the median number of rooms in Lake County, which is 6.1 rooms and the Cleveland PMSA, which is 5.8 rooms.

The neighboring communities with the largest dwelling sizes, based on rooms per unit, include Kirtland Hills Village (8.4 rooms), Concord Township (7.4), and Kirtland (7.0) (Table 6.10)

The neighboring communities with the lowest median rooms per dwelling include Willoughby (5.5), Mentor on the Lake (5.6) and Painesville Township. These three communities are below the Lake County Median Number of 6.1 rooms. Willoughby (5.5) and Mentor-on-the-Lake (5.6) are communities with a large number of apartments or pre-World War II housing stock. Median rooms per dwelling in Grand River (6.3) is slightly lower than Mentor and slightly above the county median (6.1)

While the median number of rooms in Mentor is 6.6, not all of the census tracts in the city meet or exceed the median (Table 6.12). Six out ten census tracts are below median number of rooms. Two of the tracts do not meet or exceed the median number of rooms for the county (6.1) or the Cleveland PMSA (5.8). Tract 2026, whose median number of rooms is 5.8, has the largest amount of homes built prior to 1960 and tract 2032, whose median number of rooms is 5.2, has a low percentage of single family units and has various other types of housing units such as apartments, attached condominiums and mobile homes.

Table 6.11 Median Number of Rooms

Community	*Median Number of Rooms*
Mentor	**6.6**
Concord Twp.	7.4
Grand River	6.3
Kirtland	7.0
Kirtland Hills	8.4
Mentor on the Lake	5.6
Painesville Twp.	6.0
Willoughby	5.5
Lake County	6.0
Cleveland PMSA	5.8

(US Census Bureau)

Table 6.12 Median Number of Rooms by Census Tract

Census tract	*Median Number of Rooms*
2026	5.8
2027	7.6
2028	6.3
2029	6.7
2030	6.9
2031	6.3
2032	5.2
2033	6.3
2034	6.2
2035	7.5
Entire City	6.6

(US Census Bureau)

Even as household sizes shrunk, the number of bedrooms in a dwelling rose. In 1980, 65.5% of all dwellings in the county had three or more bedrooms; in 2000, 69.6% had three or more bedrooms (Table 6.13) Between 1980 and 2000, the number of homes in the county with three bedrooms rose by 23.8%, those with four bedrooms by 57.2%, and those with five or more bedrooms by 64.6%,

Table 6.13 Number of bedrooms

Community	No bedrooms		1 bedroom		2 bedrooms		3 bedrooms		4 bedrooms		5+ bedrooms		Median
	Units	%	Units	%	Units	%	Units	%	Units	%	Units	%	BRs
Mentor	**43**	**0.2%**	**487**	**2.5%**	**3,276**	**17.0%**	**9,791**	**50.7%**	**5,067**	**26.3%**	**637**	**3.3%**	**3.1**
Concord Township	0	0.0%	17	0.3%	876	14.9%	2,529	42.9%	2,149	36.4%	325	5.5%	3.3
Grand River Village	0	0.0%	9	7.8%	25	21.6%	48	41.4%	26	22.4%	8	6.9%	3.0
Kirtland	17	0.7%	158	6.2%	313	12.2%	1,125	44.0%	795	31.1%	150	5.9%	3.2
Kirtland Hills Village	0	0.0%	2	0.8%	16	6.6%	86	35.4%	88	36.2%	51	21.0%	3.7
Mentor-on-the-Lake	41	1.2%	377	11.1%	928	27.3%	1,684	49.5%	370	10.9%	5	0.1%	2.6
Painesville Township	48	0.6%	551	7.1%	1,952	25.1%	3,793	48.8%	1,256	16.2%	176	2.3%	2.8
Willoughby	127	1.2%	1,502	14.0%	3,616	33.8%	4,040	37.7%	1,223	11.4%	200	1.9%	2.5
Lake County	775	0.8%	6,913	7.4%	20,708	22.2%	44,626	47.7%	17,877	19.1%	2,588	2.8%	2.9

(US Census)

Mentor, which has 3.1 median number of bedrooms, is above the county median number of bedrooms, which is 2.9 (Table 6.13). Communities with dwellings that have more bedrooms than Mentor include Kirtland Hills Village (3.7 bedrooms), Kirtland (3.2) and Concord Township (3.3).

Communities lower than Mentor and Lake County in amount of median bedrooms per unit include Painesville Township (2.8 bedrooms), Willoughby (2.5), and Mentor-on-the-Lake (2.6). Grand River, with 3.0 median bedrooms, is lower than Mentor, but higher than Lake County.

Housing Value

US Census statistics, as used in this element, tend to underestimate the price of real estate in a community. Respondents may be unaware of market conditions affecting the value of their property, or may state the value of their property as the original list price from years ago.

Table 6.14 Median Home Values

Community	1990 Median Home Value	2000 Median Home Value	Δ% 1990-2000
Mentor	**$89,500**	**$144,100**	**+61%**
Concord Twp.	$112,200	$179,600	+60%
Grand River	$72,000	$119,300	+66%
Kirtland	$113,200	$204,100	+80%
Kirtland Hills	$252,900	$389,300	+54%
Mentor on the Lake	$66,600	$115,600	+74%
Painesville Twp.	$73,584	$127,778	+74%
Willoughby	$72,700	$114,300	+77%
Lake County	$73,900	$127,900	+73%

(US Census Bureau)

The estimated median value of a house in Lake County is $144,100 (Table 6.14). In 2006, the value increased to $177,00 (Crain's Business 11-19-2006).

The most expensive housing near Mentor is found south of Interstate 90, in the wealthy estate communities of Kirtland Hills, affluent Kirtland and Concord Township. Home values in the other neighboring communities are below the median value of Mentor. Mentor and most of its neighboring communities have experienced at least 60% increase in the median home values between 1990 Census and Census 2000. Kirtland Hills is the only exception. Its $136,400 increase only accounted for a change of 54%.

Table 6.15 shows that only four of the ten census tracts are above the median home value of $144,100, but nine out of ten census tracts are above the county median home value of $127,900. Most of the below median home value tracts are between 91% and 99% of the median home value of the city. Only census tract 2026, at 66% of the Mentor City median home value, is significantly below the city median home value. In fact, it only increased by 7.5% since the 1990 census of median home values in the City of Mentor.

Table 6.15 Median Home Value by Census Tract

Census tract	*Median Home Value*
2026	$96,200
2027	$176,500
2028	$136,800
2029	$130,900
2030	$151,000
2031	$143,300
2032	$135,400
2033	$157,200
2034	$141,200
2035	$188,100
Entire City	$144,100

(US Census Bureau)

6.3 CONSTRUCTION, DEMANDS AND TRENDS

Vacant Land

Continued development has reduced the amount of vacant land in the city. According to the 1967 Comprehensive Plan, 62.8% of all land within the city was vacant. By 1972 the amount of vacant developable land had decreased to 42.9% or a 20% decline. In 1990, vacant land accounted for just 25.6% of all the land in the city. The majority of vacant land in the city is residentially zoned (14% residential, 3.4% commercial, 8.2% industrial). The 1960's saw the greatest reduction in the amount of vacant land and the largest increase in the number of housing units. In 1990 approximately 55% of all vacant land was residentially zoned. This represents more than 2,400 acres of land or almost 14% of all the land in the City. In 1994, a Mentor Community Development study found that available residential land had been further reduced to about 2,000 acres, 11.67% of all the land in the City.

In 2007, there was approximately 1,626.84 acres of vacant land in residentially zones areas. If necessary, local leaders may need to examine the amount of commercially zoned property and judge its value in relationship to rezoning the land to residential to continue to attract people to Mentor.

Buildout of Vacant Land

The projection of the number of new housing units is based on the continued desirability of Mentor as a place to live and raise a family. It is also based on the assumption that economic conditions will improve through 2009 (and beyond) and encouraging for new construction. While yearly economic fluctuation will influence the number of new units built each year, the general trend should be toward continued development, but at a slower pace than the previous decades. It is also assumed that no significant amount of land zoned commercial or industrial is rezoned residential, or that residentially zoned is rezoned to a higher density than three units per acre. Future rezonings to residential uses shall require open space preservation within the development site. Using the R-4 minimum lot size (22,000 sq.ft), this plan estimates approximately 2,500 single family homes can be built on the remaining vacant residentially zoned land before reaching build out.

Mentor will continue to grow and develop as a predominantly single family community. Similar to Newell Creek, future residential developments may include various types of dwelling units; single family, multi-family and senior living. This plan encourages various

styles of homes to provide a wide array of choices for college graduates, empty nesters, and those in need of assisted living.

The limited availability of land zoned for multi-family development and the required referendum for multi-family rezoning would appear to insure that trend. Mentor will continue to grow because it is a desirable place to live. Families move into Mentor to take advantage of one of the premier school systems in the state, outstanding park facilities and numerous recreation programs. They are also attracted by the low crime rate, excellent fire and emergency medical services, the generally high quality of city services, and the convenience of extensive retail facilities. Another attraction to the City of Mentor is the Lake County MRDD Board's Deepwood Facility and Deepwood Industries. These are residential and life skills centers for people with developmental disabilities. Many people with dependents with developmental disabilities like to live close by these services.

Housing Density

Each census tract in Mentor has added new units to their housing inventory since 1970. The number of housing units per acre has increased by 85.85% between 1970 Census and Census 2000 (Table 6.17). In 1970, there was just over half of a housing unit (0.58) per acre. By 2000, there were 1.07 housing units per acre. This is a result of an increase in condominium and cluster developments in the 1980s and 1990s.

Census tract 2030 and 2035 have seen the greatest amount of change over the past 30 years. Census tract 2030 had 0.47 of housing unit per acre in 1970 and it increased to 2.17 units per acre, which is 357.71% increase. Census tract 2035 had a similar experience going from 0.40 units per acre to 1.24 units per acre. The smallest percentage was for census tract 2033, which added 10.04% (Table 6.16).

Table 6.16 Percent in change in the number of housing units per acre, 1970-2000

Census tract	△% 1970-2000
2026	25.54%
2027	157.12%
2028	51.50%
2029	111.36%
2030	357.71%
2031	24.55%
2032	44.11%
2033	10.04%
2034	22.00%
2035	210.45%
Entire City	85.85%

(US Census Bureau)

Table 6.17 Housing Units and Density per Tract, 1970-2000

	Housing Units				Acres	Square Miles	Units per Acre			
Tract	*1970*	*1980*	*1990*	*2000*			*1970*	*1980*	*1990*	*2000*
2026	1,288	1,326	1,391	1,617	1,387.16	2.17	0.93	0.96	1.00	1.17
2027	793	1,355	1,766	2,039	2,966.13	4.63	0.27	0.46	0.60	0.69
2028	1,736	2,456	2,803	2,630	1,582.01	2.47	1.10	1.55	1.77	1.66
2029	1,312	1,750	2,401	2,773	1,555.89	2.43	0.84	1.12	1.54	1.78
2030	603	1,500	1,926	2,760	1,272.65	1.99	0.47	1.18	1.51	2.17
2031	167	124	217	208	3,165.58	4.95	0.05	0.04	0.07	0.07
2032	1,222	1,627	1,718	1,761	1,267.23	1.98	0.96	1.28	1.36	1.39
2033	767	771	806	844	1,143.39	1.79	0.67	0.67	0.70	0.74
2034	1,636	1,889	1,928	1,996	1,525.08	2.38	1.07	1.24	1.26	1.31
2035	861	1,325	2,216	2,673	2,159.76	3.37	0.40	0.61	1.03	1.24
Entire City	10,385	14,123	17,172	19,301	18,024.87	28.16	0.58	0.78	0.95	1.07
Lake County	57,485	75,167	83,194	93,487						

(US Census Bureau)

Population Density

The overall population density of Mentor has increased from 2.06 persons per acre in 1970 to 2.81 persons in 2000 (Table 6.18, 6.19). In 2000, tracts 2029 and 2030 had the highest density with approximately 5.5 persons per acre. Excluding tract 2031 (Tyler Blvd.), tracts 2033 and 2027 have the lowest population densities.

While the City has added new housing units and increased the housing unit density by 85%, the population density has increased by only 36% indicative of a 1980's large lot suburban type development pattern and a decrease in household and family sizes (Table 6.19).

Furthermore, Table 6.16 indicates four census tracts that increased the amount of housing units by greater than 100%, but there are only two that have exceeded 100% increases in population density (Table6.18). Even with population growth, four tracts have even seen the population density per acre decrease since 1970.

Table 6.18 Percent change in population density per acre, 1970-2000

Census tract	△% 1970-2000
2026	-18.64%
2027	85.71%
2028	6.91%
2029	46.07%
2030	212.30%
2031	-15.79%
2032	3.37%
2033	-7.88%
2034	-14.58%
2035	174.22%
Entire City	36.41%

(US Census Bureau)

Table 6.19 Population and density per tract, 1970-2000

Tract	Population				Acres	Sq. Miles	Persons per Acre			
	1970	*1980*	*1990*	*2000*			*1970*	*1980*	*1990*	*2000*
2026	5,321	4,377	4,097	4,328	1,387.16	2.17	4.13	3.40	3.18	3.36
2027	3,119	4,665	5,525	5,784	2,966.13	4.63	1.05	1.57	1.86	1.95
2028	6,282	7,277	7,479	6,726	1,582.01	2.47	3.62	4.19	4.31	3.87
2029	5,007	5,474	6,807	7,319	1,555.89	2.43	3.82	4.17	5.19	5.58
2030	2,380	5,013	5,868	7,433	1,272.65	1.99	1.87	3.94	4.61	5.84
2031	600	345	473	510	3,165.58	4.95	0.19	0.11	0.15	0.16
2032	3,633	3,884	3,777	3,756	1,267.23	1.98	2.97	3.18	3.09	3.07
2033	2,319	2,070	1,972	2,136	1,143.39	1.79	2.03	1.81	1.72	1.87
2034	5,492	5,131	4,874	4,702	1,525.08	2.38	3.36	3.14	2.98	2.87
2035	2,759	3,829	6,486	7,584	2,159.76	3.37	1.28	1.77	3.00	3.51
Entire City	36,912	42,065	47,358	50,278	18,024.87	28.16	2.06	2.35	2.65	2.81
Lake County	197,200	212,801	215,499	227,511	147,840.00	231	1.33	1.44	1.46	1.54

(US Census Bureau)

6.4 OWNERSHIP AND RENTAL TRENDS

Value Rents

To rent a home or apartment in the City of Mentor, the median cost would be $700 per month (Table 6.20). This cost is the second highest amongst its neighbors with only Concord Township being slightly higher at $707 per month. The median rent in Mentor is also $77 higher than the median rent value in Lake County.

Table 6.20 Median Rent Values Census 2000

Community	*2000 Median Rent*
Mentor	$700
Concord Twp.	$707
Grand River	$634
Kirtland	$621
Kirtland Hills	$575
Mentor on the Lake	$657
Painesville Twp.	$603
Willoughby	$656
Lake County	$623

(US Census Bureau)

Table 6.21 Median Rent Value by Census Tract Census 2000

Census tract	*Median Rent Value*
2026	$724
2027	$754
2028	$735
2029	$824
2030	$810
2031	$530
2032	$667
2033	$595
2034	$657
2035	$461
Entire City	$700

(US Census Bureau)

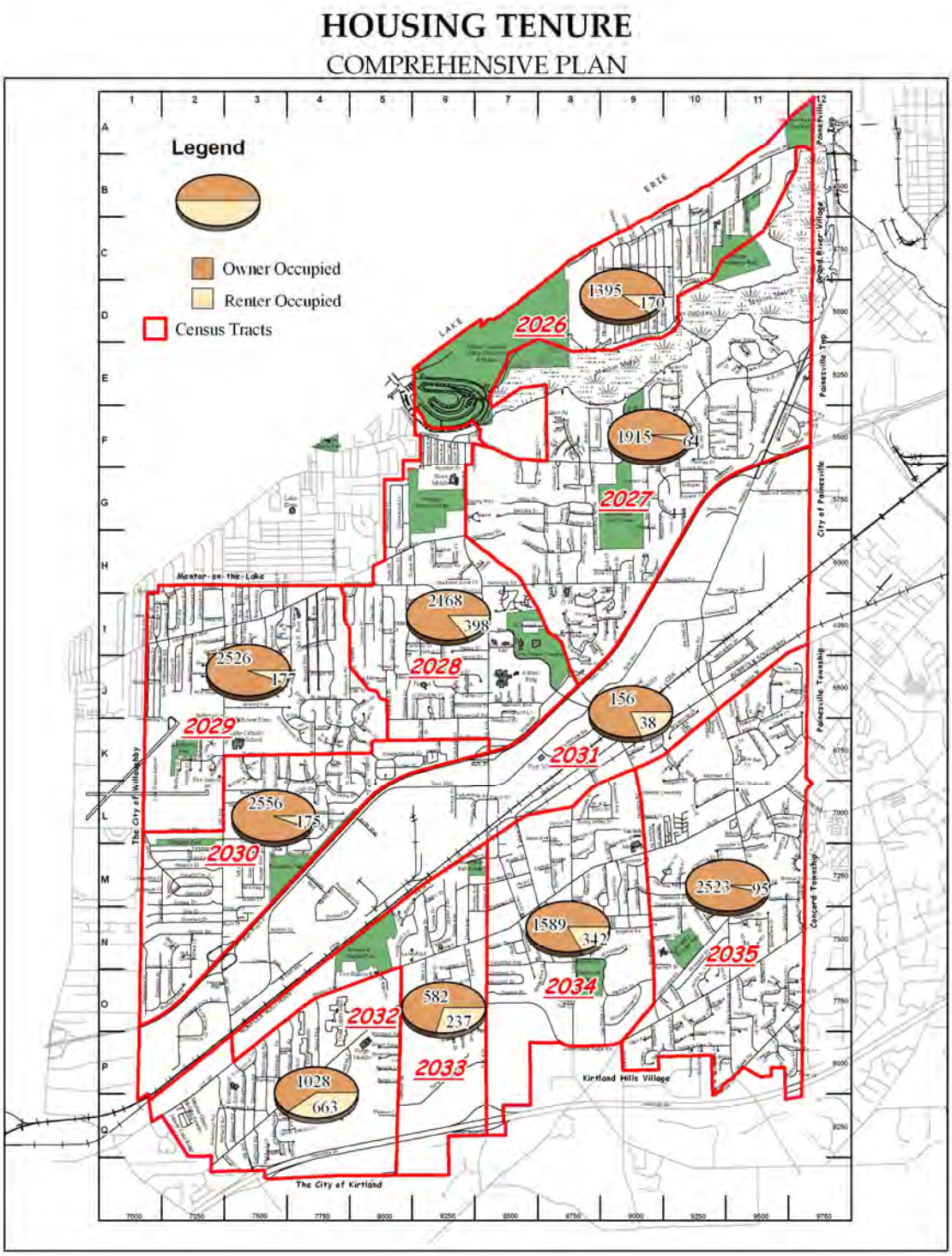
While the median rental value is higher than most of its neighbors and higher than Lake County's median rental value, there are census tracts that are below the neighboring communities and below the median rental value of Lake County (Table 6.21). Census tract 2035 is 65% of the median rent value and census tract 2033 is 85% of the rental value. Census tract 2031 is also showing lower value, but there is a limited amount of housing in this tract, so the numbers may be distorted.

Tenure

In 2000, approximately 12.2% of the housing units in the city were rented. This rate was lower than the 1990 rate which was approximately 15.5% of the housing units and lower than the 1980 figure of 14.6%. This compares favorably with Lake County's rate of 32.3%. Mentor's rate is also low when compared with the national average for similar sized cities.

Map 6.5 shows the range in tenure in different areas of the city. Tracts 2032, 2033 and 2034 yield the highest proportion of renter occupied units. This is a direct and standard correlation to the apartments, condominiums and mobile home parks located on Mentor Avenue. Owner occupied units are a high proportion of the total units in the remaining tracts indicating a stable to strong residential community.

Map 6.5: Housing Tenure



Vacancy Rate

The housing vacancy rate in Mentor was 2.6% according to the Census 2000 (Table 6.22) and 4.9% according to the 2005-2007 American Community Survey.

Table 6.22 Housing Units and Vacancy Rates

Community	*Occupied units*		*Vacant units*	
	Units	*Percentage*	*Units*	*Percentage*
Mentor	18,797	97.4%	504	2.6%
Concord Twp.	5,722	97.0%	174	3.0%
Grand River	112	96.6%	4	3.4%
Kirtland	2,446	95.6%	112	4.4%
Kirtland Hills	224	92.2%	19	7.8%
Mentor on the Lake	3,304	97.0%	101	3.0%
Painesville Twp.	5,890	96.3%	224	3.7%
Willoughby	10,272	95.9%	436	4.1%
Lake County	89,700	95.9%	3,787	4.1%

(US Census Bureau)

Typically a rate less than 5% indicates a very strong housing market and is considered desirable. There will always be some vacant houses attributed to sales and general turn over in the market. In the past 25 years, the City of Mentor has experienced a 2 to 3% vacancy rate. A rate this low indicates vacant houses are almost nonexistent. It also indicates a trend toward higher rents and housing prices as a result of unmet demand.

The economic climate in Ohio has impacted homeownership dramatically. From 2004-2008, Ohio has experienced a 45% increase in foreclosures. During this same time, Lake County experienced a 75% increase (Ohio Supreme Court filings).

According to the Coalition on Homelessness and Housing in Ohio, Ohio is near the top of list in the amount of foreclosure filings in nation. Currently, 1.91% of the owner occupied households in Ohio are affected by a foreclosure. Lake County is below the state average with a percentage of 1.64% and it is also below Cuyahoga County, 3.77% and Ashtabula County, 2.48%, but it is higher than Geauga County, 1.14%. While Lake County has a 1.64% household affected rate, Mentor has faired even better in this crisis. Their household affected rate is 0.42%. This is four times less than the county rate.

6.5 HOUSING GOALS

GOAL 1

"MAINTAIN THE QUALITY OF THE EXISTING HOUSING STOCK."

A. Maintain existing housing stock by increasing the oversight of the existing stock and maintaining standards and codes that are consistent with the housing stock profile and technological advances in construction materials and methods.

B. Provide avenues of access to information and services for home maintenance and repair needs of residents.

C. Continue the practice of the Single Family and Multi-family Rental Inspection program.

D. Consider the implementation of a "point of sale inspection" to maintain quality of housing stock.

E. Consider a comprehensive pedestrian access plan. This includes a sidewalk analysis and expanded bikeway/trail plan.

Chapter 7

Recreation and Public Facilities

7.1 INTRODUCTION

Historic areas, parks and recreational areas are increasingly important in today's environment. The park and recreational areas, public and private, active and passive, in Mentor are of the highest quality. With nearly 3.6 miles of Lake Erie shore (approximately 1.4 miles public accessible), Mentor has numerous amenities to offer, with the lake views alone attracting residents and visitor from the region. Mentor is also home to unique resources such as Lawnfield, Civic Ice Arena, Mentor Lagoons, and Headlands Beach State Park (portion).

According to the 2007 land use survey, approximately 1,200 acres of parks and recreational areas exist in Mentor (Table 7.1, Map 7.1). Additional recreation land is located on land owned by the Mentor School District (Table 7.20). While Mentor's population has been growing at slow to moderate rate, land consumption to serve new residents is growing at an unproportional rate, thus increasing the need to preserve prime natural areas.

History is also a major component in Mentor's quality of life. Mentor has a variety of historical sites, notably the home of a former United States president, James A. Garfield. Levels of recognition include century homes indentified by the Lake County Historical Society and eight sites listed on the National Register of Historic Places. Approximately 120 historic structures areas and sites have been identified in this plan.

This chapter will discuss the public facilities, parks, historic resources and safety forces that exist in the City of Mentor. The intent of the Public Facilities element is to ensure that schools, parks, public safety facilities, community centers, and other government-provided amenities continue to meet, if not exceed, the needs of city residents and visitors. These amenities should contribute positively to enhancing the overall quality of life of the city.

7.2 PARKS AND OPEN SPACE

The City of Mentor owns or operates 21 parks with a total of 1,199 acres (Table 7.1, Map 7.1). When combined with Mentor Marsh area, Lake Metroparks holdings (or other conservation based organizations), or property owned by the school district, which serves as valuable regional and neighborhood open space, the total open space acreage increases to over 2,300 acres.

The standard derived from early studies of park acreages located within urban areas was the expression of acres of parkland per person. Over time, six to ten acres of developed parkland per 1,000 residents – mini-parks and tot lots, neighborhood parks, and community parks, not nature preserves, undeveloped parks, school grounds, private open space or school grounds – came to be the accepted standard recommended by the National Parks and Recreation Association. This ratio is used by a majority of communities in the United States.

Using this guideline of 10 acres per 1,000 residents, the City of Mentor should have about 600 acres of *developed* parkland by the plan year 2020. According to Table 7.1, approximately 420 acres of developed parkland exist, representing a deficiency of about 180 acres. Acquiring additional acreage may not be necessary as the existing parks have acreage to expand recreational activities as necessary. Furthermore, this deficiency may be lower due to the acquisition of the Morton Salt property.

Table 7.1 City Parks and Open Space

Park	Location	Acres	Dev.	Undev
Bellflower Park	7271 Bellflower Rd.	22.29	22.00	0.29
Bellflower Skate Park	6655 Reynolds Rd.	0.50	0.50	
Center St. Ballfield/Sledding Hill	8350 Carpenter Dr.	8.95	8.95	
Civic Center Park	8500 Civic Center Blvd.	107.06	53.53	53.53
Dog Park (leased from CEI)	6645 Hopkins Rd.	3.00	3.00	
Eleanor B. Garfield Park	7967 Mentor Ave.	60.70	40.00	20.70
Hodgson Park	Hodgson Rd. & Rt. 306	14.09		14.09
Krueger Park	7556 Chillicothe Rd.	29.18	6.00	23.18
Mentor Beach Park	7779 Lakeshore Blvd.	13.30	10.60	2.70
Mentor Lagoons Nature Preserve and Marina	8365 Harbor Dr.	450.00	150.0	300.0
Mentor Municipal Cemetery	6881 Hopkins Rd.	58.88	30.00	28.88
Morton Park (4 acres leased from Mentor Public Schools)	9325 Rosemary Ln.	13.30	10.60	2.70
Presidents Park	Ohio St. & Rt. 306	41.62	30.00	11.62
Ridge Roller Hockey (leased from Mentor Schools)	7860 Johnnycake Ridge Rd.	0.55	0.55	
Rose Garden	8537 Mentor Ave.	1.00	1.00	
Tiefenbach Park	Lake Overlook & Cordury Rd.	1.54	0.55	0.99
Veterans Park (leased to Lake Metroparks)	5740 Hopkins Rd.	82.79	41.39	41.39
Wildwood Cultural Center	7645 Little Mountain Rd.	34.50	4.00	30.50
Black Brook Golf Course	8900 Lakeshore Blvd.	150.00		
Black Brook Golf Course Annex Property	8862 Lakeshore Blvd.	7.07		
Morton Salt Property	Jordan Dr.	99.57		
Source: City of Mentor, 2009	**TOTAL ACREAGE**	***1,199.89***		

Using the standards set forth in Tables 7.2 and7.3, the city has adequate park facilities for the population by combining the city, school board, and Lake Metropark owned areas. Using city facilities alone, Mentor has deficiency in the amount of the smaller mini parks and neighborhood/community parks and an adequate amount of larger regional/community parks in the recommended amount of parkland for a community. The 1997 plan recognized this deficiency and noted the school areas should fullfil the role of neighborhood parks.

Table 7.2 Classification and minimum park area requirements

Park type	*Area/1,000 residents*	*Size of park*	*Service radius*	*Notes*
Mini park Designed to provide recreational opportunities for a small area in a neighborhood. Typically designed for young children, however in some cases it may be designed for aesthetic purposes.	1 ac	0.5 to 1 ac	0.25 to 0.5 mi	Mentor has 2 mini parks.
Neighborhood park Designed to serve recreational needs of children 6-15 years of age, as well as adults, pre-schoolers, and seniors. Typically includes family picnic areas, unlighted open turf areas for informal sports, and play equipment. Lighted athletic fields would not be included.	3 ac	2 to 14 ac	0.25 to 0.75 mi	Mentor has 5 neighborhood parks.
Community park Designed to serve a wide variety of needs for youths and adults in both active and passive recreation. Facilities for sports fields (lighted when appropriate), open turf areas, playgrounds, picnic areas, and off-street parking. Should include restrooms and related facilities. May include a community center. Components of neighborhood parks and mini-parks should be included in the community park.	6 ac	12 to 50 ac	1 to 2 mi	Mentor has 5 community parks.
Regional park Open space areas characterized by significant natural resources that provide passive recreation for nearby residents and the surrounding metropolitan area. Small portions of a regional park might be allocated to fulfill neighborhood park requirements.	15 ac	100 ac	Mentor, central Lake County	Mentor has 3 regional parks
Conservancy /open space area Land kept mostly in its natural state. Used to preserve natural areas such as riparian zones, bluffs, wetlands and other lands of recreational and scenic interest. May also include areas devoted to preservation of historic or cultural resources. Could include smaller portions of the area needed to satisfy local neighborhood recreational needs.	n/a	Sufficient to provide or preserve the resource	Northeast Ohio	Mentor Lagoons Nature Preserve and Marina, Mentor Marsh, Headlands State Park

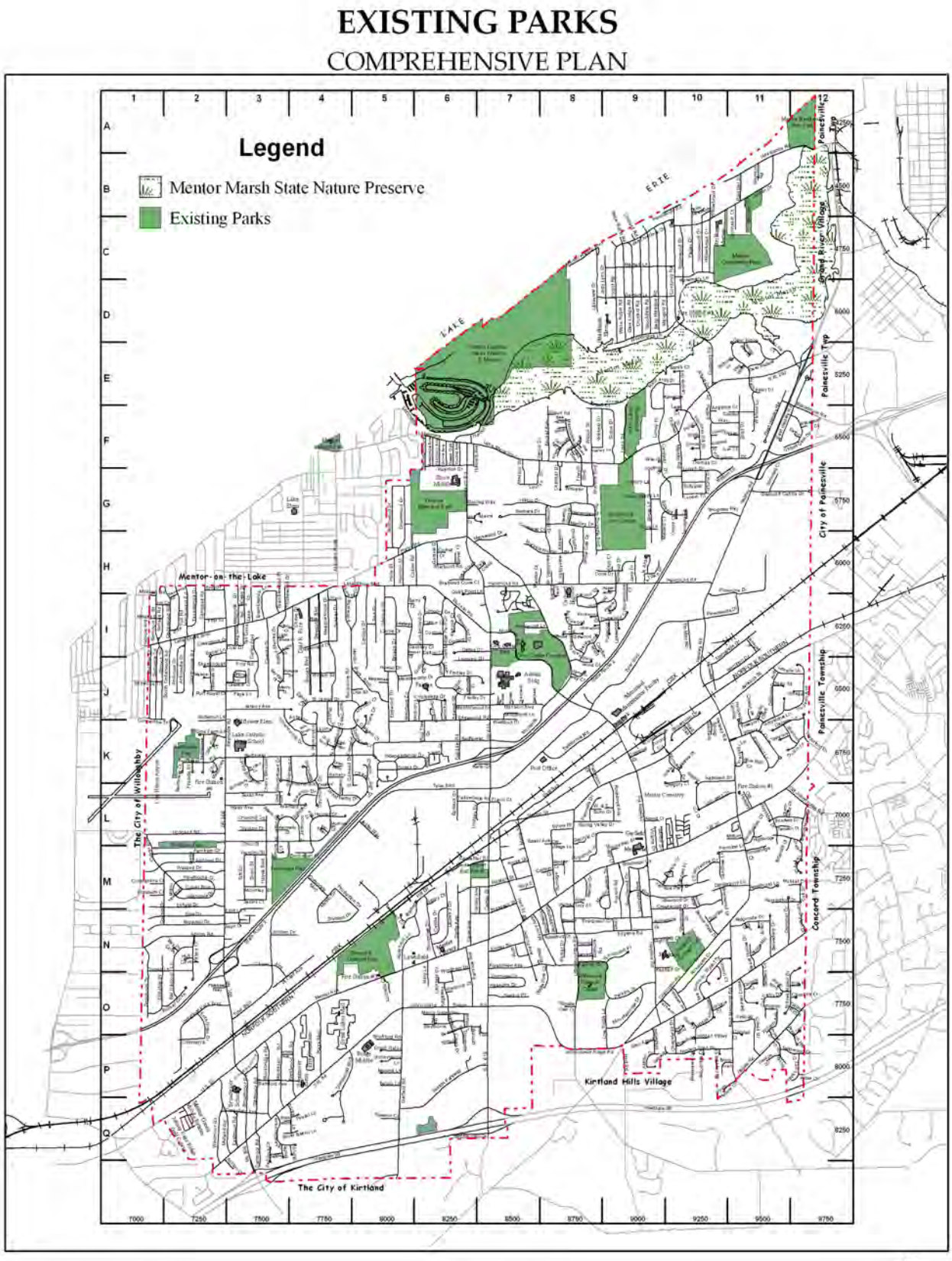
While Veterans Park, in particular, and to some extent most of the other parks, together with the Mentor Marsh provide passive recreation experiences, the total amount of passive facilities provided is probably sufficient, but somewhat lacking in convenient distribution. If the park system were to work out a leasing arrangement with the schools, for development and maintenance, an opportunity might exist to provide passive and active recreation more conveniently dispersed throughout the City.

Table 7.3 Active Recreational Facility Inventory and Recommended Requirements

Park/facility type	*Target park/ facility size*	*Existing assets*	*Year 2000 minimum requirements*	*Surplus Deficiency*
Neighborhood park (including acreage for mini-parks)*	4-12 ac; 4 ac/1,000 residents	62.7 ac	200 ac	-137.3 ac
Community park*	20-50 ac; 6 ac/1,000 residents	187 ac	300 ac	-113 ac
Tennis courts**	1:2,500 residents	16	20	-4
Basketball courts	1:5,000 residents	5	10	-5
Volleyball courts	1:20,000 residents	0	2	-2
Baseball diamond/softball	1:5,000 residents	39***	10	+19
Soccer/football fields	1:5,000 residents	9 ****	10	0
Swimming pool	1:20,000 residents	3, 2 spray parks	2	0
One half mile running track	1:20,000 residents	0	2	-2
Handball/racquetball court**	1:20,000 residents	0	2	-2
Dog park	2-5 ac/0.8-2.0 ac; 1:25,000 residents	1	2	-1

** This chart does not include Civic Center Par, Mentor Lagoons Nature Preserve/Marina, Veterans Park, Blackbrook Golf Course or Morton Salt Property*
*** Ratio may be decreased due to the declining popularity of racquet sports.*
**** 18 city owned,*
***** 9 full size, more fields can be created based on required size (various by registration)*

Map 7.1: Existing Parks



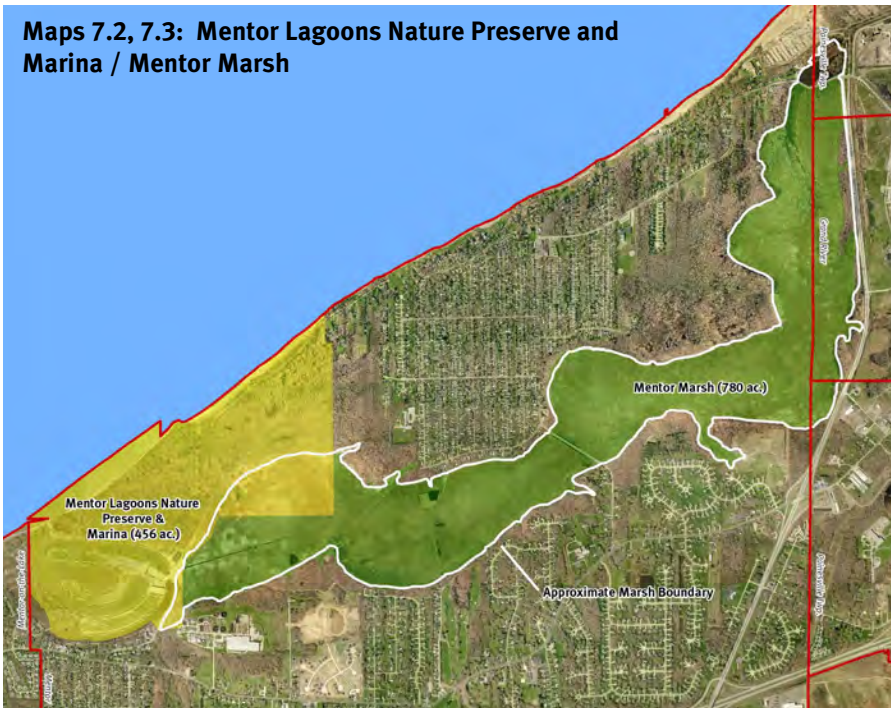
Mentor Lagoons Nature Preserve and Marina

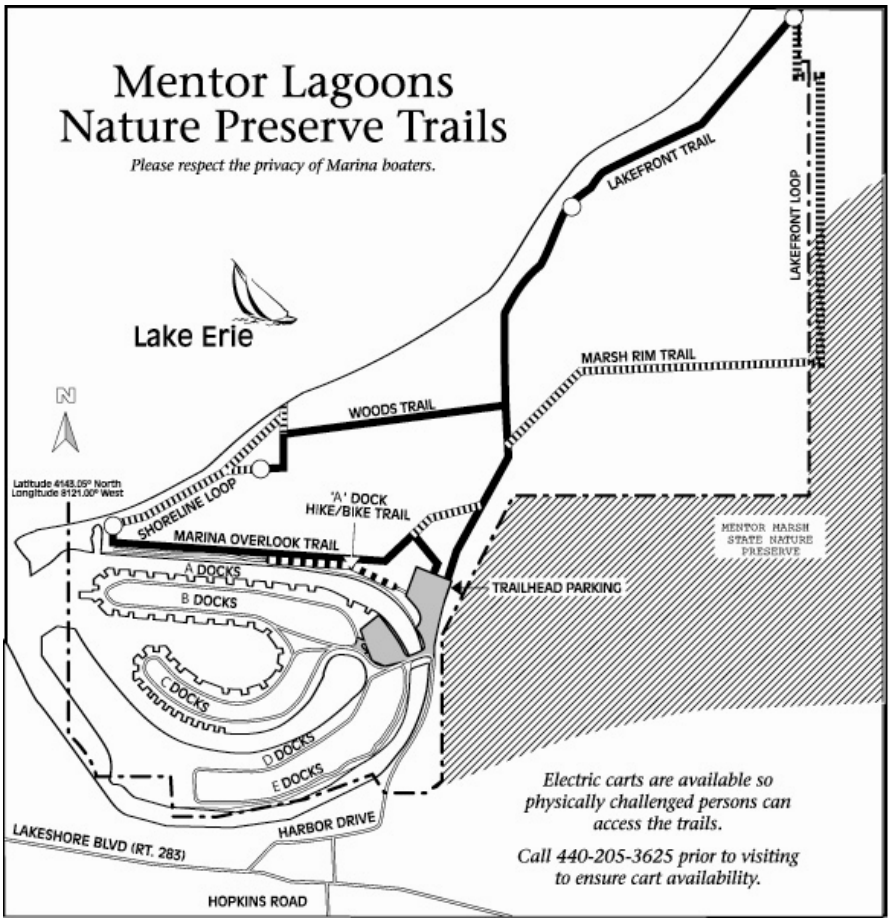
Owned by the City of Mentor, the Mentor Lagoons Nature Preserve and Marina occupy 450 acres along 1.5 miles of pristine, wild Lake Erie shoreline (Map 7.2, 7.3).

Acquired by the City in 1998, the park has over four miles of trails and manages a full-service marina with approximately 400 docks and 150 indoor boat storage spaces. The lagoons and Mentor Harbor provide direct access to Lake Erie.

The Mentor Lagoons Nature Preserve offers a pedestrian-friendly public lake access point. There are two specific trails of interest for lakefront visitation: Shoreline Loop and Lakefront Trail. The Shoreline Loop extends a third of a mile along the western portion of the preserve. It has limited access to carts that are provided by the City to the handicapped. The Lakefront Loop is

Maps 7.2, 7.3: Mentor Lagoons Nature Preserve and Marina / Mentor Marsh





open to everyone, regardless of cart possession, and extends 1.1 miles along the northwestern lakefront of the preserve. A third trail, Woods Trail, does not provide immediate beach access, but runs parallel to the waterfront for 0.6 miles. The Woods Trails connects to the Lakefront Trail and is similarly open to all visitors. Lake Erie cuts inland at the southwest corner of the MLNP, allowing five docks for boating. The Marina Overlook Trail follows the northern boundary of the docking areas for 0.6 miles with unlimited access for all wishing to view the lake and its many boaters.

The harbor entrance, located in Mentor-on-the-Lake, is of great concern to the City of Mentor and Mentor Harbor Yacht Club, because it is prone to sedimentation. The harbor entrance has a silting problem that creates an annual maintenance burden of dredging at the beginning of each boating season, and periodically through the summer. The lagoons itself serves as a safe harbor for the recreational boating community. While the channel is outside the municipal border, proper functionality of the harbor entrance is essential to the operation of the marina.


Figure 7.1: Mentor Harbor entrance


Figure 7.2: Mentor Harbor entrance (aerial)

The 2005 Lake County Coastal Development Plan identified the ingress/egress point as a priority project (Figures 7.1, 7.2). Currently, the entrance is substandard due to a sunken barge used to protect the harbor. This barge severely reduces the width of the channel entrance creating potentially unsafe boating

conditions, especially in rough waters.

The goal for the channel is 1) protect the harbor and allow for safe navigation through the channel into the lagoons; and 2) effectively redirect, reduce, or remove the deposition of sand at the entrance to the channel.

The USACE conducted a study of this harbor that was completed in October, 2003. They evaluated a series of ten alternatives that could be simplified to four general concepts with minor variations: 1) Dog-leg piers as an extension of the west jetty; 2) a detached breakwater several hundred feet offshore that would cover each side of the entrance channel; 3) rubble mound absorbers internal to the channel and harbor, and 4) sand bypass systems or dredging with internal rubble mound absorbers. The USACE dismissed all concepts because they would either not be "economically justified due to the weighted recreational benefits derived from the economic analysis", or because of the potential disruption of the littoral drift and possible impact on the downdrift shoreline, particularly the Mentor Marsh CBRA. Protection of the harbor and safe navigation through the channel is difficult to provide without the corresponding accumulation of sediment in the entrance and disruption of the littoral drift (at least until the entrance channel is filled).

Figure 7.3, 7.4: Mentor Harbor entrance improvements (proposed)

The concept shown on figures 7.3, 7.4 provides the protection of the harbor through the use of an offshore breakwater, but requires either a sand by pass system or scheduled dredging to keep the entrance channel open. Sand that is bypassed or dredged should be placed east of the entrance channel to maintain the littoral drift system.

At the present time, there are few places along the Great Lakes where communities undertake sand-bypassing as opposed to mechanical or hydraulic dredging. Sand bypassing is typically used on the east and west coasts in areas requiring the removal of large volumes of sand consisting of uniform gradation. Along this reach of shoreline, there are smaller quantities of material to move and the sand is mixed with cobbles, gravels, and miscellaneous debris, making it less than ideal for sand-bypassing.

Placement of the offshore breakwater eliminates waves coming through the entrance channel and allows the removal of the sunken barge. Major elements of this concept that are part of the Opinion of Probable Construction Costs include removal of the sunken barge, channel dredging, and construction of an approximately 650 foot long rubblemound breakwater.

Within the park itself, previous plans, notably the "Mentor Lagoons Nature Preserve and Marina 15 Year Plan" and 1998 "Urban Land Institute Study (ULI)" have proposed the following improvements to the facility:

Marina Improvements:

- Phase out A docks over 15 years and create a promenade for increased public access to the lake and lagoons.
- Improved water/sewer/electrical service
- Improved gas dock facility
- Other vendor services

Preserve Improvements:

- Observation tower
- Handicap shoreline access
- Picnic shelter
- Amphitheater
- Trail improvements
- Welcome center
- Pavilion
- Landscaping

More immediate needs include:

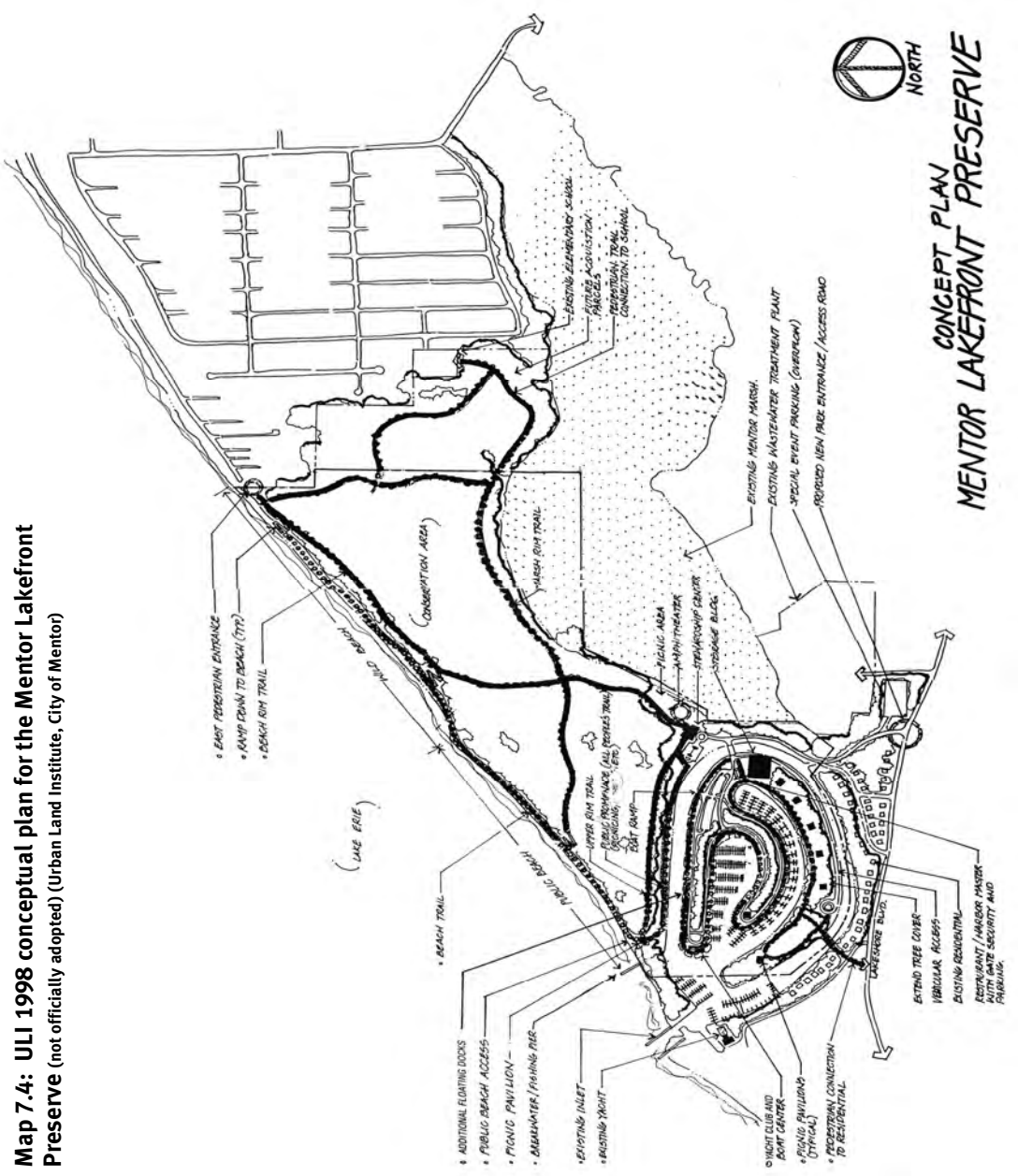
- Replacement of approximately 2.5 miles of bulkhead
- Increased preserve maintenance to protect the current natural resources from invasive species and to improve user enjoyment

The ULI Panel report recommended the expansion of an east/west trail connection along the north rim of the marsh, in the Mentor Lagoons area and along Corduroy Road. The trail could consist of a mixture of hiking trails and bike paths.

Listed in the ULI Panel report were other possible projects within the harbor and adjacent area including an amphitheater, stewardship center, and observation tower. Future improvements could also possibly include additional sanitary facilities, picnic pavilions,

additional floating docks, improved pedestrian access, parking facilities, general picnic areas, and extension of sewer, water and other utilities as needed.

Current semi-permanent improvements, such as covered decks and sheds made by dock users presents a challenge in maintaining the marina in a 'green marine concept'. As slip lessees leave, the City is demolishing such permanent structures. The City of Mentor has developed the marina as a 'green marina' by providing green space by each dock. The 'green marina' concept has provided a market niche that is different from conventional boat marinas.



Map 7.4: ULI 1998 conceptual plan for the Mentor Lakefront Preserve (not officially adopted) (Urban Land Institute, City of Mentor)

Lake Access

There are three points of public lake access: Mentor Beach Park (located in Mentor-on-the-Lake), Mentor Lagoons Nature Preserve and Marina (discussed above), Willowbrook Drive, and Headlands Beach State Park.

The Headlands Beach State Park is located at the northeastern most corner of the city. It includes 120 acres of lakefront land. Amenities include swimming, fishing, a children's playground, picnicking, a long beach, and over five miles of trails. The east end of the state park is a nature preserve known as the Headlands Dunes. This area is one of the last dune communities in Ohio and contains many plant species not commonly found outside the area.

Mentor Marsh State Nature Preserve is adjacent to the south. This natural landmark includes 644 acres of marsh-swamp forest. The Ohio Department of Natural Resources, Division of Natural Areas and Preserves and the Cleveland Museum of Natural History jointly manage and care for this natural wonder. The Museum also leases 240 acres from the State to run naturalist programs from the Marsh House. These programs are supported by the educational committee of the museum. The museum is also actively acquiring marsh property whenever it becomes available. Access to all of these areas is limited to daylight hours only.

Mentor Marsh State Nature Preserve

The 450 acre city-owned park is next to the Mentor Marsh State Nature Preserve. The park , managed by ODNR Division of Natural Areas and Preserves, was designated as a National Natural Landmark in 1966. The marsh itself, located in the abandoned channel of the Grand River, occupies 673 acres.

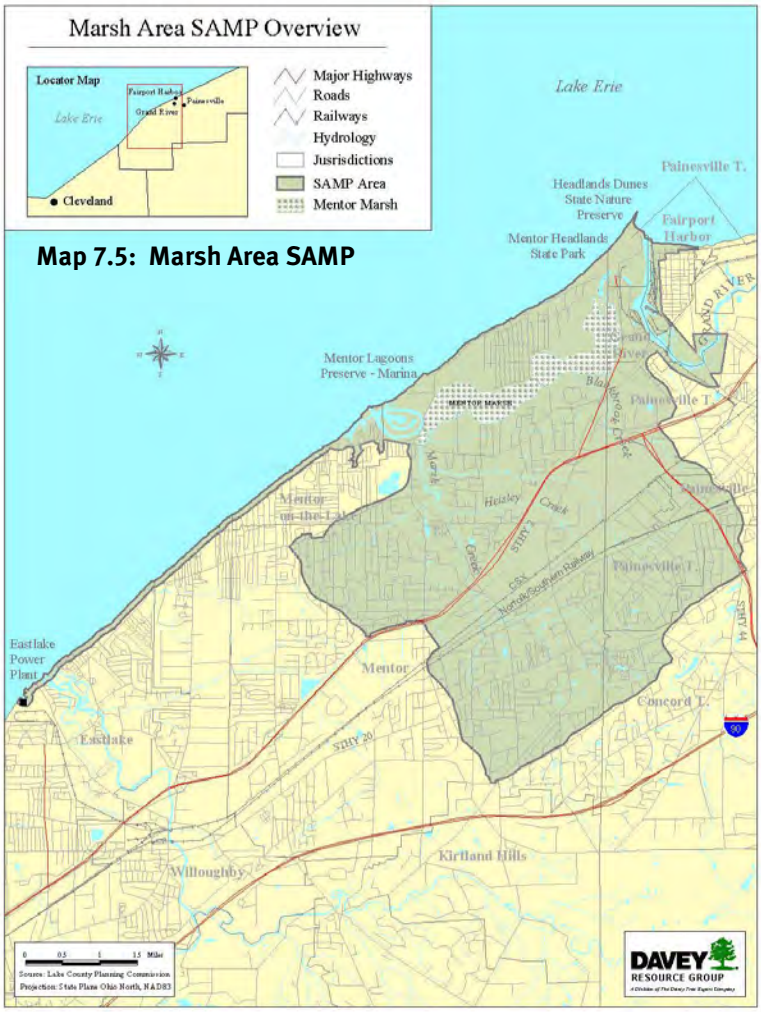
A beech-sugar maple forest occupies the higher elevations bordering the marsh. At the eastern edge of the preserve, there is a mixed oak swamp forest, a forest type destroyed in most parts of the Lake Erie region. The Mentor Marsh is recognized as an important Birding Area by the Audubon Society, making our area a globally recognized location for the preservation and protection of essential habitat for one or more species of bird for breeding, wintering, and/or migration.

The most extensive plant community type is an emergent wetland dominated by reed-grass or Phragmites. This is the largest Phragmite marsh in Ohio. The area provides habitat for a diversity of wildlife species.

The preserve has parking, visitor center, 4 mile trail system (part of the Buckeye Trail network, *www.buckeyetrail.org*) , including boardwalk trail and observation deck.

Mentor Marsh Special Area Management Plan

The Ohio Department of Natural Resources through their Office of Coastal Management under took the process of developing a Special Management Plan for the Mentor Marsh with the help of Davey Resources Group, 18 non-governmental organizations, 16 local/regional agencies, nine State of Ohio agencies and five federal agencies. Funding was provided by the National Oceanic and Atmospheric Administration (Map 7.5).



Map 7.5: Marsh Area SAMP

A Special Area Management Plan (SAMP) is a "comprehensive plan providing for natural resource protection and reasonable coastal-dependent economic growth containing a detailed comprehensive statement of policies; standards and criteria to guide public, and private uses of lands and waters; and mechanisms for timely implementation in specific geographic areas within the coastal zone" (Federal Coastal Zone Management Act of 1972, 16 U.S.C.A. Section 1453 (17)).

The Marsh Area Regional Coalition (MARC) was established to develop and promote the Mentor Marsh Area SAMP. The overlying objective of the SAMP is to protect and enhance the environmental, social, and economic assets of the Mentor Marsh Watershed and related communities for the benefit of present and future generations.

The Lake Erie Protection and Restoration Plan (Ohio Lake Erie Commission, 2000) established ten guiding principles for a sustainable Lake Erie watershed. These principles provide a framework for the MARC as it develops the Mentor Marsh Area SAMP. The Plan states that activities in the Ohio Lake Erie watershed should:

- Maximize reinvestment in existing core urban areas, transportation, and infrastructure networks to enhance the economic viability of existing communities.

- Minimize the conversion of green space and the loss of critical habitat areas, farmland, forest, and open spaces.
- Limit any net increase in the loading of pollutants or transfer of pollution loading from one medium to another.
- To the extent feasible, protect and restore the natural hydrology of the watershed and flow characteristics of its streams, tributaries, and wetlands.
- Restore the physical habitat and chemical water quality of the watershed to protect and restore diverse, thriving plant and animal communities and preserve our rare and endangered species.
- Encourage the inclusion of all economic and environmental factors into cost/benefit accounting in land use and development decisions.
- Avoid development decisions that shift economic benefits or environmental burdens from one location to another.
- Establish and maintain a safe, efficient, and accessible transportation system that integrates highway, rail, air, transit, water, and pedestrian networks to foster economic growth and personal travel.
- Encourage that all new development and redevelopment initiatives address the need to protect and preserve access to historic, cultural, and scenic resources.
- Promote public access to and enjoyment of our natural resources for all Ohioans.

Specific taskforces exist to address/implement various variables with the plan. The following list indicates the taskforce and it's associated area of concern.

- **Water Quality**

  Salt Contamination

- **Land Use and Economic Development**

  Uncoordinated Land Use Planning

- **Wetlands and Biodiversity**

  Loss
  Hydromodification
  Natural Disturbances
  Public Understanding

- **Recreation and Public Access**

  Lack of a Strategic Recreation Plan

- **Shoreline Management and Nearshore Issues**

  Insufficient Sand Supply Activities
  Landward of the Bluff Edge

In 2008, the MARC continued its planning initiative with a focus on completing an approved watershed action plan by the Ohio EPA.

This plan recommends continued participation with the SAMP and its dedication toward preservation of the area.

Blackbrook Golf Course

The 2005 acquisition of Blackbrook Golf course provides a substantial visual open space asset to those who don't golf and an active recreational outlet for those who do golf. The 18-hole public course spans approximately 150 acres along the Lakeshore Blvd. corridor.

Acquiring New Parkland

An acceptable general policy is that a city can never have enough or too much land for open space and public use. Once land is zoned, developed and in use, it is very difficult, costly, and politically undesirable to put it back in recreational use. The City should continue to seek good buildable land for recreation or open space whether it is undeveloped parcels or the rear portion of developed parcels which exceed zoning lot-area requirements.

Land that is suitable and needed to satisfy existing and anticipated recreation program demands should be acquired as soon as practical. As noted previously, neighborhood parks are of greatest need. The City must be prepared to move swiftly to protect the public interest for future generations. The City should develop a systematic program to acquire desirable land through donations from industry and local business; establish acquisition priorities; promote fund raising efforts by establishing a blue-ribbon committee to head up the effort – and get the public enthusiastic and involved. The Primary Conservation Areas (Map 4.16), discussed in Chapter 4, should be used as a guide when considering acquisition.

Along these lines, provisions to accept developer donations or reservations of land for open space and recreational purposes through zoning should be maintained. The provision should accept the donation of small parcels for open space, but not necessarily require that the City hold title to the land or be responsible for its maintenance and upkeep if the land serves no other useful public recreational purpose.

Situations arise where the expansion of existing park boundaries or the protection of these parks from possible encroachment can be achieved through parcel acquisition or easement. Good examples are the expansions of both Veteran's Park and Krueger Park.

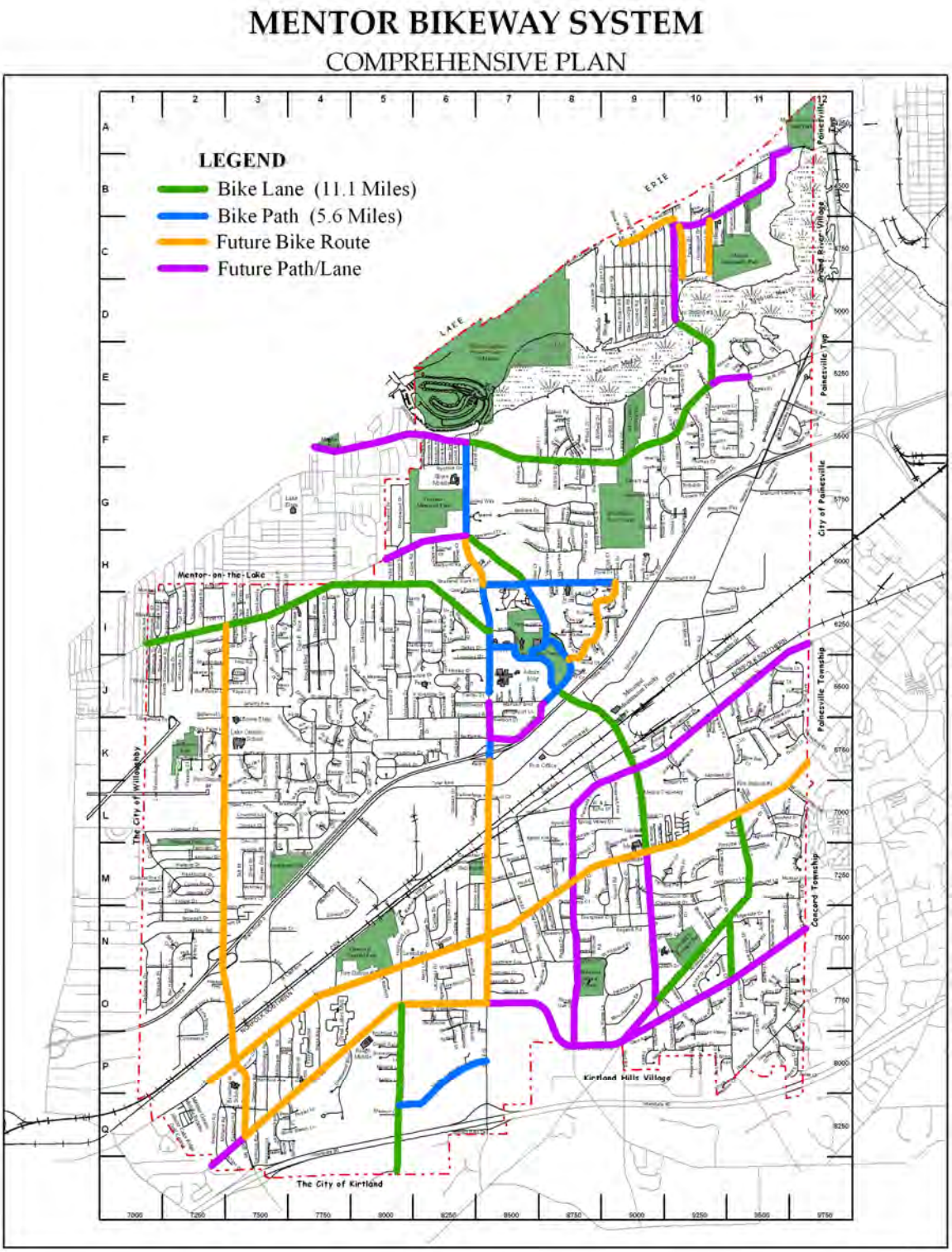
In more developed communities, similar to Mentor, efforts should focus on linking existing facilities via bikeways, riparian corridors or acquisition. Lakefront parcels and lands adjacent to the Mentor Marsh should be considered a primary open space acquisition objective. Multiple funding sources are available to assist the City with acquisition and subsequent park planning costs.

Presently, a public indoor swimming facility does not exist in the City. The previous comprehensive plan indicates the potential for an indoor pool, but the facility should be associated with the Senior Center, Ice Arena, High School or other central location to serve all City residents. This plan concurs with this rationale. Future capital planning for an indoor pool should concentrate on existing facilities and review potential financial partners including the local school district and/or other private entity.

Bikeways

The City of Mentor is the Lake County leader of providing bike accommodations. Approximately 17 miles of bike lanes or paths exist (Map 7.6). See chapter 5.

Map 7.6: Bikeways



7.3 SCHOOLS

The Mentor Public School System has 10 elementary schools (grades 1 through 5), 3 middle schools (grades 6-8) and one high school (grades 9-12). The district serves students from Mentor, Mentor-on-the-Lake and portions of Concord Township and Kirtland Hills (Map 7.7). The District owns 43 parcels, consuming over 330 acres of land (Table 7.4).

Table 7.4 Mentor Public Schools Acreage

School Facility	*Location*	*Acreage*
Mentor High School	Center St.	74
Memorial Middle School	Mentor Ave.	23
Ridge Middle School	Johnnycake Ridge Rd.	27
Shore Middle School	Hopkins Rd.	36
Bellflower Elementary	Reynolds Rd.	45
Brentmoor Elementary	Johnnycake Ridge Rd.	8
Fairfax Elementary	Fairfax Dr.	10
Garfield Elementary	Hopkins Rd.	4
Headlands Elementary	Forest Rd.	33
Hopkins Elementary	Hopkins Rd.	9
Lake Elementary	Pinehurst	14
Sterling Morton Elementary	Jordan Dr.	12
Orchard Hollow Elementary	Hendricks Rd.	12
Rice Elementary	Lakeshore Blvd.	26

Source: Lake County GIS

Similar to other Lake County school districts, Mentor School District has seen a 25% decrease in enrollment between 1996-1997 (Table 7.5). This is evidence of a decreased family size and the continued population shift to eastern Lake County.

The public school system is complemented by several local private and parochial schools. Most of the students in both these elementary and secondary schools are from Mentor; however, they also draw students from much of Lake County. Lake Catholic High School and the Mentor Christian School are instances of this type of facility. These facilities expand the alternatives for education that are available to Mentor residents. Within Mentor are located the Broadmoor School and the Deepwood Center. These institutions provide education and training to the individuals with developmental disabilities of Lake County. Individuals with developmental disabilities in Mentor may also take advantage of the training facilities of the East Shore Center in Kirtland. These facilities, owned and operated by the Lake County Commissioners, have been enthusiastically supported by all of Lake County.

Mentor is fortunate to have a wealth of knowledge and technology within a short distance of the city. Within approximately 45 miles of Mentor there are nine major universities and two community colleges, numerous businesses, and technical and trade schools that provide excellent educational opportunities for Mentor residents. Just as importantly they provide a rich and valuable resource of talent and advanced technology for businesses in the city.

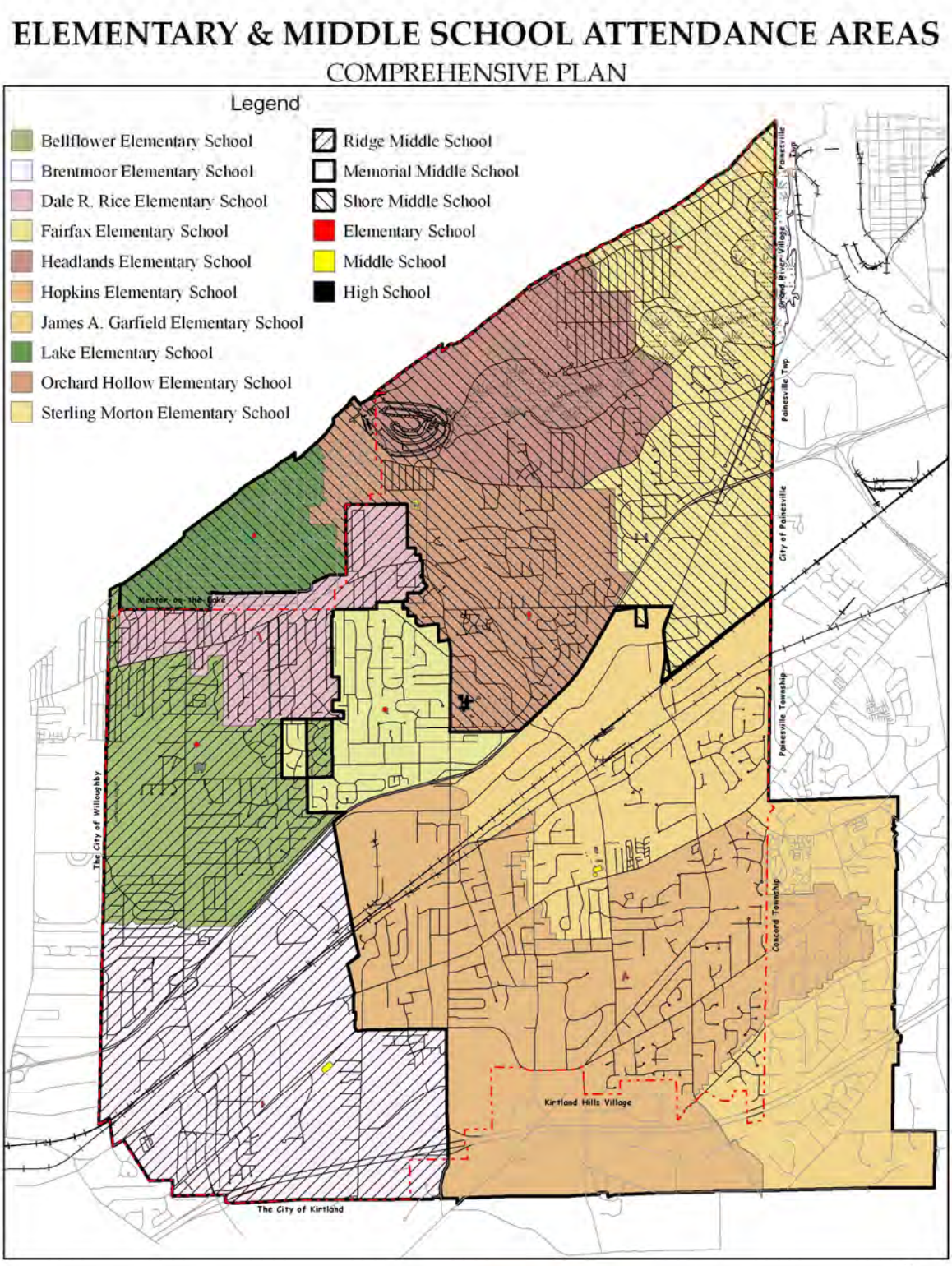
Lakeland Community College has had a positive impact on the City of Mentor. Partially located within the city, the college founded in 1967 has provided higher education and advanced training for numerous Mentor residents and workers. The college not only provides the foundation for a full college degree but also provides excellent specialized training as required by a community.

Table 7.5 Lake County School Districts Enrollment

	Fairport	Kirtland	Madison	*Mentor*	Painesville City	Riverside Local	Perry	Wickliffe	Willoughby Eastlake
1996-97	623	915	3,514	11,042	2,366	3,945	1,981	1,590	9,279
1997-98	591	921	3,556	10,905	2,442	3,956	1,958	1,584	9,111
1998-99	573	953	3,528	10,429	2,552	4,013	1,970	1,558	9,111
1999-00	506	947	3,434	10,150	2,356	3,705	1,924	1,416	8,687
2001-02	549	987	3,430	9,666	2,636	3,992	1,873	1,445	8,484
2002-03	594	1,039	3,355	9,911	2,702	4,161	1,844	1,452	8,575
2003-04	599	1,035	3,304	10,313	2,609	4,232	1,824	1,495	8,529
2004-05	578	1,084	3,350	9,925	2,826	4,471	1,860	1,497	8,567
2005-06	581	1,107	3,431	9,553	3,038	4,628	1,846	1,404	8,568
2006-07	538	1,173	3,604	8,876	3,053	4,815	1,893	1,495	8,944
2007-08	557	1,152	3,635	8,495	3,033	4,911	1,907	1,469	8,941
2008-09	585	1,161*	3,599	8,373	2,827	5,017	1,872	1,447	8,930
Change (1996-2009)	-38	+246	+85	-2,669	+461	+1072	+109	-143	-349

*October, 2008

Map 7.7: School Attendance Areas



7.4 HISTORIC RESOURCES

One of the legacies of Mentor's past, which is still evident, is its historical structures. These buildings serve as a link with the city's past. Buildings that are architecturally, aesthetically or historically of value provide a unique character and charm to the city. Once lost these buildings can never be replaced and lost with them would be an invaluable link to the past.

Figure 7.5: Lawnfield

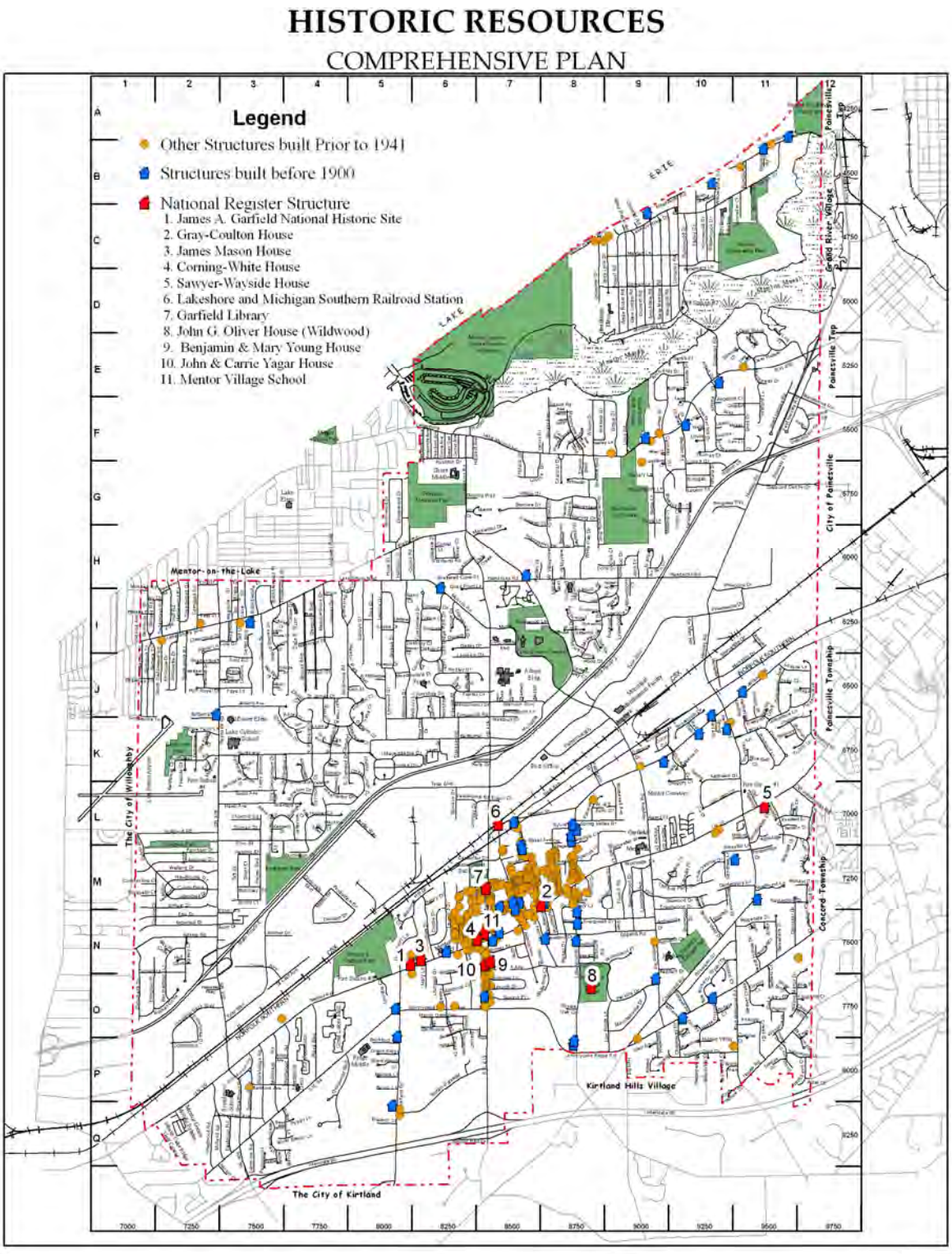
There are eleven buildings in Mentor listed on the National Register of Historic Places. They are:

- James A. Garfield Home (Lawnfield)
- Gray-Goulton House
- James Mason House
- Corning-White House
- Sawyer Wayside House
- Lakeshore and Michigan Southern Railroad Station and Freight House.
- Garfield Library
- John G. Oliver House (Wildwood)
- Benjamin and Mary Young House
- John and Carrie Yagar House
- Mentor Village School

There are also more than 120 homes or structures within the City of Mentor built prior to 1900. Their locations are found on Map 7.8. Many of the houses are located within the Old Village area along Mentor Avenue and adjacent streets. Approximately 50 of these buildings are more than 100 years old which designates them as Heritage Homes. Many of these homes are distinguished by their architectural style. All types of architecture are represented. The dominant type, while not official, is commonly referred to as the Western Reserve style, which was an amalgamation of the Federal and Greek Revised style. There are also excellent examples of the Greek Revival, Italianate, and Victorian architectural styles located throughout Mentor.

This plan recommends a complete evaluation of properties and the creation of a historic preservation overlay zone for in the Old Village area. New guidelines, while more stringent, will provide the basis for long-term preservation and help enforce a unique sense of place in this area. Historic districts exist in Willoughby, Painesville, and Madison Village.

Map 7.8: Historic Resources



7.5 PUBLIC SAFETY

Mentor is serviced by full time fire and police departments. Five fire stations providing paramedic level emergency medical services are located throughout the city. The police department is located within the Civic Center Complex.

Police Department

Police protection in the City of Mentor is provided by a staff of 82 sworn police officers comprised of 65 patrol officers, three special patrol officers, nine sergeants, four lieutenants, three captains, and one Chief of Police.

Within the patrol division, Mentor Police Department fields a SWAT team, hostage negotiators, evidence technicians, field training officers, K-9 teams, emergency ordinance disposal team, a bicycle and ATV unit, firearms instructors, defensive tactics instructors, pursuit driving instructors, and other special operations. The patrol division also manages the detective bureau.

Within the support services division, Mentor Police provides a court liaison officer, supervises the communications unit, records room, jail, property and evidence, facilities management, vehicles, and report review. The administrative division oversees training, hiring, crime prevention/community services, grants, website maintenance, general orders maintenance, and the department budget. In 2007, one captain was designated as the technology administrator, in charge of information technology, accident reconstruction, computer forensics, SWAT, and the range.

The City of Mentor Police Department civilian support includes one supervisor with twelve full time and two part-time communication operators, one supervisor and four records clerks, one supervisor and five corrections officers, three secretaries, one victim's advocate, a courtroom security officer, a research and training specialist, two vehicle maintenance technicians, and eight part- time school crossing guards.

Mentor Police Department is also served by the Lake County Crime Lab, a division of the Lake County Prosecutor's Office. The Lake County Crime Lab is funded by a countywide tax levy. All criminal cases are arraigned in Mentor Municipal Court and felony cases are prosecuted through the Lake County Common Pleas Court.

The City of Mentor Police Department looks forward to providing progressive and innovative police services to the citizens of Mentor and Lake County, and to maintain its position as one of the premier law enforcement agencies in the State of Ohio.

Fire Department

Fire protection and emergency medical services in the City of Mentor is provided by the Mentor Fire Department which exists to serve the community and pledges to continue to deliver professional, cost effective services in a personal, responsive, and innovative manner that will always serve the public's best interest.

Through a system of education, preparedness, response and recovery, the Mentor Fire Department utilizes the following five operating divisions to deliver this service to the

community: Fire Prevention, Education, Fire and Rescue, Fire Administration and Maintenance.

Fire Administration is responsible for the planning, staffing, budgeting, and management of the Mentor Fire Department.

The Fire Rescue Division is the largest division of the Mentor Fire Department and provides quick and effective service delivery from these five stations located throughout the City of Mentor. These Fire Stations are:

Station 1
6929 Heisley Road Opened in 1990, Originally located at 7262 Jackson Street

Minimum Staffing 4 personnel, a front line Fire Engine, a reserve Fire Engine, an Advance Life Support Ambulance, a Reserve Advance Life Support Ambulance, a Grass (Brush) Fire Truck ,and a Hazardous Material response team.

Station 2
5025 Corduroy Road Opened in 1995, originally located at the north end of Corduroy.

Minimum Staffing is 4 personnel, a front line Fire Engine, a reserve Fire Engine, and Advance Life Support Ambulance.

Station 3
7957 Mentor Avenue Opened in 1965

Minimum Staffing is 4 personnel, a front line Fire Engine, a reserve Ladder Truck and Advance Life Support Ambulance.

Station 4
6900 Reynolds Road Opened in 1971, previously located behind the present station

Minimum Staffing is 4 personnel, a front line Fire Engine, Water Rescue team consisting of a rapid deployment unit with two boats, an Advance Life Support Ambulance, Air Truck, Mass Casualty Response Unit; Technical Rescue Response Team capable of trench, high angle, collapse, heavy and technical rescue, and Urban Search and Rescue.

Station 5
8467 Civic Center Boulevard- Headquarters
Opened 1971, with major remodeling completed in 2003

Minimum Staffing is 6 personnel, plus a Battalion Chief, a front line fire engine, a front line ladder truck, an advance life support ambulance, a reserve fire truck, a special service Unit with heavy rescue equipment, Command vehicle and Staff.

The Fire Rescue Division is responsible for the day-to-day provision of emergency services to citizens. The essential mission and number one priority of the members assigned to the Fire Rescue Division is to take care of people by providing them with the best service possible.

The Fire Rescue Division is staffed by 112 members who are all State Certified Fire Fighters and Emergency Medical providers, many have advanced or specialized training.

The Mentor Fire Department has three "Special Teams" to respond to the dangerous, yet less frequent emergencies that could occur. They are:

- The Technical Rescue Team consists of 22 members of the Mentor Fire Department who have taken extra training in confined space, trench collapse, and rope rescue. The team drills once a month with each drill covering a specific area of discipline.
- The Hazardous Materials Team (Haz-Mat) is a specialized group of department members who have received specific training in order to become certified Hazardous Material Technicians. Team members have the ability to research, identify and perform risk analysis prior to entry into hazardous areas to mitigate the particular hazard. Each trained member completes annual required continuing education to recognized standards of OSHA 1910.120 and NFPA 472. Monthly training drills are conducted both within the department and in cooperation with the Lake County Hazard Intervention Team (H.I.T.). The H.I.T. consists of members from several fire departments within the county, all of which are certified Haz-Mat Technicians.
- The Mentor Water Rescue consists of 14 divers who are internationally certified in basic and advanced SCUBA, search and recovery, underwater investigation, ice diving, and Dive Master. Members of the Water Rescue Team train actively throughout the year on a monthly basis, regardless of weather conditions.

Fire Prevention is responsible to work to protect the lives and property of our citizens, visitors, and firefighters through effective code enforcement by reviewing land development and building plans; inspecting buildings, tenant processes, and fire and life safety protection systems; and evaluating public/private water systems for effective fire protection.

The Public Education division of the Mentor Fire Department assists the general public with training and safety information. Besides providing first aid, CPR, AED, and fire extinguisher classes for businesses in the city, the educators also visit the schools with fire and injury prevention classes. Public Education runs the Children's Safety House and assists in maintaining the Mentor Fire Museum. Public Education is involved in many community events, as well as utilizing media channels that provide safety and other important information.

7.6 CITY GOVERNMENT

Mentor's Civic Center is centrally located along Civic Center Blvd. The Center and surrounding area contains the Municipal Center, police department, central fire station, civic center, ice arena, senior center and a number of ancillary recreational areas.

All administrative offices are located within the Mentor Municipal Center, 8500 Civic Center Boulevard. This is a 51,000 square foot facility that includes the Mentor City Council Chambers, the City Manager's Office and the Mentor Municipal Court and the Police Department. The original building was built in 1975 and an addition that currently houses the Police Department was completed in the early 1980's. Second rounds of renovations to the Police Department were recently completed.

7.7 COMMUNITY AND SENIOR CENTERS (other facilities, Map 7.9)

Civic Ice Arena/Community Center – This is really two facilities in one, and generally separate in nature and operation.

The Community Center, a portion of which started out as a City Teen Center, is now a rental facility and is also used for some recreation programs. The Center is open to resident and non-resident use.

The Ice Arena consists of two large rinks (200 x 85 feet) and a studio rink (75 x 45 feet). The studio rink is used primarily for private lessons, beginning hockey, party rentals, and open tot skating.

The west ice rink is open year round except for about 4 weeks in late May – early June for annual maintenance from Fall through Spring. The rink is used for high school hockey, teams, Mentor youth hockey, open skating, adult pick-up hockey, and figure skating. The rink hosts regional and national figure skating competitions and regional and national hockey tournaments.

Mentor Senior Center – The Senior Center is a day-use facility located at 8484 Munson Road, near the Community Center, which currently provides a full range of recreational experiences for approximately 10,000 senior citizens. Founded in 1973, the Center is open from 8:00 a.m. to about 9:00 p.m., 5 days per week providing a full schedule of classes, tours, parties, exercise, crafts, and workshops. Weekend and evening programs are also available.

Senior center usage is expected to increase as the demographic profile of the city ages. Today's seniors are much more active than previous decades and will provide a market for new programs and recreational opportunities.

Wildwood Center – A primarily passive recreation resource which is open to the public. Wildwood is administered by the City of Mentor with assistance from an appointed Cultural Arts Commission whose art programs are supported in part by a membership of over 300 residents and non-residents. The City provides a yearly operating budget and maintains the site year round.

Wildwood is home to multiple clubs and organizations, and is used by three service clubs. The Center also provides numerous classes, hires instructors, organizes special events and hosts numerous shows. The site provides adequate parking and a passive nature/hiking trail.

Wildwood is efficiently operated and well maintained. The facility is not ADA accessible due to its narrow doorways and multilevel floors, but the architectural integrity of the structure is protected by its National Register designation. The facility does operate a wheelchair lift to make the first floor accessible.

The 34 acre facility is also well suited for weddings, corporate events or small gatherings.

Eleanor B. Garfield Park Recreation Center – The Garfield Park Recreation Center is a two-story building approximately 3,500 square feet in size. Located on the second floor in the recreation center, is a large hardwood floor ballroom which is used for rental of up to 170 people. The center is also used for a large number of recreation classes, i.e., aerobic dance, ballet, ballroom dance, creative dance, gymnastics and tumbling.

The first floor has a lounge room which is used for rentals of up to 60 people, and is also used for recreational classes, karate, tap dance, leg enhancement and many other youth and adult classes.

The center also has a women's and men's restroom which are the only restrooms available in the whole park. The restrooms are very heavily used during summer, due to all the league play and general park use. They are also used throughout the year for spring and fall soccer players and year round tennis players.

Mentor Beach Park Pavilion – Located on Lake Erie, the pavilion has two enclosed rooms available for rental and which are also used for recreation classes. Restrooms are provided for building patrons and separate restrooms for park users.

The original construction dates back to 1936 when it was used as a dance hall and offered changing rooms and showers for those using the beach. Today, the beach is nearly non-existent and the basement has been sealed up. Although this structure has sentimental value in the community, the need to make large scale repairs to the structure are evident.

Old Council Hall – Located at 7250 Jackson Street, the facility was originally built in 1856 as a church. Its most notable parishioner was President James A. Garfield. The building is used for classes as well as rentals for up to 100 people. Although not on the National Historic Register, the integrity of the building has been preserved.

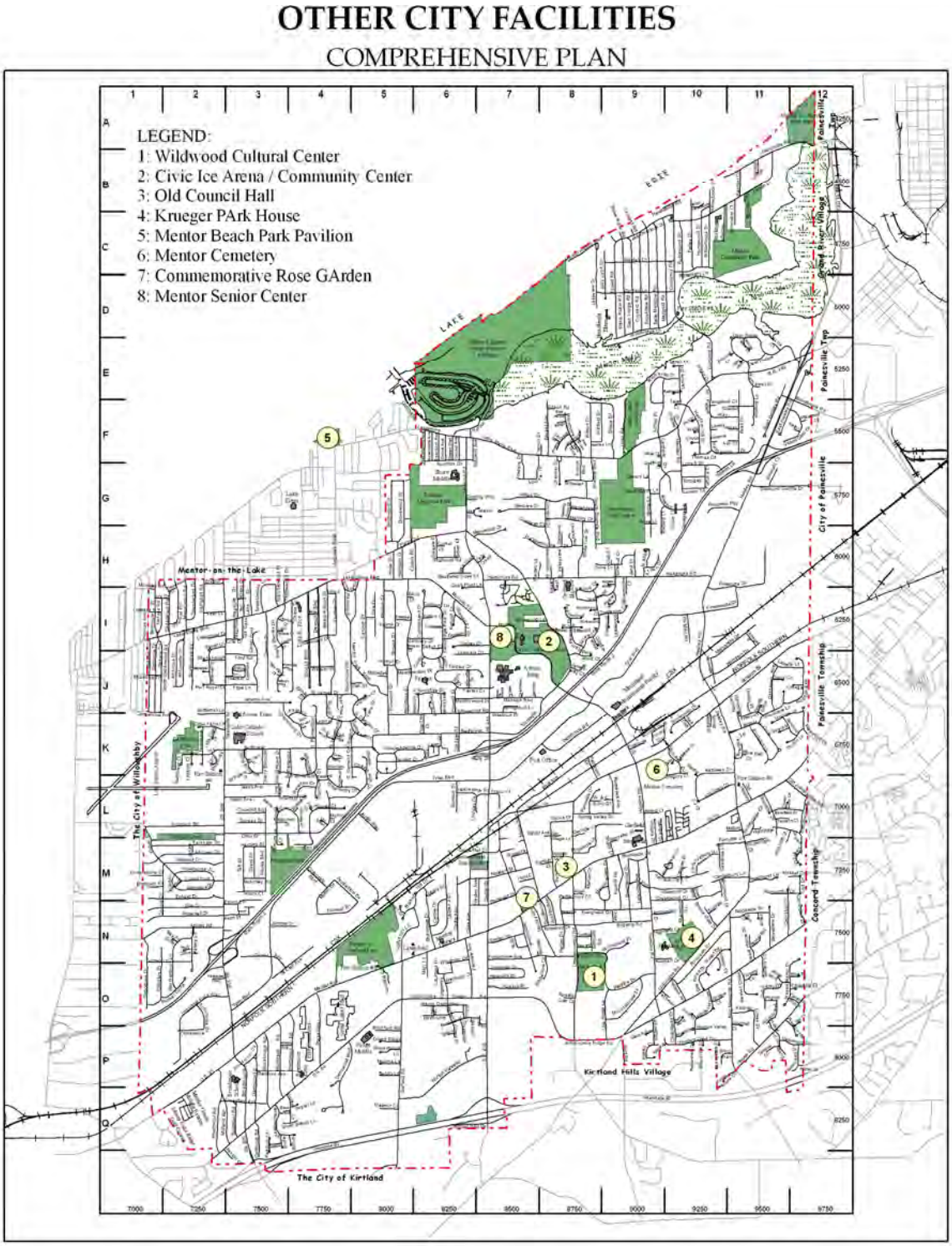
Service Center - The City of Mentor stores and repairs all their vehicles at the Service Center located on Hopkins Road near Tyler Blvd. This 62,000 square foot facility was built in 1999.

Mentor City Cemetery - The Mentor Cemetery started out as a 10 acre property at the corner of Hopkins Road and Jackson Road in 1854. Originally it was operated by the Mentor Cemetery Association. At some point, the Mentor Township Trustees took over administration of the cemetery and finally, the City of Mentor took over administration when the Village and Township merged in 1964.

The cemetery has been expanded to 60 acres. Only 37 acres have been used.

Jackson Street Property - Old Fire Station Number One on Jackson Street is being used as the Mentor Fire Museum. It is currently housing two old fire engines. The Old Council Chambers, which was originally built as a church and became the Mentor Township Hall, is being used for recreational programs and being rented out to the general public. There is also the Mentor Children's Safety House located on that property behind the Old Council Chambers.

Map 7.9: City Facilities



7.9 GOALS AND POLICIES

GOAL 1

"TO PROVIDE RECREATIONAL OPPORTUNITIES FOR ALL SEGMENTS OF THE POPULATION"

Policies:

A. Develop, plan and provide programs, activities, and events that encourage all ages to adopt a healthy and active lifestyle.

B. Ensure physical layout and amenities of the site suffice to the market demands of the changing demographic.

C. Continue to promote natural water body related activities (kayaking, hiking, birding, fishing).

GOAL 2

"TO STRIVE TO PROVIDE HIGH QUALITY FACILITIES FOR THE MAXIMUM SAFETY AND ENJOYMENT OF RESIDENTS"

Policies:

A. Provide adequate parking to attract larger events.

B. Ensure that facilities are designed to be state of the art in terms of construction, safety equipment, and materials facilitating ease of use and maintenance.

C. Monitor, review and repair all buildings, facilities and grounds regularly to ensure the safest possible surroundings for residents and users.

GOAL 3

"TO MAXIMIZE THE USE OF EXISTING FACILITIES"

Policies:

A. Major recreational facilities such as Blackbrook Golf Course and Mentor Lagoons may be developed as enterprise operations provided self contained operation, significant specialized recreational amenities, retail and service component, cost covering user fees and provide a significant public benefit.

B. Extend usage through select lighting.

C. Improve physical layout and circulation in existing parks, with the ultimate goal of complete park connectivity.

D. Constantly review all facilities to be able to expand, contract and adapt based on the needs of the residents.

GOAL 4

"CONTNUE TO ACQUIRE AND LINK EXISTING FACILITIES AND NATURAL RESOURCES BASED ON AN ACQUISITION PLAN."

Policies:

A. Develop land use regulations that protect sensitive natural areas and buffers from development.

B. Promote land use practices that provide win-win situations for the community, homeowner, and developer through conservation easements and thoughtfully designed planned unit development projects.

C. Garner widespread local support for a coordinated plan for the marsh area, the overall goal of the SAMP and the Western Lake County Coastal Comprehensive Plan.

D. Public agencies and non-profit organizations should continue efforts to acquire parcels of environmental significance when available.

E. Encourage land preservation requirements in all major development programs.

Chapter 8
Utilities

8.1 INTRODUCTION

The utility services of Mentor have developed with the city over the past 45 years. The majority of the city is served by all sanitary sewer, water, natural gas, electric, cable and telephone. The majority of the infrastructure is relatively new. Many of the larger infrastructure items such as sanitary sewer treatment and water treatment plants are also located in the City. With the large population, the city is in a good position to have the next greatest technology to be installed in their community first.

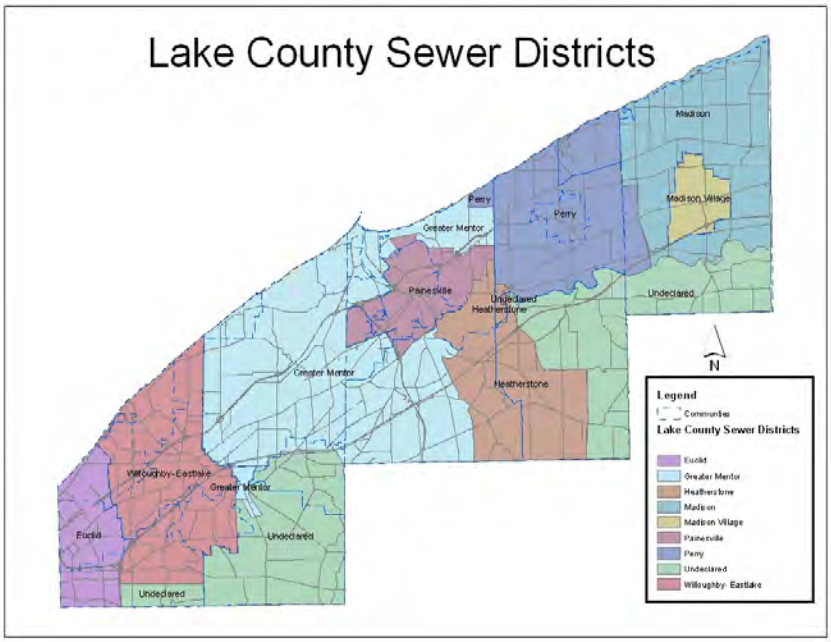
This section represents a general inventory of existing utility services in Mentor. The Capital Improvement Program (2009-2013) should be referenced for specific projects and associated timeframes and finances.

8.2 WATER SERVICE

Water is provided to the majority of residents through Aqua Ohio.

8.3 SEWER SERVICE

The sanitary sewer system is owned and operated by Lake County, and likewise serve the majority of the residents. Sewage is processed at the Gray Kron Wastewater Treatment Plant located on Lakeshore Blvd.



Mentor is located in the Greater Mentor Sewer District, which also serves Mentor-on-the-Lake, and parts of Concord Township, Kirtland, and Painesville Township.

8.4 ELECTRICAL SERVICE

First Energy (formerly CEI) provides electrical service to the entire city.

Most electric utility lines in the city are above ground, strung on poles placed in the public right-of-way. Utility lines are buried in the newest subdivisions. Undergrounding existing utility lines is expensive. Nonetheless, the city should work towards a long-term goal of placing all utility lines underground. New electrical substations should be carefully placed, well-designed, and screened so they are visually unobtrusive.

8.5 NATURAL GAS

Natural gas has been extended to most new subdivisions since 1967 and all industrial subdivisions. 86.4% of the homes in Mentor are heated by natural gas. Natural gas is provided by Dominion East Ohio and Orwell Natural Gas

8.6 TELEPHONE / DSL

Telephone service in Mentor is provided by AT&T. DSL broadband Internet service is available in much of the city. Service availability depends on proximity to central switching offices.

Telephone lines are above ground in parts of the city where electrical lines are also above ground.

8.7 CABLE TELEVISION / CABLE BROADBAND

Cable and digital cable television is available for all of Mentor and is provided by Time Warner. Mentor has access to three public access channels that allow the city and the schools an additional method of communicating with citizens. High Speed internet is also provided by Time Warner. Cable lines are above ground in parts of the city where electrical lines are also above ground.

AT&T is currently providing U-verse to a limited area in Mentor. U-verse TV is AT&T's television service which is 100-percent digital television. The service uses Internet Protocol (IP)-based video service. U-verse delivers its digital television services to its customers via phone lines or over cable using Internet protocol (IPTV - Internet Protocol TV).

The Ohio Municipal League is suggesting that cities install 1.5 inch conduits along their major road arterials and industrial corridors in order to make the installation of fiber optic lines easier. Fiber optic lines could provide extremely high volume electric communications for the City and could be an economic development tool in the future. Mentor is in the beginning stages of this project. The Mentor Capital Improvements Plan indicated the planning, engineering, and construction of the 1.5 inch conduit.

As noted in Chapter 9, the City should also consider select 'hot spot' areas of the community for wireless internet access. If successful, and feasible, wireless interest service could be extended throughout the City.

8.8 STORMWATER MANAGEMENT

The City of Mentor drains primarily to Lake Erie with two exceptions. About 25% of the city in the southwest corner lies within the Chagrin River watershed. About 3% of the city in the southeast corner lies within the Grand River watershed. Each of these sub watersheds is comprised of local watersheds that drain into ditches and creeks. Mentor is 28.4 square miles in area and is urban in nature. Its infrastructure provides both sanitary and storm water service. There are a small number of home sewage treatment systems, or septic systems, in the city. Retention and/or detention basins have been required in new developments for many years to control increased storm water runoff.

In 2002 Ohio EPA's Stormwater Phase II Rule established a storm water management program that is intended to improve the Nation's waterways by reducing the quantity of pollutants that storm water picks up and carries into storm sewer systems during storm events. The first permit term for the Phase II program ran from December 2002 until December 2007 (NPDES Permit No.: OHQ000001).

Mentor City Council formally approved the city's Stormwater Management Plan on March 4, 2003. The Engineering Department and the Public Works Department currently address storm water issues within the city under Article III, Section 3.06 of the Charter. Recent improvements to the storm sewer system have relieved flooding problems and minimized inconveniences.

The new permit for next 5 years runs from January 2009 through January 2014 (NPDES Permit No.: OHQ000002). The City of Mentor is considered a regulated community under the Phase II program and has designed a Storm Water Program Plan and has been implementing it since 2005. The plan is focused around six elements or minimum control measures (MCM), with the goal to reduce the discharge of pollutants, protect water quality, and satisfy the appropriate water quality requirements of the Clean Water Act.

The Stormwater Program Minimum Control Measures include the following.

1. *Public Education and Outreach*: Distributing educational materials and performing outreach to inform citizens about the impacts polluted stormwater runoff discharges can have on water quality.
2. *Public Participation and Involvement*: Providing opportunities for citizens to participate in program development and implementation, including effectively publicizing public hearings and/or encouraging citizen representatives on a stormwater management panel.
3. *Illicit Discharge, Detection and Elimination*: Developing and implementing a plan to detect and eliminate illicit discharges to the storm sewer system that includes developing a system map and informing the community about hazards associated with illegal discharges and improper disposal of waste.
4. *Construction Site Runoff*: Developing, implementing, and enforcing an erosion and sediment control program for construction activities that disturb 1 or more acres of land.
5. *Post-Construction Runoff Control:* Developing, implementing, and enforcing a program to address discharges of post-construction storm water runoff from new development and redevelopment areas. Applicable controls could include preventative actions such as protecting sensitive areas or the use of structural BMPs such as grassed swales or porous pavement.

6. *Pollution Prevention and Good Housekeeping*: Developing and implementing a program with the goal of preventing or reducing pollutant runoff from municipal operations. The program must include municipal staff training on pollution prevention measures and techniques.

At this time the City is working to update the Erosion and Sediment Control Ordinance - Chapter 1353, and is working to enact a Comprehensive Strom Water Management Ordinance and a Riparian Setback Zoning Ordinance in accordance with its Storm Water Program Plan. The City of Mentor will continue to implement its Stormwater Program Plan and make necessary updates to meet the requirements of the new permit over the next 5 years of the permit term.

8.9 GOALS

GOAL 1

"MANAGE THE IMPACTS OF DEVELOPMENT UPON THE NATURAL AND MAN-MADE STORMWATER MANAGEMENT INFRASTRUCTURE SYSTEM."

Policies:

A. Require that all new development be designed and constructed in a manner which minimizes and controls stormwater impacts on adjacent properties.

B. Encourage the construction of stormwater management facilities which serve multiple developments wherever possible.

C. Ensure that the City of Mentor shall have the right of access to perform cleaning/repair/improvement upon every major drainage facility which has significant implications for downstream watershed conditions.

D. Ensure that responsibility for the long-term maintenance of stormwater management facilities be clearly assigned and accepted as part of council's approval of a subdivision.

GOAL 2

"IMPROVE SANITARY SEWER SYSTEM IN THE FRENCH HOLLOW SUBDIVISION AREA WHERE A HIGH CONCETRATION OF SEPTIC SYSTEMS EXISTS."

GOAL 3

"PLACE ALL UTILITY LINES UNDERGROUND"

GOAL 4

"INSTALL 1.5" CONDUIT ALONG MAJOR ROADS AND COMMERCIAL/INDUSTRIAL ZONES TO PROVIDE EASY INSTALLATION OF FIBER OPTICS AND OTHER TECHNOLOGIES."

9.1 INTRODUCTION

The City of Mentor, while known for its retail base, has a diverse economic profile that includes traditional manufacturing, specialized manufacturing, as well as medical industries.

The Economic Development element identifies policies and strategies that will address the well being of Mentor – its neighborhoods, businesses and residents – in a local and regional economic context. It includes analysis of the local economy assessing its strengths and weaknesses in terms of the scope and character of the local employment base, the relationship between the local labor force and local opportunities for employment, and an assessment of current and future needs of the community.

9.2 ECONOMIC INFLUENCES

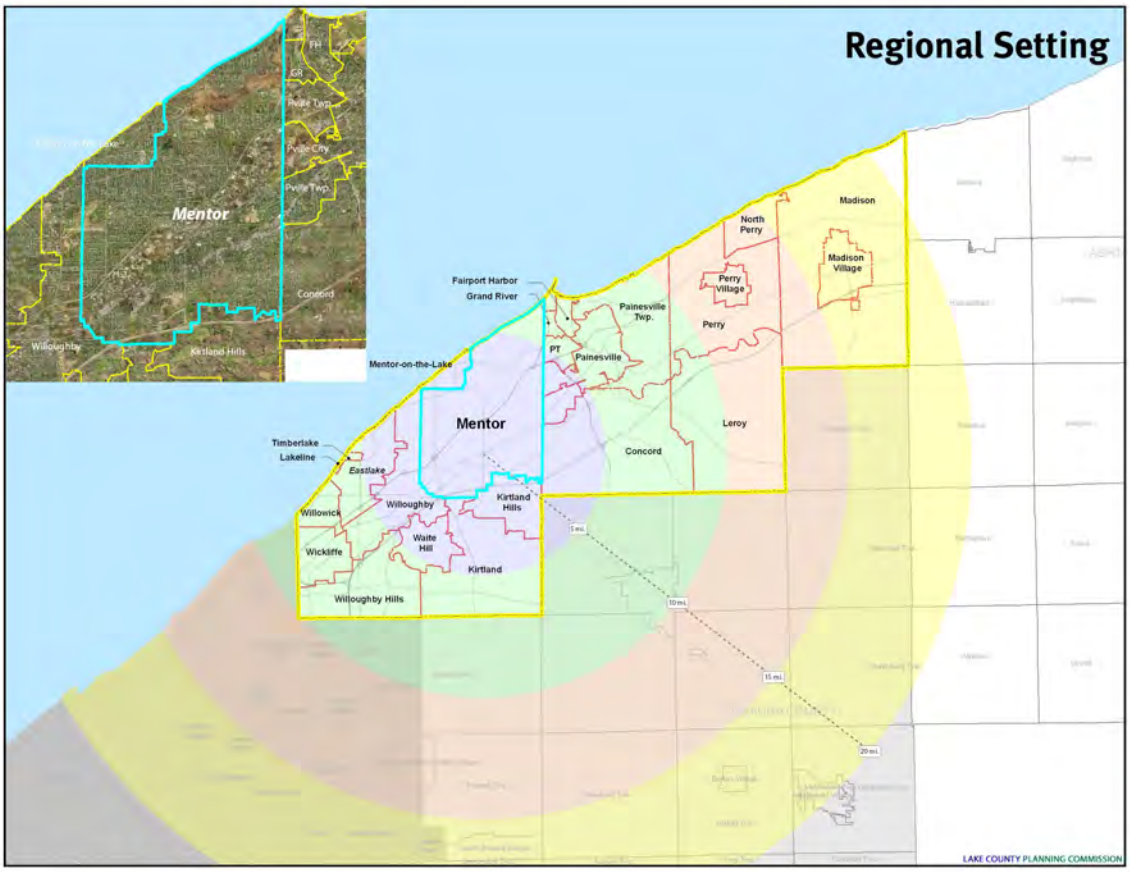
Lake County and Mentor are influenced by regional and national economic trends including unemployment and construction activity. At the time this plan was prepared, the United States and Ohio was in an economic recession with an unemployment rate near 10% and construction activity at a low point not seen in over twenty years. Strong leadership and the diverse economy and business patterns in Mentor has enabled the City to continue to provide the high quality of services to their citizens and provide programs and incentives to continue economic growth.

The local transportation network provides a competitive advantage for the City. Mentor's manufacturing and retail districts are easily accessible by exits off Interstate 90 at SR 306 & SR 615 (Center Street) and SR 2 at SR 306, SR 615 (Center Street) & Heisley Road. The planned improvements to SR 2 will also enhance access to key employment centers. Rail service is available off CSX with facilities in Cleveland, while Cleveland Hopkins International Airport is easily accessible via the interstate system.

A 20 mile radius around the Center Street/Mentor Avenue intersection encompasses the densely populated (both people and businesses) I-271 and SR 2 (Lakeland Freeway) corridors and the central business district of Cleveland making Mentor an attractive location for work and living (Map 9.1).

Other notable influences include the Great Lakes Mall area, Tyler Boulevard, and the emerging Heisley Road (Diamond Center) business node.

Map 9.1: Regional location



9.3 BASELINE INDICATORS

Existing conditions

The Mentor Exempted Village School District and City of Mentor are the largest employers. Contrary to regional trends, a review of Table 9.1 indicates a very significant manufacturing base in Mentor. Twelve of the top twenty employers in Mentor are in the manufacturing sector. The retail base is represented with three companies totaling 600 jobs. Small business, an integral component of a healthy community, is represented with 55% of the local businesses employing between 1-9 people.

Data from the City of Mentor, US Census and State of Ohio reveal the following highlights of the City's economic position:

Table 9 1. Largest Employers

Mentor Exempted Village School District (1,045)
City of Mentor (928)
Steris Corporation (809)
PCC Airfoils (484)
Avery Dennison Corporation (400)
Lincoln Electric (354)
Deepwood Center (340)
Component Repair Technologies (285)
Kmart (236)
JC Penney (210)
Wiseco Piston Co. (203)
US Endoscopy (202)
Source One Healthcare Technologies (200)
Wal-Mart Stores (200)
Royal Plastics (200)
Worthington Precision Metals (200)
Beech Technology Systems (200)
Mill-Rose Co. (200)
Cleveland Construction (187)
Altercare of Mentor (185)

City of Mentor, 2009.

- 2,148 Total business establishments
- 8,439 Total employees
- 55% Percent of businesses with 1-9 employees
- 1% Percent of business with 250-499 employees
- 13.2 % Percent of employees in manufacturing
- 24 % Percent of employees in retail sector
- 11.2% June 2009 Ohio unemployment rate
- 9.5% June 2009 Lake Co. unemployment rate
- 8.4% June 2009 Mentor unemployment (Bureau of Labor Market Information)

Workforce / Employment by Industry (Mentor residents)

According to the 2000 US Census, Mentor's workforce has increased by 2,727 workers since 1990. The occupational breakdown is similar to the county with the exception of those employed in 'management, professional and related occupations.' Mentor has over 36.1% of the workforce in this field compared to 32% in Lake County (Table 9.2). Regarding Industry segments, the two primary differences are in the 'construction' and 'retail trade' categories. Mentor has 1.3% less employees in the construction industry and 1.1% more employees in the retail trade sector.

Table 9.2 Employed Workforce Analysis (2000)

	Mentor		*Lake County*	
	#	%	#	%
Employed civilian population 16 years and over	***27,399****	***100.0***	***118,749***	***100***
OCCUPATION				
Management, professional, and related occupations	9,882	36.1	38,147	32.1
Service occupations	3,051	11.1	15,445	13.0
Sales and office occupations	7,876	28.7	33,440	28.2
Farming, fishing, and forestry occupations	52	0.2	386	0.3
Construction, extraction, and maintenance occupations	1,912	7.0	10,306	8.7
Production, transportation, and material moving occupations	4,626	16.9	21,025	17.7
INDUSTRY				
Agriculture, forestry, fishing and hunting, and mining	92	0.3	668	0.6
Construction	1,309	4.8	7,250	6.1
Manufacturing	6,910	25.2	28,999	24.4
Wholesale trade	1,099	4.0	4,767	4.0
Retail trade	3,585	13.1	14,249	12.0
Transportation and warehousing, and utilities	990	3.6	4,586	3.9
Information	512	1.9	2,106	1.8
Finance, insurance, real estate, and rental and leasing	1,949	7.1	8,488	7.1
Professional, scientific, management, administrative, and waste management services	2,245	8.2	9,467	8.0
Educational, health and social services	5,023	18.3	21,383	18.0
Arts, entertainment, recreation, accommodation and food services	1,714	6.3	7,986	6.7
Other services (except public administration)	1,100	4.0	5,138	4.3
Public administration	871	3.2	3,662	3.1

Census.gov (2000) ** 3 year estimates (2005-07) from the US Census Bureau indicate approximately 26.083 persons.*

Employment Trends

In Ohio, from 2000-2007, 248,000 (24.3%) jobs were lost in the manufacturing industry (Table 9.3). Other industries that suffered decreases include: retail trades (10.5%), information (18.2%) and utilities (14%). Industries that increased employment during the same period include transportation and warehousing (10%), management of companies (28%), and health care and social assistance (17%).

Table 9.3: Ohio Non-farm Employment Estimates 2000-2007

Industry Division	2000 Employment	2007 Employment	Net Change	Percent Change	2007 Location Quotient
Total Nonfarm Employment	**5,624,700**	**5,424,400**	**-200,300**	**-3.6%**	**1.00**
Total Goods-Producing	**1,280,100**	**1,009,400**	**-270,700**	**-21.1%**	**1.15**
Natural Resources & Mining	12,900	11,700	-1,200	-9.3%	0.41
Construction	246,100	224,900	-21,200	-8.6%	0.75
Manufacturing	1,021,000	772,800	-248,200	-24.3%	1.41
Total Service-Providing	**4,344,600**	**4,415,000**	**70,400**	**1.6%**	**0.97**
Trade, Transportation & Utilities	1,115,300	1,050,500	-64,800	-5.8%	1.00
Wholesale Trade	247,400	238,900	-8,500	-3.4%	1.01
Retail Trade	671,600	601,300	-70,300	-10.5%	0.98
Utilities	24,300	20,900	-3,400	-14.0%	0.96
Transportation & Warehousing	172,000	189,400	17,400	10.1%	1.06
Information	107,200	87,700	-19,500	-18.2%	0.73
Financial Activities	305,200	301,100	-4,100	-1.3%	0.92
Finance & Insurance	232,400	233,700	1,300	0.6%	0.96
Real Estate & Rental & Leasing	72,800	67,400	-5,400	-7.4%	0.79
Professional & Business Services	644,900	665,900	21,000	3.3%	0.94
Professional & Technical Services	236,600	246,200	9,600	4.1%	0.82
Management of Companies & Enterprises	82,200	105,700	23,500	28.6%	1.45
Administrative & Waste Management	326,100	314,000	-12,100	-3.7%	0.94
Education & Health Services	680,300	790,200	109,900	16.2%	1.09
Educational Services	89,800	98,700	8,900	9.9%	0.85
Health Care & Social Assistance	590,500	691,500	101,000	17.1%	1.14
Leisure & Hospitality	483,300	500,000	16,700	3.5%	0.94
Arts, Entertainment & Recreation	70,100	65,600	-4,500	-6.4%	0.84
Accommodation & Food Services	413,200	434,400	21,200	5.1%	0.96
Other Services	223,300	221,900	-1,400	-0.6%	1.03
Government	785,100	797,600	12,500	1.6%	0.91
Federal Government	87,200	77,100	-10,100	-11.6%	0.72
State Government	163,700	168,300	4,600	2.8%	0.83
Local Government	534,100	552,300	18,200	3.4%	0.98

Derived from CES estimates. Columns may not total due to rounding.

Locally, the percentage of workers employed in manufacturing businesses in Lake County decreased by 24.2% (Table 9.4). According to the United States Census tally of county business patterns, businesses in Lake County employed 26,509 manufacturing workers in 2001 and 22,078 in 2006. The bulk of the businesses were in paper manufacturing, plastics and rubber products manufacturing, primary metal manufacturing, fabricated metal products manufacturing, machinery manufacturing, computer and electronic product manufacturing,

and transportation equipment manufacturing (Table 9.5). The majority of these business types are located in Mentor.

Table 9.4 Manufacturing Employment 1995-2006

Year	Lake County employment			Ohio employment	
	Manuf. workers	% of all workers	% change	Manuf. workers	% change
1995	28,134	24.7%	N/A	1,126,628	N/A
1996	28,812	24.8%	2.4%	1,121,000	-0.5%
1997	29,184	24.5%	1.3%	1,118,370	-0.2%
1998	29,064	24.0%	-0.4%	1,121,121	0.2%
1999	28,457	23.3%	-2.1%	1,113,021	-0.7%
2000	29,113	23.4%	2.3%	1,103,840	-0.8%
2001	26,509	21.6%	-8.9%	982,577	-11.0%
Change 1995-2001	-1,625	N/A	-5.8%	-144,051	12.8%
2002	23,314	19.6%	-12.1%	904,838	-8.2%
2003	22,140	18.2%	-5.0%	864,280	-4.5%
2004	22,063	17.85	-0.3%	845,662	-2.2%
2005	22,120	17.5%	0.1%	835,492	-1.2%
2006	22,078	17.4%	-0.2%	820,773	-1.8%
Change 2000-2006	-7,050	N/A	-24.2%	-283,325	-25.0%

(Ohio Department of Development /Office of Strategic Research)

Projections from the state Department of Development envision a decline in manufacturing employment for Lake County in the future, to 23,900 workers in 2010, 22,800 in 2020, and 21,800 in 2040. More than likely, these trends will carry over into Mentor.

Table 9.5 Lake County manufacturing employment patterns 2004

Industry	Employees	Annual Payroll	Establishments	Employment size class			
				1-19	20-99	100-499	500 and up
Food mfg	(C)	(D)	12	11	1	0	0
Paper mfg	1,059	$63,008,000	9	2	2	5	0
Printing and related support activities	662	26,910,000	40	33	6	1	0
Petroleum and coal product mfg	(E)	(D)	4	2	1	1	0
Chemical mfg	743	39,922,000	21	7	13	1	0
Plastics and rubber products mfg	1,640	53,803,000	39	23	11	5	0
Nonmetallic mineral product mfg	384	20,832,000	25	21	3	1	0
Primary metal mfg	1,997	$85,208,000	19	9	5	4	1
Fabricated metal product mfg	6,039	253,217,000	293	212	72	9	0
Machinery mfg	2,682	111,592,000	104	74	25	4	1
Computer and electronic product mfg	2,291	100,434,000	19	5	10	3	1
Electrical equip, appliance and component mfg	514	15,925,000	19	12	6	1	0
Transportation equip mfg	1,353	58,102,000	28	17	5	6	0
Furniture and related product mfg	137	4,544,000	21	20	1	0	0
Miscellaneous mfg	2,443	105,007,000	49	35	7	6	1
Undisclosed mfg.	(A)	(D)	11	11	0	0	0
Total	**22,346**	**$957,670,000**	**713**	**494**	**168**	**47**	**4**

(D) - Withheld to avoid disclosing data for individual companies
Employment-size classes are: (A) 0 to 19, (B) 20 to 99, (C) 100-249, (E) 250-499, (F) 500 to 999.
(US Census Bureau)

In the event of large scale decreases in the local manufacturing base, as forecasted by the State of Ohio, other land use strategies should be encouraged to locate to the City for economic development. These should include office and high tech parks with a focus on healthcare, bioscience, advanced manufacturing, and alternative energy

engineering/manufacturing. Table 9.6 forecasts the continued employment trends as noted above and currently evident in the US and NE Ohio from 2006-2016; decrease in manufacturing and an increase in computer technologies, professional offices and specialty services. While overall employment is projected to increase by 3.5%, employment in two of the City's larger employer segments, 'manufacturing' and 'retail trade' is projected to decrease. This loss may be offset by the projected 11.4% increase in the 'professional and business services' industry. Other industries projected for employment gains include construction (5.2%), wholesale trade (8.7%), arts, entertainment and recreation (15.5%) and health care (19.7%). These industries already have a strong presence in the city and should be emphasized in future economic development decision-making.

Table 9.6 Cleveland-Elyria-Mentor MSA: Industry Employment Projections Report, 2006-2016

Industry	*2006 Annual Employment*	*2016 Projected Employment*	*Change in Employment 2006-2016*	*Percent Change 2006-2016*
Total	**1,126,900**	**1,165,900**	**39,000**	**3.5%**
Goods-Producing	194,500	168,800	-25,700	-13.2%
Natural Resources and Mining	6,700	6,400	-300	-4.5%
Construction	40,300	42,400	2,100	5.2%
Manufacturing	147,500	120,000	-27,500	-18.6%
Transportation equipment manufacturing	18,400	12,000	-6,400	-34.8%
Service-Providing	865,500	927,500	62,000	7.2%
Trade, Transportation and Utilities	194,200	198,100	3,900	2.0%
Wholesale trade	53,000	57,600	4,600	8.7%
Retail Trade	109,200	106,600	-2,600	-2.4%
Transportation and warehousing	28,400	30,500	2,100	7.4%
Utilities	3,500	3,300	-200	-5.7%
Information	18,600	17,600	-1,000	-5.4%
Financial Activities	74,800	77,900	3,100	4.1%
Finance and insurance	58,600	59,400	800	1.4%
Real estate and rental and leasing	16,300	18,500	2,200	13.5%
Professional and Business Services	137,500	153,200	15,700	11.4%
Professional and technical services	54,700	62,900	8,200	15.0%
Management of companies and enterprises	20,200	21,900	1,700	8.4%
Administrative and waste services	62,600	68,400	5,800	9.3%
Education and Health Services	167,200	199,400	32,200	19.3%
Educational services, private	24,200	28,300	4,100	16.9%
Health care and social assistance	142,900	171,100	28,200	19.7%
Hospitals, private	55,700	63,800	8,100	14.5%
Leisure and Hospitality	94,200	101,800	7,600	8.1%
Arts, entertainment, and recreation	14,200	16,400	2,200	15.5%
Accommodation and food services	80,000	85,400	5,400	6.7%
Other Services	43,200	40,000	-3,200	-7.4%
Government	135,800	139,700	3,900	2.9%
Federal Government	14,400	13,600	-800	-5.6%
State Government	6,800	6,500	-300	-4.4%
Local Government	114,600	119,700	5,100	4.5%
Local Education Employment	55,800	56,300	500	0.9%
Self-employed, private household and unpaid family workers	66,900	69,600	2,700	4.0%

Source: Ohio Department of Job and Family Services, Bureau of Labor Market Information, March 2009.

Unemployment

Mentor, along with the northeast Ohio region, has experienced a dramatic increase in unemployment since 2008 (Table 9.7). Through a combination of measures, the employment base has been shifting from reliance on traditional heavy manufacturing by expanding the economic base with small and medium sized light-industrial and highly specialized technical firms, thus lessoning the impact of the economic downturn. New retail opportunities have also provided recent employment opportunities in the City.

Table 9.7 Unemployment Rates (%)

	June 08	*May 09*	*June 09*
Mentor	5.5	8.3	8.4
Lake County	6.1	9.5	9.5
Ohio	6.6	10.4	11.2

Bureau of Labor Market Information

Despite the loss of jobs, the city's rate of 8.4% compares favorably to the State of Ohio (11.2%). The marketing of the City as well as the efforts of organizations such as the Mentor Economic Assistance Corporation, and the city's economic development strategy, has sustained Mentor's economic position in the current economic climate.

Retail

Mentor's historical strength in the retail market was significantly due to the early regional dominance of the Great Lakes Mall and the Plaza Blvd corridor. While competition has increased, the City is ranked 6th in the state for retail volume sales. A low county sales tax and diverse retail market place are two reasons for the high ranking. In addition, new retail development has continued to prosper in Mentor, most notably in the eastern portion of the City with the addition of Diamond Center, Creekside Commons, and most recently, Target. (Map 9.2). Several small multi-tenant retail centers have been completed over the last decade.

In Lake County, 14,680 were employed in the retail sector in 2000, with total wages of $303,687,000. The number employed in the retail sector dropped slightly to 14,591 in 2001, with wages of $306,651,000. As noted above 24% of Mentor's workforce is in the retail sector.

There is almost 700,000 square feet of retail space in 27 shopping centers in Mentor which range in size from 11,000 to 45,800 square feet. The vacancy among these convenience centers is 13 percent, a 2 percent increase from the 2008 report. The overall vacancy rate in the City of Mentor's 37 shopping centers is approximately 8 percent, up from 5 percent in 2008.

At the time this plan was written (2008-09), the country was declared to be in an economic recession. Consumer spending is declining which may impact retail markets. It is too early to note, but vacancy rates could increase in the commercial core.

The retail sector is a major focal point of many Lake County communities, including Mentor. Being the most visible land use, its physical configuration and condition are critical in projecting a city's image. The economic health of a city is often associated with the ability of its business districts to thrive and remain prosperous. The retail stores along Mentor Avenue serve the important function of maintaining the social character of a community by creating a

sense of place where residents can satisfy their consumer needs and encounter other neighborhood residents. This so-called "marketplace" function is critically important to community vitality.

The dynamic nature of retailing in Northeast Ohio is evidenced by frequent announcements of store closings, new construction, and concerns about the impact of both. Although retail development projects are generated by the private sector, public officials are often requested to provide assistance in the form of rezoning, transportation and infrastructure enhancements, or financial assistance such as tax abatement.

It should be noted that retailers are not often sold by such incentives. Retail and restaurant site selection specialists often use a formula to determine whether a market is a viable location for a store or restaurant. Criteria determining an ideal location are mostly quantitative, and usually include the following:

- Population living in a certain radius (mileage and driving time).
- Percentage of families versus singles in a certain radius.
- Average family and household income in a certain radius.
- Average age of the population in a certain radius.
- Cumulative income of all people in a certain radius.
- Education level in a certain radius.
- Number of jobs in a certain radius.
- Traffic volume at a location.
- Utility availability at a location.
- Proximity of other mid- and high-end retail development (positive).
- Proximity of low-end commercial development (negative).
- Property size and geometry.
- Potential return on investment.

Relatively speaking

A mass of numbers listing square footage may seem meaningless, unless there is a point of reference that can be easily related to.

1,200'²	typical 1950s-era single-family house in western Lake County
1,500'²	Chinese carry-out restaurant, chain coffeehouse (Starbucks, Caribou)
2,400'²	typical new single-family house in Lake County
3,000'²	fast food restaurant, convenience store
5,000'²	large new single-family house in Concord Township, sit-down chain restaurant (Applebee's, TGI Friday's)
11,000'²	very large single-family house in Waite Hill, large chain drugstore (CVS, Walgreens, Rite Aid)
20,000'²	big box pet supply store (PetSmart, Petco), office supply store (Staples, Office Max)
30,000'²	big box bookstore (Barnes and Noble, Borders)
45,000'²	small supermarket, home outfitting store (Bed Bath and Beyond)
57,600'²	NFL standard football field
60,000'²	big box sporting goods store (Dick's, Galyan's)
80,000'²	large supermarket
100,000'²	big box discount department store (Wal-Mart, Target)
150,000'²	big box home improvement store (Home Depot, Lowe's)
220,000'²	hypermarket (Wal-Mart Supercenter, Target Superstore)
700,000'²	small shopping mall
1,250,000'²	Great Lakes Mall

Each of these criteria carries a different weight, depending on the type of business. A bookstore may place a greater emphasis on the education and income in an area, while chain restaurants often look at the employment base in the area, so they can profit from lunch as well as dinner business. Sewer service is more important for uses that generate plenty of wastewater, such as sit-down restaurants. Mentor should continue to carefully examine its demographic and site characteristics while pursing economic development strategies to ensure long-term viability/stability with future businesses.

All businesses seek a high potential return on investment. A store may make a profit in Mentor, but if there is the opportunity of a greater return in another area, the chain will locate an outlet there instead, not developing in the City until most of the other more lucrative locations have been developed.

The mantra of commercial developers is "retail follows rooftops." The density of housing (shoppers) and presence of countless national retailers will continue to attract the attention of other retailers scouting for new store locations.

The changing nature of the retail industry is having profound implications on the land use patterns of Lake County. Older communities are experiencing under-utilization and vacancies in storefronts along major retail corridors resulting in loss of local retail services, decreasing tax revenues and suburban blight. At the same time, newer suburban and outlying areas continue to encounter retail development which has often led to increased traffic congestion, the need for costly infrastructure improvements, and degradation of land, air and water quality. This scenario may occur in the future within the city limits. While the efforts to maintain a strong retail base at Great Lakes Mall is extremely important, the continued expansion of alternative commercial and retail opportunities in the eastern portion of the city may decrease the customer base of the mall and Plaza Blvd. corridor. Often the opening of new businesses, in Mentor or other communities, comes at the expense of other areas within the city.

Mentor must counter these trends by proactively working with landowners/business owners along Mentor Avenue to accommodate their needs to the fullest extent possible without compromising the long-term vision of the city. Mixed-use zoning in the areas surrounding the Great Lakes Mall is a possibility (see Chapter 4).

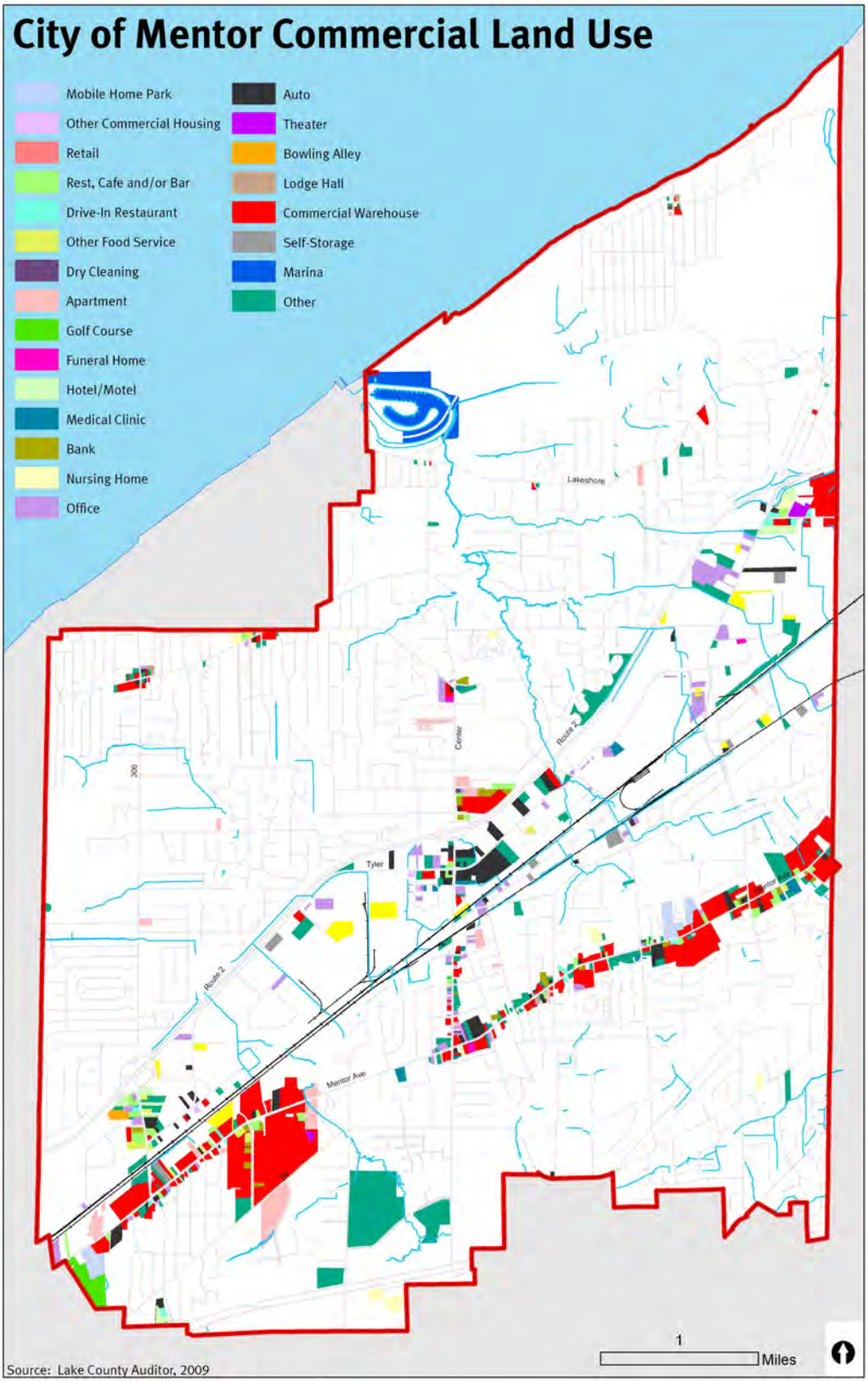
Manufacturing

The 2009 Harris Ohio Industrial Directory compiled by the Harris Infosource Company indicates the State of Ohio experienced a less than 1% decrease in manufacturing firms between June, 2007 and June, 2008. Similarly, the number of manufacturing firms in the region (Cuyahoga, Geauga, Lake, Lorain and Medina Counties) decreased by less than 1%. Lake County experienced a 1.8% decrease (15 companies) in the number of manufacturing firms; while Mentor experienced a decrease of six (6) manufacturing firms (see Table 9.8).

During the same time period, the State of Ohio experienced a decrease of 1.2% (11,745 jobs) while the region increased 2.2% in manufacturing employment. Lake County experienced a 4.2% increase in manufacturing employment, while the City of Mentor's increase was 4.3% or 351 jobs.

In Mentor, over a five year time horizon (2005-2009), the number of companies engaged in manufacturing increased by 8, yet manufacturing employment declined by 302 jobs (17%) (Table 9.8). This may be a reflection of the impact of technology on the manufacturing sector and the ability to maintain, if not increase, productivity with fewer employees.

Map 9.2: Commercial areas



The Measuring & Analyzing Instruments industries added 1,212 jobs and increased from 14 to 21 companies. Electronic & Other Electrical Equipment added 85 jobs and Paper & Allied Products added 78 jobs. Industrial & Commercial Machinery represents approximately 40% of the manufacturing companies in the city; and accounts for the largest manufacturing job loss (525 jobs). Rubber & Misc. Plastics decreased by four (4) companies, and experienced a loss of 366 jobs. The Primary Metals Industries has declined by three (3) companies yet has experienced a 333 person decrease in employment. Misc. Manufacturing decreased by two (2) companies and resulted in a decrease of 324 jobs.

As noted in Chapter 4, in 2008, approximately 1,460,165 sq. ft. (13%) of the industrial space in Mentor was available. The largest available space is 490,000 square feet in the former Caterpillar building, 416,000 square feet in the former George Worthington building, 180,000 square feet in the former CE Tyler building. These "industrial dinosaurs" account for approximately 3/4 of the total available space in the City. The City of Mentor's "windshield" survey indicated approximately 2.1 million square feet of vacant industrial space; virtually unchanged from 2008. It is estimated that this figure may increase slightly in 2009 amid current economic conditions.

Table 9.8 Number of Employees & Companies (manufacturing sector), Mentor

	2005	*2006*	*2007*	*2008*	*2009*	*% Change 2005-2009*	*Net Change 2005-2009*
Number of Employees	8,741	8,304	8,969	8,088	8,439	3.4%	-302
Number of Companies	286	288	298	284	278	2.8%	-8

Table 9.9 Number of Companies by Manufacturing Sector, Mentor

SIC Code		*2005*	*2006*	*2007*	*2008*	*2009*	*% Change 2005-2009*	*Net Change 2005-2009*
20	Food & Kindred Products	2	3	4	2	2	0.0%	0
21	Tobacco Products	0	0	0	0	0	0.0%	0
22	Textile Mill Products	0	0	1	2	2	200.0%	2
23	Apparel & Other - Finished Products	8	8	7	5	5	-37.5%	-3
24	Lumber and Wood Products	5	5	6	4	3	-40.0%	-2
25	Furniture & Fixtures	4	4	3	4	4	0.0%	0
26	Paper & Allied Products	3	5	4	6	4	33.3%	1
27	Printing, Publishing & Allied Industries	17	19	17	20	20	17.6%	3
28	Chemicals & Allied Products	10	9	10	11	11	10.0%	1
29	Petroleum, Refining & Allied Industries	0	0	0	0	0	0.0%	0
30	Rubber & Misc. Plastics	17	17	14	9	13	-23.5%	-4
31	Leather & Leather Products	1	2	1	0	0	-100.0%	-1
32	Stone, Clay, Glass & Concrete Products	6	7	9	9	7	16.7%	1
33	Primary Metal Industries	7	7	8	4	4	-42.9%	-3
34	Fabricated Metal Products	32	31	28	34	32	0.0%	0
35	Industrial & Commercial Machinery	117	114	119	109	109	-6.8%	-8
36	Electronic & Other Electrical Equipment	19	21	26	22	21	10.5%	2
37	Transportation Equipment	7	6	8	8	5	-28.6%	-2
38	Measuring & Analyzing Instruments	14	17	19	21	21	50.0%	7
39	Misc. Manufacturing	17	13	14	14	15	-11.8%	-2
	Total	286	288	298	284	278	-2.8%	-8

City of Mentor

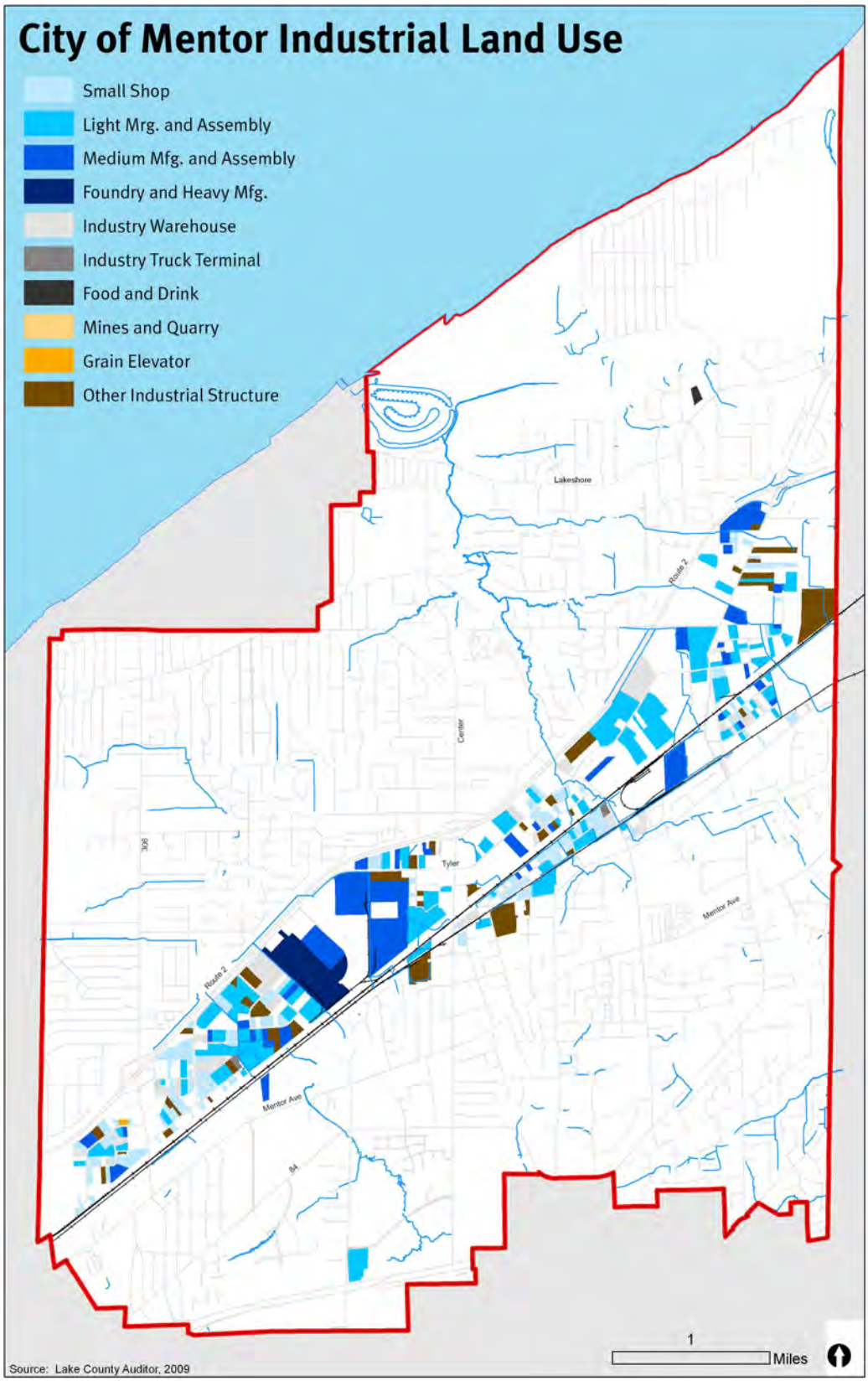
Table 9.10 Number of Employees by Manufacturing Sector , Mentor

SIC Code		2005	2006	2007	2008	2009	% Change 2005-2009	Net Change 2005-2009
20	Food & Kindred Products	17	19	22	5	5	-70.6%	-12
21	Tobacco Products	0	0	0	0	0	0.0%	0
22	Textile Mill Products	0	0	5	10	10	1000.0%	10
23	Apparel & Other - Finished Products	56	51	31	15	15	-73.2%	-41
24	Lumber and Wood Products	66	61	61	51	11	-83.3%	-55
25	Furniture & Fixtures	43	39	34	20	109	153.5%	66
26	Paper & Allied Products	207	202	295	348	285	37.7%	78
27	Printing, Publishing & Allied Industries	252	250	252	313	314	24.6%	62
28	Chemicals & Allied Products	276	226	265	279	284	2.9%	8
29	Petroleum, Refining & Allied Industries	0	0	0	0	0	0.0%	0
30	Rubber & Misc. Plastics	836	973	523	411	470	-43.8%	-366
31	Leather & Leather Products	1	34	33	0	0	-100.0%	-1
32	Stone, Clay, Glass & Concrete Products	229	254	270	271	96	-58.1%	-133
33	Primary Metal Industries	396	180	314	157	63	-84.1%	-333
34	Fabricated Metal Products	663	661	531	594	584	-11.9%	-79
35	Industrial & Commercial Machinery	3,159	2,395	2,713	2,166	2,634	-16.6%	-525
36	Electronic & Other Electrical Equipment	731	838	890	742	816	11.6%	85
37	Transportation Equipment	354	383	525	622	405	14.4%	51
38	Measuring & Analyzing Instruments	828	1,298	1,757	1,826	2,040	146.4%	1212
39	Misc. Manufacturing	627	440	448	258	298	-52.5%	-329
	Total	8,741	8,304	8,969	8,088	8,439	-3.5%	-302

City of Mentor

The manufacturing industry continues to be an integral part of Mentor's economic portfolio. Tyler Blvd. and Heisley Road provide excellent locations for large and small scale manufacturing ventures (Map 9.3). Other areas exist for additional space if conditions warrant (current data and available sites available from the Economic and Community Development Department).

Map 9.3: Industrial areas



9.4 FUTURE BUSINESSES PATTERNS

Recreation as Economic Development

Communities across the Great Lakes region are beginning to view local water bodies as more than just water. They are recognizing water as a tourist amenity and asset. Many are taking action to preserve and protect river banks, coastal areas and wetlands and encouraging controlled development and public access to these highly desired amenities. The Mentor Lagoons, Mentor Harbor, Headlands Beach State Park and Lake Erie provide a built in competitive advantage for the City.

Without question, water features attract people to the city. Estimates from the Ohio Department of Natural Resources indicate approximately 1 million visitors to Headlands Beach State Park on an annual basis. Three yacht clubs/marinas exist in the Mentor Harbor. During the recreational boating season approximately 700 boaters are using the harbor area. Thousands of visitors (often from outside the community) frequent the Mentor Lagoons Nature Preserve and Marina on an annual basis. It is estimated that visitors to the SAMP area (see Ch. 7) spend approximately $1.6 m – 8.2 m in the local economy (Sohngen, 2003).

From an economic development standpoint, the City must attract more people to these sites and develop additional amenities that generate revenue for the city. The construction of new overnight accommodations at the Diamond Center is a positive factor in capturing additional tourist dollars.

Table 9.11 Lake County Tourism Economic Impact

Year	*Receipts (output)*	*Employment*	*Payroll*	*Tax revenue*
1996	$241,687,000	7,162	$88,874,000	$17,729,000
1998	$261,639,000	7,497	$96,350,00(	$19,241,000
1999	$456,880,000	n/a	n/a	n/a
2000	$477,160,000	n/a	n/a	n/a
2001		n/a	n/a	n/a
2002		n/a	n/a	n/a
2003	$483,500,000	11,800	$258,100,000	$61,600,000
2004	$494,200,000	12,800	$287,100,000	$67,600,000
2005	$546,272,348	n/a	n/a	n/a
2006	$568,751,047	n/a	n/a	n/a
2007	$587,558,785	8,384	$157,885,073	$78,407,321

(Lake County Visitor's Bureau)

Data from the Lake County Visitors Bureau clearly reveals the economic impact provided by the tourism industry (Table 9.11). Tourism receipts fall into the categories of transportation (such as water, air, ground, and service stations), retail (such as gift shops and general merchandise), eating and drinking places, lodging, and amusement/recreation (such as golf, museums, and parks).

The City should continue to pursue additional recreational lands, when feasible. Recent acquisitions of the Morton Salt property and Blackbrook Golf Course should be considered a component of the economic development equation in the City.

The information presented on the following page provides a brief economic impact analysis of the boating industry.

Boating impacts

National Statistics

- An estimated 68.84 million Americans participated in recreational boating during 2002.
- The number of recreational watercraft owned in the U.S. last year was estimated at 17.3 million, representing a 10 percent increase since 1988.
- An estimated $30.3 billion was spent nationwide last year on the purchase of new and used boats, motors, engines, trailers, accessories and other marine related expenditures. This is nearly triple the $11.2 billion that was spent in 1993.

Ohio Statistics

- Ohio ranks eighth nationally in the number of registered watercraft.
- Ohio's population increased 4.7 percent from 10,847, 115 in 1990 to 11,353,140 in 2000. Over the same period, the number of registered recreational watercraft increased 10.1 percent from 378,249 to a record 418,701.
- There are 500 marinas and boat dealerships and more than 55,000 docks and rack storage spaces present in Ohio. In 2008 Ohio ranked 9th nationally with 411,366 registered recreational watercraft, in the following general categories:
    - Powerboats & PWC: 78%
    - Canoes & Kayaks: 19%
    - Sailboats (no auxiliary power): 2%
- Watercraft registration statistics show a total of 80,640 Ohio-registered canoes/kayaks in 2008, up 34% from a total of 60,065 registered canoes/kayaks in 2003. Canoe/kayak registration fees generated total income of $543,740 for the Waterways Safety Fund in 2008.
- A total of 44,464 personal jet-propelled watercraft were Ohio-registered in 2008, or 10.7% of all Ohio-registered watercraft. These craft collectively are commonly referred to by some of their commercial brand names such as Jet Ski or Waverunner.

Economic Impact

- Recreational boating in Ohio contributes an estimated $1.5 billion annually to the state's economy and supports 19,500 jobs.
- Tourism is a $38 billion industry – Ohio's 3rd largest industry - and one that supports the full-time equivalent of more than 450,000 Ohio jobs which generate nearly $10 billion in direct earnings. More than half of all Ohioans are employed by the hospitality industry. Ohio is located within a one-day drive of 60% of the USA population.
- The Lake Erie region of northern Ohio includes 312 miles of shoreline. Lake Erie tourism generates $10.7 billion in direct sales and employs 119,000 people in tourism-related businesses. It also generates $430 million in state tax revenue and $320 million in local tax revenues.
- More than 5.5 million is paid annually in watercraft registration fees. Ohio watercraft owners paid $12.1 million in state fuel taxes during fiscal year 2001.
- Excluding boat payments, the typical boat owning household spends an average of $5,625 annually on recreational boating.

The Average Boat/Boater

- An estimated 3 million Ohioans go boating each year, or nearly 1 in 4 Ohioans. Almost half of all Ohio residents (48%) have participated in recreational boating at least once in their lifetime, according to an Ohio State University study.
- The average Ohio boat owner is 52 years old with an annual household income of $81,700 and 26.5 years of boating experience. Boat ownership by women increased from 2.6% in 2001 to 7% in 2007. (OSU)
- The average boat-owning household in Ohio has 2.13 boats. The average length of boats in Ohio is 19 feet and the average age is 16 years. The average engine size for powerboats is 160 horsepower.

(Adapted from Boating in Ohio Fact Sheet, Ohio Department of Natural Resources whose sources include: Boating Associations of Ohio; Census / Bureau; National Marine Manufacturers; ODNR Division of Watercraft; Ohio Division of Travel and Tourism; Ohio Sea Grant)

New Era of Manufacturing

As noted by the Ohio Department of Job and Family Services, "employment in goods-producing industries is expected to continue to decline, with heaviest loses in manufacturing. Manufacturing will remain, but will change. Improved productivity may mean that future production workers will need more high-tech skills. New technologies for green energy efforts could produce more jobs."

Future economic development and workforce attraction strategies should focus on emerging high growth industries in healthcare, bioscience, alternative energy and advanced "white collar" manufacturing. More specifically, the City should consider aligning their resources with the following segments identified by the Ohio Business Roundtable .(http://development.ohio.gov/strategicplan/documents/WorldClassOhio-OhioBusinessRoundtable.pdf, 2003):

Advanced Materials

- High-performance materials for structural components: These materials have a relatively high strength-to-weight ratio, can transmit high mechanical loads dynamically or statically, or can effectively operate in harsh environments.
- Functional polymer-based materials: Functional materials have special properties beyond those of basic materials. Ohio's strength in one particular area of functional materials -- functional polymer-based materials -- holds high potential for application growth.

Biosciences

- Medical devices and imaging; translational and clinical services; cardiovascular, cancer, and child health; agriculture, pharmaceuticals and homeland security project: Ohio has strength on which to build in all of these areas.
- Intersections between complimentary, well-developed technology areas and bioscience: bio-informatics, bio-materials, bio-science targeted nano-devices and advanced manufacturing all hold promise for collaboration and commercialization.
- Emerging technologies: This includes regenerative medicine and cellular engineering, and other areas defined by entrepreneurs as growing in importance.

Information Technology

- Data management: This is a specific Ohio information technology strength that cuts across all segments of industry.
- Support other technology focus areas: information technology is a crosscutting need that supports all of the other key focus areas. Ohio must invest in accelerating IT application and adoption in these areas.

Instruments, Controls, Electronics and Advanced Manufacturing Technologies

- Integration of computing, communication, measurement and control: An industry university center with this focus would help align needs with development.
- Technology transfer: Again, Ohio has an opportunity here to leverage university and research strengths.

Power and Propulsion

- Turbine technology: This directly impacts the aviation industry, where Ohio already is a leader. Spin-off technology benefits the entire power industry.
- Fuel cells: The quest for cleaner, more efficient power has sparked significant national interest in this emerging technology.

The ability to create a critical mass of these industries will provide competitive advantage in the marketplace.

Workforce

The City, along with the entire region, must have a qualified workforce to fulfill the job demands of the 21st century. The percentage of Lake County residents 25 and older with some college credit or associates degree is higher than the nation, but we are below the nation when examining those with bachelor's degrees. In Mentor, over 27 percent of those 25 and older have at least a bachelor's degree.

Understanding educational curriculums are not regulated by the City, local officials could act as a liaison between the private sector and educational community regarding the necessary technical skill sets required with emerging employment opportunities. 21st century workforce strategies set forth by the 2007 "Economic Development Strategy for Lake County" include:

- Provide businesses more workforce training assistance and financial incentives for employee training.

- Maximize K-16 educational opportunities to ensure students arrive in the workplace with essential general education, technical, and personal skills needed to succeed at their jobs.

- Ensure students arrive in the workplace with essential general education, technical and personal skills needed to succeed at their job.

- Develop a plan to change perceptions about manufacturing to attract new workers to high-tech manufacturing.

- Encourage employers to create a workplace that attracts young employees.

- Create a plan that helps younger workers understand employers' expectations, especially with regard to work ethics and interpersonal skills.

9.5 INCENTIVES FOR ECONOMIC DEVELOPMENT

Industry recruitment and incentive efforts should be concentrated in the professional business / service sector and advanced manufacturing sector, especially businesses related to aircraft parts, medical equipment, and precision machinery. These businesses are forecasted to have the highest growth rates over the next decade, and typically offer high salaries to their workers, and may be attracted to a city like Mentor where there is an agglomeration of like manufacturers, and an available pool of skilled workers.

Infrastructure improvements in the industrial corridor, including resurfacing and widening the Lakeland Freeway (SR 2) and Tyler Blvd, upgrading intersections and expressway exits, improving connections on north-south routes with I-90, and grade separation of busy railroad crossings, will make the area more attractive to existing and future employers.

Modernizing Ohio's Economic Development Incentives
Key incentive study recommendations (ODOD)

Simplify Ohio's property tax abatement system by consolidating all Ohio tax abatement and tax increment financing statutory authority into a single integrated program.

Refocus Ohio's property tax abatement system by establishing a tiered system that targets benefits to distressed areas, discourages urban sprawl, and provides for controlled and sustainable Greenfield development.

Reduce the potential for adverse impacts on the funding of education while encouraging greater intergovernmental collaboration between school districts and units of local government.

Refocus the Job Creation Tax Credit program to emphasize payroll growth in addition to job creation. This change will allow increased business flexibility, reflect the policy focus to grow both income and jobs, and simplify reporting requirements.

Harmonize and strengthen notification requirements when a company is seeking incentives for a project that will relocate jobs from one Ohio community to another.

The State of Ohio has the following programs to offer current and future businesses:

Low Interest Loans- The Ohio Department of Development has several low interest loan programs which can provide financing for fixed assets, such as land, building, machinery, and equipment.

Ohio Enterprise Bond Fund- Taxable and tax-exempt bond financing may be available for your project through the Ohio Enterprise Bond Fund which can finance up to 90 percent of the project costs to a maximum of $10 million. The term is subject to negotiation. The interest rate is fixed for the term of the loan and is determined at the time the bonds are issued.

166 Direct Loan- This loan would be available to help finance a manufacturing facility at 30 percent of the project cost to a maximum of $1 million. Each of these programs would require the payment of Ohio's prevailing wage rate on the construction of any buildings.

Workforce Recruitment- The Ohio Bureau of Employment Services can provide, at no cost to a business, labor market data, workforce recruitment, and screening of new workers. Of course, final screening and selections would be done by the company.

Utility Incentive Rates- Many of Ohio's gas and electric companies have developed incentive rates for encouraging new investment in our state.

Tax Incentives- Ohio has two tax incentive programs, the **Community Reinvestment Area** (CRA) and the **Enterprise Zone** (EZ) that can provide a business with a substantial exemption on its real and/or personal property taxes. This plans recommends the creation of a CRA near the intersection of Mentor Ave. and Center St. (Map 4.18). Under the EZ Program, a company could locate its facility in Mentor and receive a tax exemption on new investments on a building, new machinery and equipment, and new inventory.

Tax Increment Financing (TIF) is another economic development tool available to the City (see inset narrative). Currently, there are six active TIFs in Lake County.

Ohio's Job Creation Tax Credit- The Job Development Initiative allows companies creating new jobs in Ohio to apply for a refund on their corporate franchise tax or state income tax credit. The business must apply for this credit before committing to the project.

Investment Tax Credit- The Investment Tax Credit Program creates a non-refundable corporate or state income tax credit for a company that purchases new machinery and equipment or re-tools current machinery and equipment that is located in Ohio and used for manufacturing.

Infrastructure Grants- The Ohio Department of Development has funds available for infrastructure improvements serving a project site. The funds are usually granted to a community. Eligible activities can include water or sewer line extensions, road upgrades, and rail spurs.

Ohio's Export Tax Credit- The credit provides a non-refundable franchise tax credit for companies that increase export sales.

Ohio's Research and Development Tax Credit- A sales tax exemption for equipment purchased for research and development.

Tax Increment Financing (TIF)

The Ohio Department of Development TIF's are a development mechanism available to local governments in Ohio to finance public infrastructure improvements and, in certain circumstances, residential rehabilitation. A TIF works by locking in the taxable worth of real property at the value it holds at the time the authorizing legislation was approved. Payments derived from the increased assessed value of any improvement to real property beyond that amount are directed towards a separate fund to finance the construction of public infrastructure defined within the TIF legislation. Local governments may authorize TIFs to fund a number of infrastructure needs including public roads and highways, water and sewer lines, remediation, land acquisition, demolition, the provision of gas, electric, and communications service facilities, and the enhancement of public waterways (note – public infrastructure does not include police or fire equipment).

The value of real property improvements are exempted from taxes through local TIF authorizing legislation enacted by the municipality, township, or county. A taxpayer whose operations are located within a TIF continues to make payments to the jurisdiction in an amount equal to the real property tax liability that otherwise would have been due had the property not been exempted. These payments in lieu of taxes, or Service Payments, are collected by the county treasurer in the same manner as real property taxes, but are deposited into separate public improvement tax increment equivalent funds.

Source: Ohio Department of Development

Further information for economic development programs can be found at odod.state.oh.us/EconomicDevelopment.htm.

In addition to State Programs, the City's Economic Development department, along with Mentor Economic Assistance Corporation (MEACO), offers the following programs:

- **MENTOR INCENTIVE GRANT (MIG)**
  Annual performance based grant used to encourage payroll growth and business investment. Grant amount is based on payroll taxes paid to the City and the level of investment being made.

- **ECONOMIC DEVELOPMENT GRANT (E.D. GRANT)**
  A one-time grant primarily for businesses that are either moving into the City or existing businesses making significant investments in machinery, equipment or building upgrades. Maximum grant is $10,000 and is based on the amount of investment and payroll taxes paid to the City.

- **COMMUNITY REINVESTMENT AREA ZONES (CRA)**
  Targeted reinvestment areas that provide businesses with real property tax exemptions for developments that increase the property valuation resulting from new construction or remodeling of existing structures.

- **SMALL BUSINESS LOAN FUND**
  Revolving loan fund created to stimulate growth and expansion of manufacturing, commercial, and retail businesses that demonstrate job creation potential. Maximum loan amount is $25,000, with below market fixed interest rates for a term of 5 years.

- **SBA 504 LOAN PROGRAM**
  The 504 loan program is an economic development financing tool administered by the Mentor Economic Assistance Corporation that provides growing businesses with long-term, fixed-rate financing for major fixed assets, such as land, buildings, and heavy machinery. Loan program works with private sector lenders to help secure financing to small businesses. Key advantages are fixed-rates, long term (20-years), and only 10% down payment.

Mentor Economic Assistance Corporation (MEACO)
Based in the Mentor Municipal Center, MEACO is a certified development company whose mission is to advance economic development opportunities within the City of Mentor. MEACO is authorized by the U.S. Small Business Administration to operate the 504 Loan Program and also manages the Mentor Small Business Loan Fund in cooperation with the City of Mentor. These programs have created more than 1,600 jobs and represent millions of dollars in investment.

Use of incentives and other government assistance, such as property acquisition through eminent domain, should not be directed at specific retail businesses where it would compete with established merchants, giving it an unfair advantage in the marketplace. Incentives should not be offered to national retailers that would probably locate in the City if such a benefit were not otherwise offered. Incentives should also not be offered for retail projects that may hurt shopping districts in surrounding communities.

Retailers establish a business at a location because a market exists for a product or service they offer. Incentives are not required to lure a new retail business, and few government agencies in the United States offer direct incentives to retailers. Economic development funds should be used to make an area more attractive to retail businesses, through infrastructure or streetscape improvements, nonconforming sign removal, façade restoration in older pedestrian-oriented business districts, or retrofitting a vacant or dying retail center into a more pedestrian-oriented urban village or upscale lifestyle center.

In-house, cost effective incentives include:

- Streamlined permitting and zoning process (in progress)
- Maintaining an inventory of construction or move-in ready sites/facilities.
- Consider the elimination of ballot box zoning referendums where piecemeal land use (job growth) decisions may be made in reaction to isolated circumstances, incorrect dissemination of information, or simply a misunderstanding on the behalf of the electorate.
- Adopt business friendly policies for new and existing companies (welcome wagon).

9.6 TARGET AREAS

Future economic development initiatives should be concentrated in the following areas:

Tyler Boulevard Corridor

Tyler Blvd. provides a unique mix of existing structures/facilities and vacant land for a wide variety of manufacturing and/or industrial needs. Minimal land use conflicts exist in the corridor due to the buffer provided by SR 2 and the railroad corridor. The critical mass of existing businesses, recent improvements to Heisley Rd. and current upgrades to SR 2 and Tyler Blvd. will allow this area to maintain a competitive advantage over other manufacturing areas.

Diamond Center

The continued population shift to central and eastern Lake County has allowed the Heisley Rd. corridor to develop as a commercial and business node. The Diamond Center will continue to grow as a destination location based on the restaurants, hotels and retail amenities available.

Future development should carefully consider traffic impacts to Heisley Rd. Over the long-term, a second ingress/egress to the area is recommended.

Lakefront / Mentor Marsh

To date, Mentor has proactively taken steps to preserve environmentally sensitive lands. When feasible, acquisition of lands near the Mentor Lagoons, Mentor Marsh and Lake Erie should continue (see Map 4.16). In addition to the open space provided to the residents, land protection and the subsequent tourism generated will continue to be a growing 'industry' and should be considered in future economic development planning.

Great Lakes Mall / Plaza Boulevard

Mixed use zoning and development strategies should be considered for the area surrounding the Great Lakes Mall and the Plaza Blvd. corridor. The ability to maintain closed air malls, similar to Great Lakes Mall, in an era of online retailing and open air mixed use facilities, is challenging.

While retail is the primary business use of the area, competition in the region (and within the City) has diluted the customer base. Understanding retail is important to the local economy; regional data indicates a saturation of retail space in northeast Ohio. Future development scenarios could incorporate office uses, multi-family and/or senior care residential accommodations.

I-90 / SR 615 Interchange *(Newell Creek)*

The opening of the SR 615 / I-90 interchange in 2005 provided an excellent economic development opportunity in Mentor. To date, a mix of residential units and office uses have been developed. This plan recommends the continuation of mixed use, with an emphasis on professional office and business parks capitalizing on the visible highway frontage. The location of future businesses should be examined in relationship to other potential sites in the City. For example, manufacturing oriented uses should be directed to the Tyler Blvd. corridor.

9.7 SMART GROWTH AND ECONOMIC DEVELOPMENT

Recognizing the importance of economic development issues and their role in smart growth, in 1997, the Local Government Commission developed a set of 15 principles specifically focused on economic development. The Ahwahnee Principles for Economic Development promote the following and should be utilized to shape the decision making process in Mentor.

1. Integrated approach. Government, business, education, and the community should work together to create a vibrant local economy through a long-term investment strategy that encourages local enterprise, serves the needs of local residents, workers, businesses, promotes stable employment and revenues by building on local competitive advantages, protects the natural environment, increases social equity, and is capable of succeeding in the global marketplace. For Mentor, this means an emphasis on small-medium, locally owned businesses that offer middle-class and higher wages, which produce a product or offer a service that meets a need not just locally, but internationally.

2. Vision and inclusion. Communities and regions need a vision and strategy for economic development according to the economic principles. Visioning, planning and implementation efforts should continually involve all sectors, including the voluntary civic sector and those traditionally left out of the public planning process. The Comprehensive Plan should be a starting point for a larger economic development planning effort in the city, which includes businesses, community officials, and residents.

3. Poverty reduction. Economic development efforts should be targeted to reducing poverty by promoting jobs that match the skills of existing residents, improving the skills of low-income individuals, addressing the needs of families moving off welfare, and insuring the availability of quality affordable child care, transportation, and housing.

4. Local focus. Because each community's most valuable assets are the ones they already have, and existing businesses are already contributing to their home communities, economic development efforts should give first priority to supporting existing enterprises as the best source of business expansion and local job growth. Luring businesses away from neighboring communities is a zero-sum game that creates no new wealth in the regional economy. Community economic development should focus instead on promoting local entrepreneurship to build locally-based industries and businesses that can succeed among national and international competitors.

5. Industry clusters. Communities and regions should identify specific gaps and niches their economies can fill, and promote a diversified range of specialized industry clusters drawing on local advantages to serve local and international markets. The manufacturing sector of Lake County includes a growing cluster of businesses related to aircraft parts, medical equipment, and precision machinery. This niche could form the foundation for enhancing a manufacturing-based local economy, and compensate for the loss of heavier industrial operations. New white-collar jobs based on engineering and research in specialized industry sectors can complement manufacturing-based jobs, and provide a more diversified, recession-resistant local economy. The Tyler Blvd. corridor provides an excellent land use area for these business types.

6. Wired communities. Communities should use and invest in technology that supports the ability of local enterprises to succeed, improves civic life, and provides open access to information and resources. High-speed broadband Internet service and universal wi-fi connectivity will make the city more attractive to home-based businesses.

7. Long-term investment. Publicly supported economic development programs, investments, and subsidies should be evaluated on their long-term benefits and impacts on the whole community, not on short-term job or revenue increases. Public investments and incentives should be equitable and targeted, support environmental and social goals, and prioritize infrastructure and supportive services that promote the vitality of all local enterprises,instead of individual firms.

8. Human investment. Because human resources are so valuable in the information-nation age, communities should provide lifelong skills and learning opportunities by investing in excellent schools, post-secondary institutions, and opportunities for continuous education and training available to all. Vocational education and skills training should be continued on a regional basis, creating a pool of talent that would be an incentive for employers to locate in the area.

9. Environmental responsibility. Communities should support and pursue economic development that maintains or improves the environmental and public health. Development should respect and maintain the environmental well-being and atmosphere of the City. Efforts should be made to minimize development pressures in or near the Mentor Marsh area. To the highest extent possible, the City should direct future development to areas where similar uses exist to create a critical mass and eventually a competitive advantage to the business (see #11).

10. Corporate responsibility. Enterprises should work as civic partners and stewards, contributing to the communities and regions where they operate, protecting the natural environment, contributing to civic affairs, and providing workers with good pay, benefits, opportunities for upward mobility, and a healthly work environment.

11. Compact development. To minimize economic, social, and environmental costs and efficiently use resources and infrastructure, new development should take place in existing urban/suburban, areas before using more open space.

12. Livable communities. To protect the natural environment and increase quality of life, neighborhoods, communities and regions should have compact, multidimensional land use patterns that ensure a mix of uses, minimize the impact of cars, and promote walking, bicycling, and transit access to employment, education, recreation, entertainment, shopping, and services. Over the long-term, the Great Lakes Mall and Plaza Blvd. corridor represents an opportunity to introduce new residential development near existing retail business.

13. Center focus. Communities should have an appropriately scaled and economically healthy center focus. At the community level, a wide range of commercial, residential, cultural, civic, and recreational uses should be located in the town center or downtown. While a true downtown in Mentor may have never developed, many people identify the Great Lakes Mall area as the center of the City.

14. Distinctive communities. Having a distinctive identity will help communities create a quality of life that is attractive for business retention and future residents and private

investment. The City must work to reinforce its sense of uniqueness, attractiveness, history, and cultural and social diversity, and a strong local sense of place, keeping it distinct from other exurban communities. Mentor should capitalize on the competitive advantage provided by Lake Erie, the Mentor Lagoons, Mentor Marsh, and the high amount of manufacturing that exists.

15. Regional collaboration. Since industries, transportation, land uses, natural resources, and other key elements of a healthy economy are regional in scope, communities and the private sector should cooperate to create regional structures that promote a coherent metropolitan whole that respects local character and identity.

9.8 GOALS AND POLICIES

GOAL 1

"PROMOTE A STRONG, STABLE, AND DIVERSIFIED ECONOMY WHICH MEETS THE NEEDS OF THE COMMUNITY FOR EMPLOYMENT GOODS, SERVICES, AND A GROWING TAX BASE."

Policies:

A. Ensure that land use controls do not unreasonably limit the diversity of businesses permitted in the industrial and commercial districts. Revise unnecessary or cumbersome regulations and procedures which limit the community's ability to take advantage of changes in markets and technology.

B. Target industrial promotion efforts (advertising, technical assistance, grants, loans, etc.) toward those segments of the economy which would generate the greatest likely payback.

C. Facilitate two-way communication with area businesses in order to promote community involvement, to be aware of their concerns, to take advantage of their skills and contacts.

D. Encourage development of a diversified and expanding tax base, that is, an economy comprised of sufficient and varied jobs, businesses, and real property to generate adequate tax revenues to support the public facilities and services desired by the community's residents.

E. Promote and maintain the City's leadership and image as a progressive, attractive, and profitable location for business development.

GOAL 2

"ENHANCE THE PRESENCE OF CHAIN / INDEPENDENT COMMERCIAL ENTERPRISES."

Policies:

A. Focus commercial recruitment efforts on the Great Lakes Mall area & Newell Creek.

B. Focus recruitment efforts in the *"Old Village"* and independent locations in general through joint meetings between businesses and property owners.

C. Monitor retail space vacancies, in order to promote opportunities for interest.

GOAL 3

"MAINTAIN & ENHANCE THE MANUFACTURING BASE OF THE CITY."

Policies:

A. Retain existing business.

B. Promote manufacturing in general and specifically in growing sectors such as biotech, information technology, and fuel cell development.

C. Utilize Economic Development Incentives to attract and retain businesses (Mentor Incentive Grant, Economic Development Grant, Community Reinvestment Area, Small Business Loan Fund, MEACO SBA 504 Loan & TIF and State Incentives).

D. Monitor industrial space vacancies.

E. Active participation in the Mentor Area Chamber of Commerce Committees and other forums & organizations on an as need basis.

F. Evaluate competitive analysis for both regional and national competitors.

Chapter 10

Natural Resources

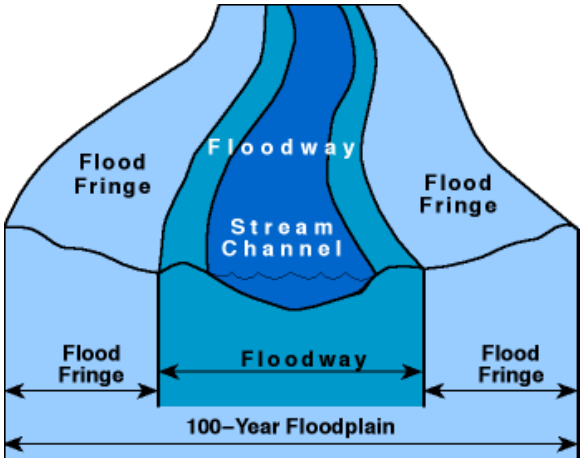
10.1 INTRODUCTION

Natural and environmental resources help define the character of Mentor, support the natural systems that provide for wildlife and a healthy environment, provide recreational and educational opportunities, and form the basis of its economy. This begins with the Mentor Marsh, Lake Erie, stream valleys and watersheds, and remaining wooded tracts.

The intent of this element is to promote the conservation and integration of natural systems and resources with a growing residential population, and reduce the impacts of man-made development on the community, property, and lives of the residents.

10.2 FLOODPLAINS

Map 10.1: Floodplain Graphic



According to the Ohio Department of Natural Resources, the floodplain is divided into two areas based on water velocity: the floodway and the flood fringe (Map 10.1). The floodway includes the channel and adjacent floodplain area that is required to pass the 100-year flood events without unduly increasing flood heights. This is the hazardous portion of the floodplain where the fastest flow of water occurs.

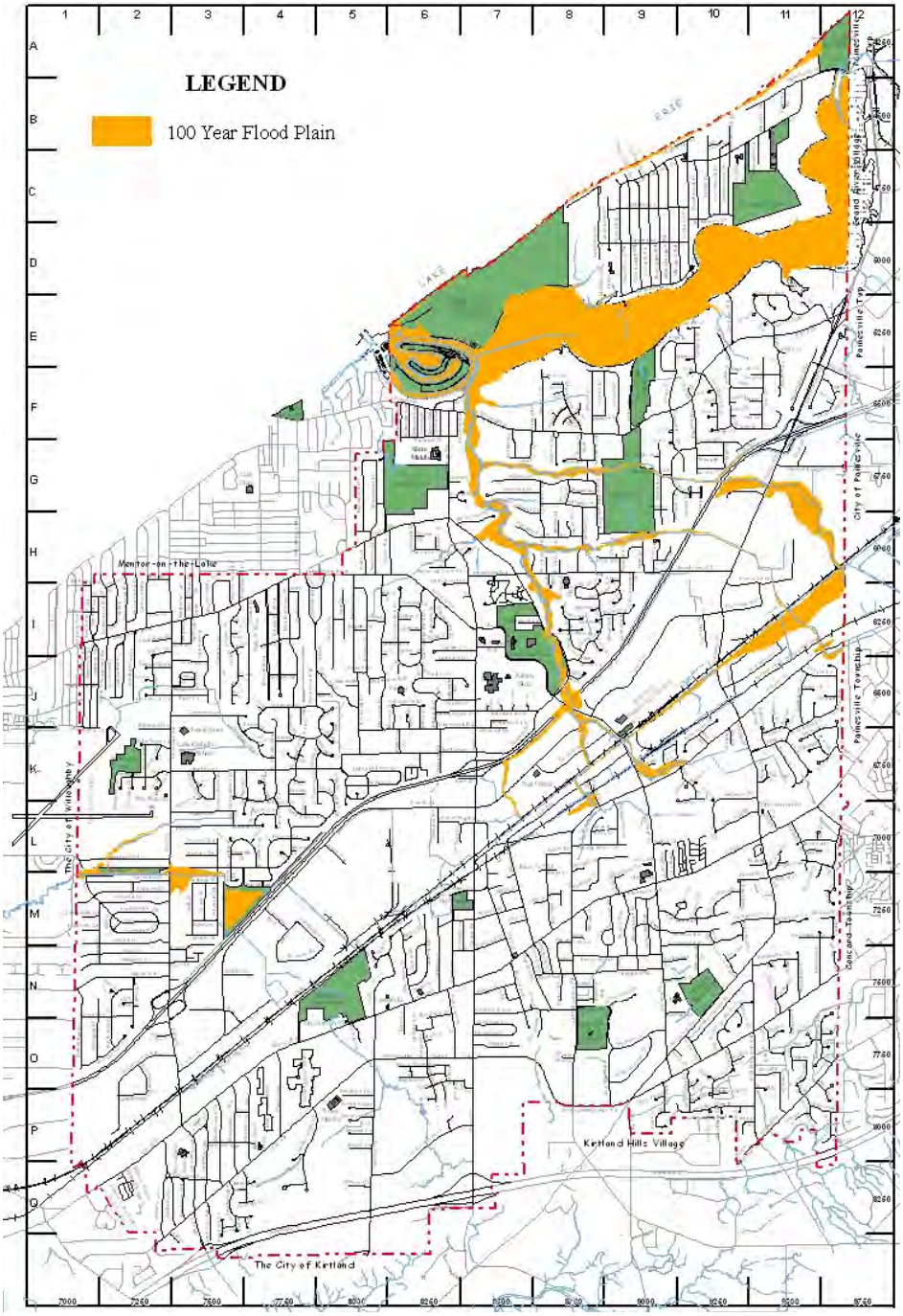
Floodplains are those areas adjacent to water courses that are prone to flooding in certain size storms. Map 10.2 displays the flood plan boundaries for the City of Mentor. The Federal Insurance Administration has established standards for development in these areas. Mentor's administration of the flood-plain regulations has proven successful in preventing flood related losses. The Ohio Department of Natural Resources (ODNR) performs periodic Community Assistance Visits (CAV). The most recent CAV was in April, 2007 with all identified administrative and regulatory issues being addressed.

Due to the high degree of hazard found in the floodway, floodplain regulations require that proposed floodway developments do not block the free flow of flood water as this could dangerously increase the water's depth and velocity.

The flood fringe is the portion of the floodplain, outside of the floodway, that contains slow-moving or standing water. Development in the fringe will not normally interfere with the flow of water. Therefore, floodplain regulations for the flood fringe allow development to occur but

require protection from flood waters through the elevation of buildings above the 100-year flood level or flood proofing buildings so that water cannot enter the structure.

Map 10.2: Floodplain (aerial)



The Ohio Department of Natural Resources records show 93 structures within the flood hazard area in Mentor (Maps 10.2,). Forty-eight of those structures are commercial or industrial in nature and the other 45 are houses. Out of 19,501 housing units in the city, only 3.0% are located in the floodplain. This fact can be traced to the adaptation of the Flood Hazard Regulations in 1969. The City of Mentor was able to design themselves around the floodplains, so they were able to keep homes away from them. FEMA is currently revising the floodplain maps, so the number of housing units in the floodplain may increase slightly.

Mentor's existing flood damage prevention regulations are in Chapter 1351 of the building code. These regulations identify the 1984 and revised 1995 flood insurance rate maps and associated flood insurance study as the basis for establishing areas of special flood hazard. These regulations establish minimum flood protection standards for buildings and other types of development in identified floodplains. Minimum standards require structures to be flood proofed or elevated above base flood elevations, anchoring of structures, and prohibit fill in floodways unless a property owner can verify that the base flood elevations will not be increased.

18 Inch Freeboard

A "freeboard" is a safety factor expressed in feet above a flood level. Designating an eighteen inch freeboard helps compensate for unknown factors that can contribute to flood heights greater than the height calculated for the base flood and conditions such as wave action, obstructed bridge openings, debris and ice jams, and the effects of urbanization in a watershed. Another advantage of a designated freeboard is the reduction in the cost of flood insurance. The insurance rates for new structures in special flood hazard areas are directly related to their lowest floor elevation compared to the base flood elevation. Disadvantages of freeboard include potentially increased construction costs for structures, and more fill being placed in the special flood hazard areas if the method for elevating the structure is a fill pad.

Cumulative Substantial Damage and Substantial Improvement

The standard requires communities to track cumulative substantial damage and improvements in special flood hazard areas. This will ensure that flood protection measures are incorporated into building reconstruction or repairs after a flood event or any event damaging a structure that was built before the effective date of the first flood insurance rate map (FIRM).

In addition, adding a cumulative substantial damage and improvement provision to the City's code will increase the availability of the *Increased Cost of Compliance* (ICC) flood insurance coverage for building owners. The ICC coverage will pay up to twenty thousand dollars beyond the flood insurance claim payment for compliance with local flood damage reduction regulations. If Pre-FIRM structures have been declared substantially damaged and are required to meet flood damage reduction regulations because of cumulative losses, the structure owner can only obtain ICC coverage if the community has adopted the cumulative provisions language. The additional standards do require that detailed records are kept up to the date of damages and improvements.

Fill Restrictions

Fill in floodplains can cause adverse impacts on adjacent property owners, water quality impacts due to increased turbidity and siltation, and loss of flood storage capacity. Minimum NFIP regulations include guidelines on the type of fill used in construction in a special flood hazard area. Including higher standards regarding fill material would provide quality, stability and compaction standards for fill placed in flood hazard areas.

Foundation Design

The objective of the higher standard is to ensure proper design and construction of building foundations to protect building structural integrity against the effects of flood forces. In many cases foundation damage renders a structure uninhabitable or subject to extensive repairs. The minimum NFIP standard includes foundation design requirements for non-residential structures. The high standards extend these standards to residential structures.
(Resources: Ohio Department of Natural Resources. *Recommended Ohio Floodplain Regulation Criteria for Floodplain Management*. August 2006.)

10.3 SOILS

Mentor is in the Lake Plain physiographic region of Ohio. The greatest geological influence on the area is the former post-glacial Lake Erie. This area was highly glaciated during the last ice age and is characterized by four basic soil types (Map 10.3):

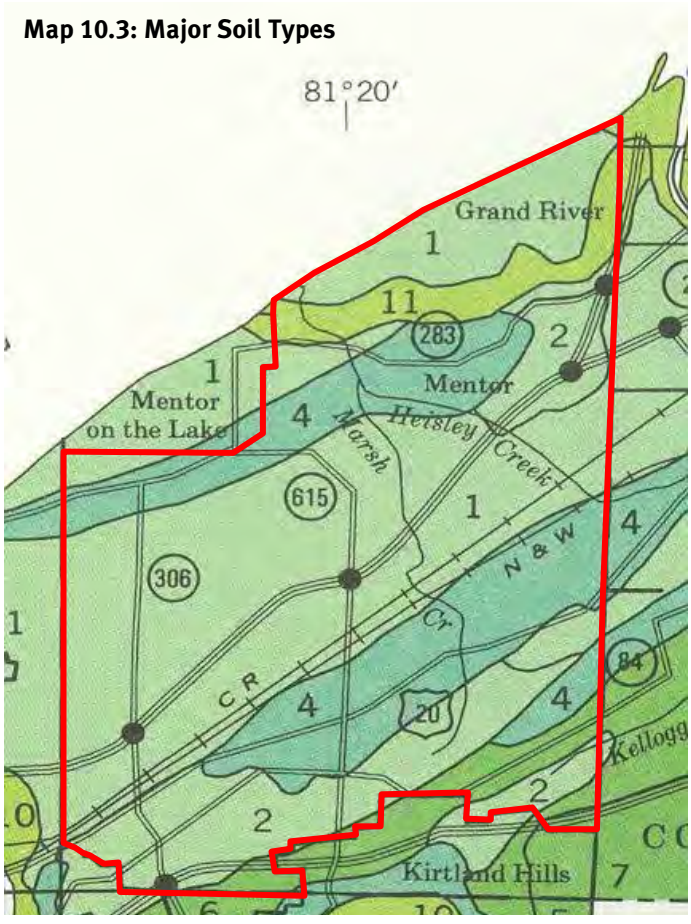
1. Conneaut-Painesville: nearly level and gently sloping, poorly drained soils that formed in silty glacial till or loamy material over silty glacial till, on the lake plain. *(Shown as 1 on map.)*

2. Red Hook: Nearly level, somewhat poorly drained soils that formed in loamy outwash deposits underlain by stratified material; on lake plain and offshore bars. *(Shown as 2 on map.)*

3. Tyner-Otisville: Nearly level to sloping, well drained and excessively well drained soils that formed in water-sorted sediment; most on beach ridges *(Shown as 4 on map…Mentor Ave., Johnnycake and Lakeshore Blvd.)*

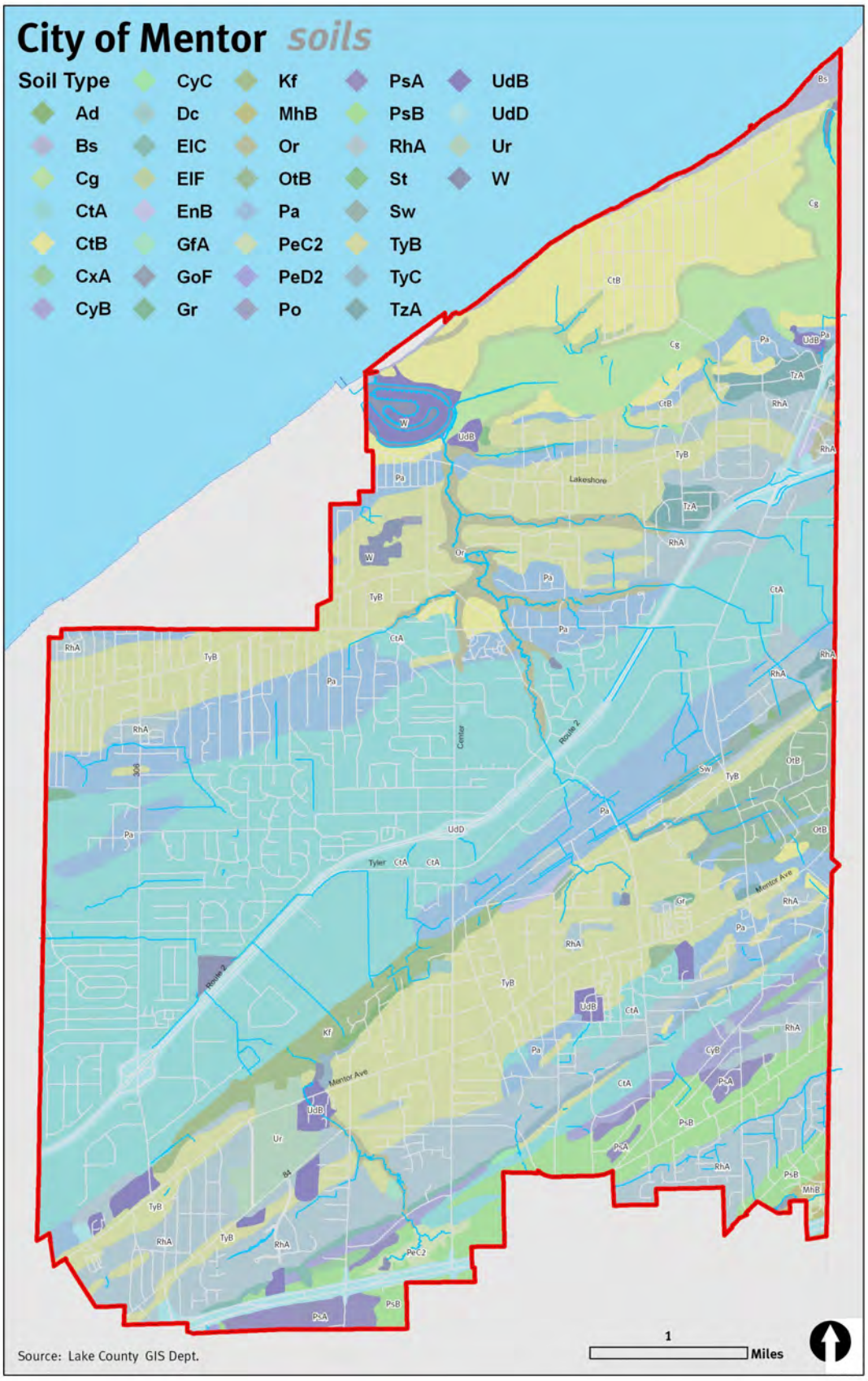
4. Carlise: Level, poorly drained soils that formed in accumulated organic material; in marshes. *(Shown as 11 on map. This is the Mentor Marsh area which was the post glacial drainage channel of the Grand River.)*

Map 10.3: Major Soil Types



The thirty-five specific soil classifications existing in Mentor are shown on Map 10.4.

Map 10.4: Soils



Soils affected by Humans

There are four soil types that are characterized by human impact. The first one is Urban land, which consists of areas of 10 or more acres that are covered by buildings pavements or other human made surfaces. In this case, the Urban Land is located at the Great Lakes Mall. The next soil type is Udorthents, which is a soil created by cut and filling done for road construction. The last two soil types are smaller concentrations. There is a soil type named Dumps, Covered. This soil type consists of nonorganic waste of broken bricks and concrete etc., from construction projects. The final soil type is Pits, Gravel. These are areas that were surface mined in which aggregate has been removed and the site has been abandoned.

Soils on the lake plain and offshore bars

These somewhat poorly drained soils are on the broad flats of the lake plain and on offshore bars. These nearly level and gently sloping soils are formed in the silty and loamy lakebed sediment and outwash material. The most common soil type on the lake plain is the Conneaut Silt Loam and that is followed by the Painesville Fine Sand Loam. Both are considered to be poorly drained soils with slopes no greater than 4%. The soils are not considered very good for agriculture or development unless they are adequately drained.

Soils on the Glacier Till Plain

These soils are poorly drained to moderately drained soils that are on broad flats and in dissected areas on till plains. In Mentor, these soils are located on the border between Mentor and Kirtland and Kirtland Hills. The most common soil of this group found in Mentor is Platea Silt Loam, which is a nearly level to gently sloping soil that has poor drainage qualities to it. It can be used for agriculture purposes if it is drained or for pasture or hay if it is not drained. When poorly drained, it can be used for development.

There are also small concentrations of Pierpont Silt Loam, 6% to 18% slope with well drained soil, and Mahoning Silt Loam with shale substratum, a poor draining with near level to gently sloping soil.

Soils on Flood Plains, Drainage Ways, Terraces, Marshes, and Hillsides

Carlisle Muck is the most common soil type in this group. Carlisle Muck is level, very poorly drained soil usually located in a marsh. In this case, it is located in the Mentor Marsh. There are also concentrations of Orville Silt Loam, nearly level, somewhat poorly drained soil, that is located along a flood plain in Newell and Marsh Creeks. There are also concentrations of Ellsworth Silt Loam, a sloping to moderately steep slope soil that is moderately well drained, and Glenford Silt Loam, a moderately well drained, nearly level soil.

Soils on beach ridges, terraces, and offshore bars

Some of these nearly level and gently sloping soils are considered to be moderately well drained and some are considered to be poorly drained soils. These soils have been formed by materials being deposited by wind or water along beach ridges or on offshore bars.

Tyner Loamy Sand is the most common soil type on the beach ridges. This soil is a well drained soil that has slopes that can ran range from 1% to 12% This soil can be doughy

during a dry period, so its suitability for farming can be limited without irrigation. The soil is suitable for development where the slope is not too great.

There are also concentrations of Conotton Gravelly Loam, an excessively drained, 6 to 15% slope soil, Kingsville Fine Sand, a nearly level, poorly drained soil, and Otisville Gravelly Loamy Soil, a nearly level, excessively drained soil.

10.4 WETLANDS AND THE MENTOR MARSH

Wetlands

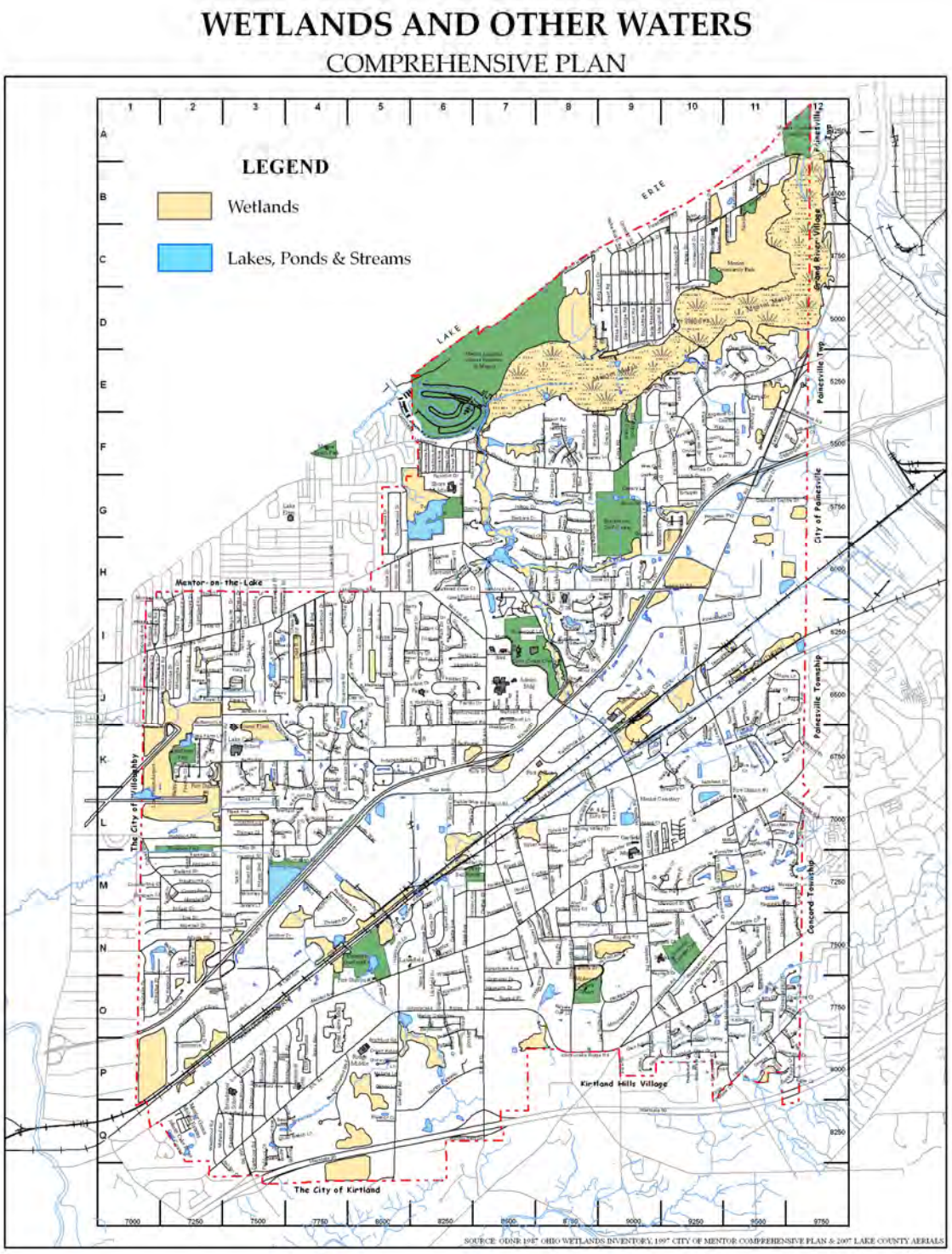
Wetlands are identified as habitats which are frequently inundated or saturated for a long duration and support characteristic plant life. Areas considered wetlands must meet the three criteria of: hydric soil, a dominance of hydrophytic vegetation, and wetland hydrology. Wetlands are important components for water quality and quantity.

According to the US EPA, wetlands provide water quality protection, fish and wildlife habitat, natural floodwater storage and reduction in the erosive potential of surface water. In Ohio, 90% of the original wetlands have been destroyed since the 1800s. Locally, development pressures have disturbed a large amount of natural wetlands.

The location and approximate boundaries of probable jurisdictional wetlands within the City of Mentor are identified on Map 10.5. These locations and boundaries were derived using the routine method (Level 1) for determining boundaries outlined in the *Corps of Engineers Wetland Delineation Manual (1987 Manual)* (Environmental Laboratory, 1987). This method employs the use of secondary source data including aerial photographs, soils, maps, National Wetland Inventory mapping, and U.S. Geological Survey topographical maps. Limited field verification was conducted in areas where discrepancies were noted between existing secondary source information, and also to determine habitat quality in highly disturbed areas.

Mitigation is required for developers who disturb wetlands on site, but the creation of new wetlands often occurs outside of the watershed that has been impacted. While regulated by the Ohio Department of Natural Resources, impact to these areas should be limited during development activities. This plan encourages mitigation measures to occur in the watershed in which the impact was located.

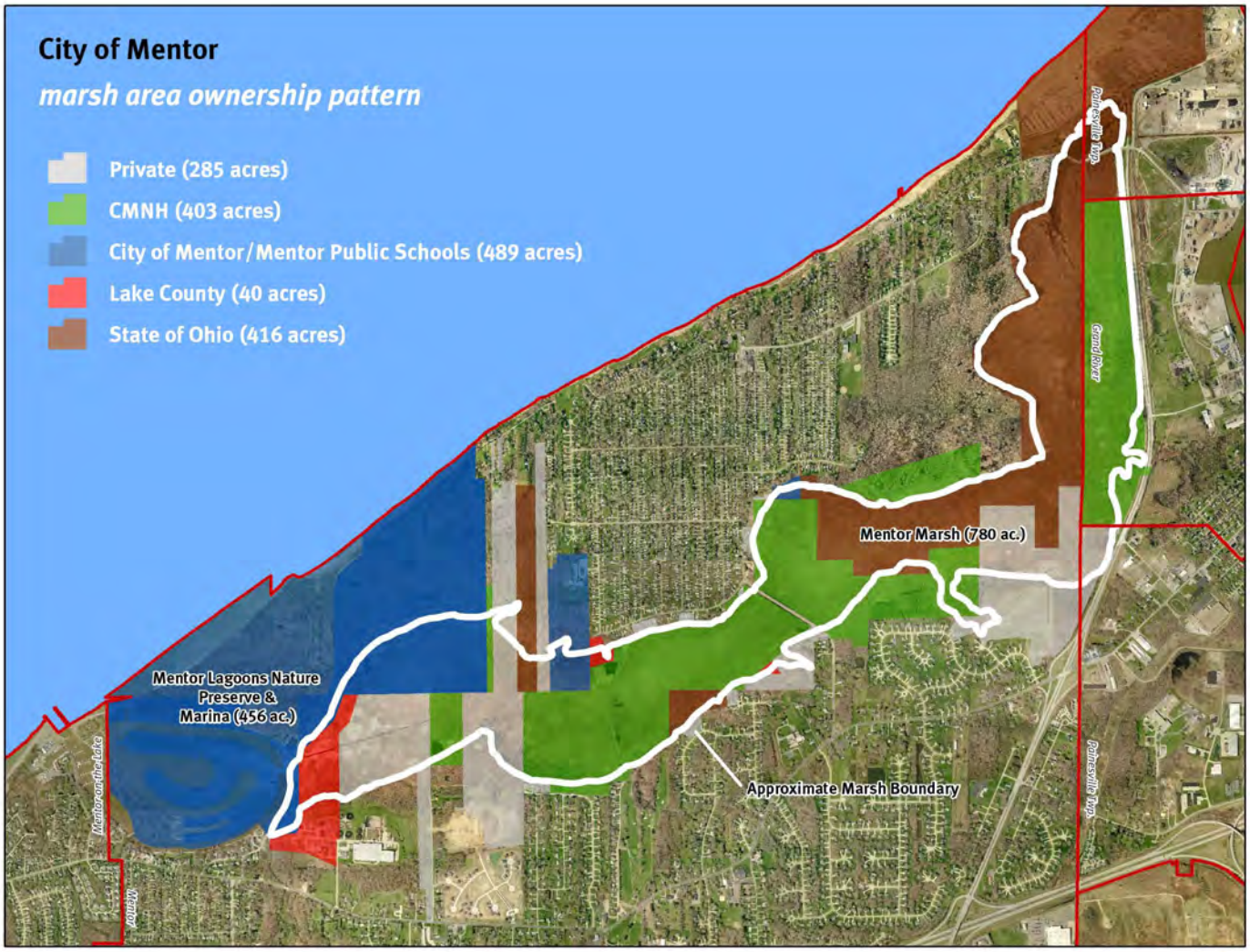
Map 10.5: Wetlands



Mentor Marsh

Mentor Marsh is the largest marsh on the Ohio shore east of Cleveland. Originally, the Mentor Marsh was where the Grand River entered in Lake Erie before the new channel, its current location, was cut. The actual marsh (white outline on Map 10.7) is approximately 800 acres which is characterized by wetlands, woods and fields. Approximately three-fourths of this land area is under the ownership of public or nonprofit organizations. In the 1967 Comprehensive Plan, there were only 400 acres of land under public ownership. The Mentor Marsh State Nature Preserve is a joint effort of the State of Ohio, Department of Natural Resources, and the Cleveland Natural History Museum. These two entities are the primary land owners. The remaining 285 acres (Significant portions lie outside of marsh itself)of marshlands is under private ownership often in large tracts of land that include both wetlands and fields (Map 10.6).

Map 10.6: Floodplain Graphic



The Mentor Marsh State Nature Preserve was established to protect and maintain the marsh area in a natural state. The Marsh Board's objective is to limit or eliminate all man-made intrusions and to allow the marsh to function as a natural ecosystem. To accomplish this

objective, they are attempting to acquire as much of the marsh wetlands as possible. They also wish to obtain a buffer area adjacent to the marsh to minimize or eliminate external influences.

Remaining hydrologic features in the city, such as the marsh, should be protected from future development. Riparian setbacks are a tool local governments can use to maintain riparian area functions. Riparian areas are naturally vegetated lands along rivers and streams. When appropriately sized, these areas can limit stream bank erosion, reduce flood size flows, filter and settle out pollutants, and protect aquatic and terrestrial habitat.

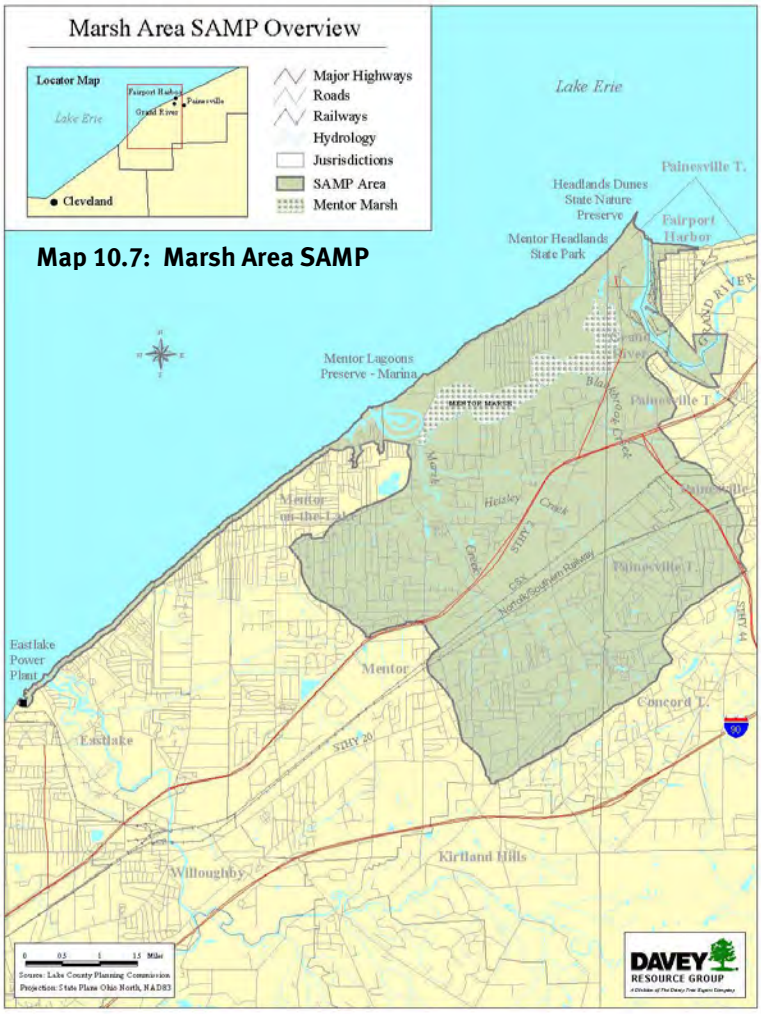
Mentor can establish riparian setbacks through a combination of landowner education, land acquisition, and land use controls on new development. The Lake County Soil and Water Conservation District, land trusts, and other organizations are skilled in assisting communities and landowners with education and acquisition efforts.

This plan recommends riparian setbacks based on the Chagrin River Watershed Partners model setback ordinance. Riparian setbacks should:

- Range from 25 feet to 300 feet depending on the watercourse drainage area.
- Minimum distances apply to both sides of designated watercourses.
- Conform to community land development patterns & natural resource management goals.
- Include provisions for communities to examine the combined impact of all setbacks (side yard, rear yard, riparian, etc.) in a subdivision or a parcel, make reasonable adjustments to ensure existing lots remain buildable, and to maintain lot yields from new subdivisions to the extent possible.

Mentor Marsh Special Area Management Plan

The Ohio Department of Natural Resources through their Office of Coastal Management undertook the process of developing a Special Management Plan for the Mentor Marsh with the help of Davey Resources Group, 18 non-governmental organizations, 16 local/regional agencies, nine State of Ohio agencies and five federal agencies. Funding was provided by the National Oceanic and Atmospheric Administration (Map 10.7).



Map 10.7: Marsh Area SAMP

A Special Area Management Plan (SAMP) is a "comprehensive plan providing for natural resource protection and reasonable coastal-dependent economic growth containing a detailed comprehensive statement of policies; standards and criteria to guide public and private uses of lands and waters; and mechanisms for timely implementation in specific geographic areas within the coastal zone" (Federal Coastal Zone Management Act of 1972, 16 U.S.C.A. Section 1453 (17)).

The Marsh Area Regional Coalition (MARC) was established to develop and promote the Mentor Marsh Area SAMP. The overlying objective of the SAMP is to protect and enhance the environmental, social, and economic assets of the Mentor Marsh Watershed and related communities for the benefit of present and future generations.

The Lake Erie Protection and Restoration Plan (Ohio Lake Erie Commission, 2000) established ten guiding principles for a sustainable Lake Erie watershed. These principles provide a framework for the MARC as it developed the Mentor Marsh Area SAMP. The Plan states that activities in the Ohio Lake Erie watershed should:

- Maximize reinvestment in existing core urban areas, transportation, and infrastructure networks to enhance the economic viability of existing communities.

- Minimize the conversion of green space and the loss of critical habitat areas, farmland, forest, and open spaces.
- Limit any net increase in the loading of pollutants or transfer of pollution loading from one medium to another.
- To the extent feasible, protect and restore the natural hydrology of the watershed and flow characteristics of its streams, tributaries, and wetlands.
- Restore the physical habitat and chemical water quality of the watershed to protect and restore diverse and thriving plant and animal communities, and preserve our rare and endangered species.
- Encourage the inclusion of all economic and environmental factors into cost/benefit accounting in land use and development decisions.
- Avoid development decisions that shift economic benefits or environmental burdens from one location to another.
- Establish and maintain a safe, efficient, and accessible transportation system that integrates highway, rail, air, transit, water, and pedestrian networks to foster economic growth and personal travel.
- Encourage that all new development and redevelopment initiatives address the need to protect and preserve access to historic, cultural, and scenic resources.
- Promote public access to and enjoyment of our natural resources for all Ohioans.

Specific taskforces exist to address/implement various variables with the plan. The following list indicates the taskforce and its associated area of concern.

- **Water Quality**

  Salt Contamination

- **Land Use and Economic Development**

  Uncoordinated Land Use Planning

- **Wetlands and Biodiversity**

  Loss
  Hydromodification
  Natural Disturbances
  Public Understanding

- **Recreation and Public Access**

  Lack of a Strategic Recreation Plan

- **Shoreline Management and Nearshore Issues**

  Insufficient Sand Supply Activities
  Landward of the Bluff Edge

In 2008, the MARC continued its planning initiative with a focus on completing an approved watershed action plan by the Ohio EPA.

This plan recommends continued participation with the SAMP and its dedication toward preservation of the area.

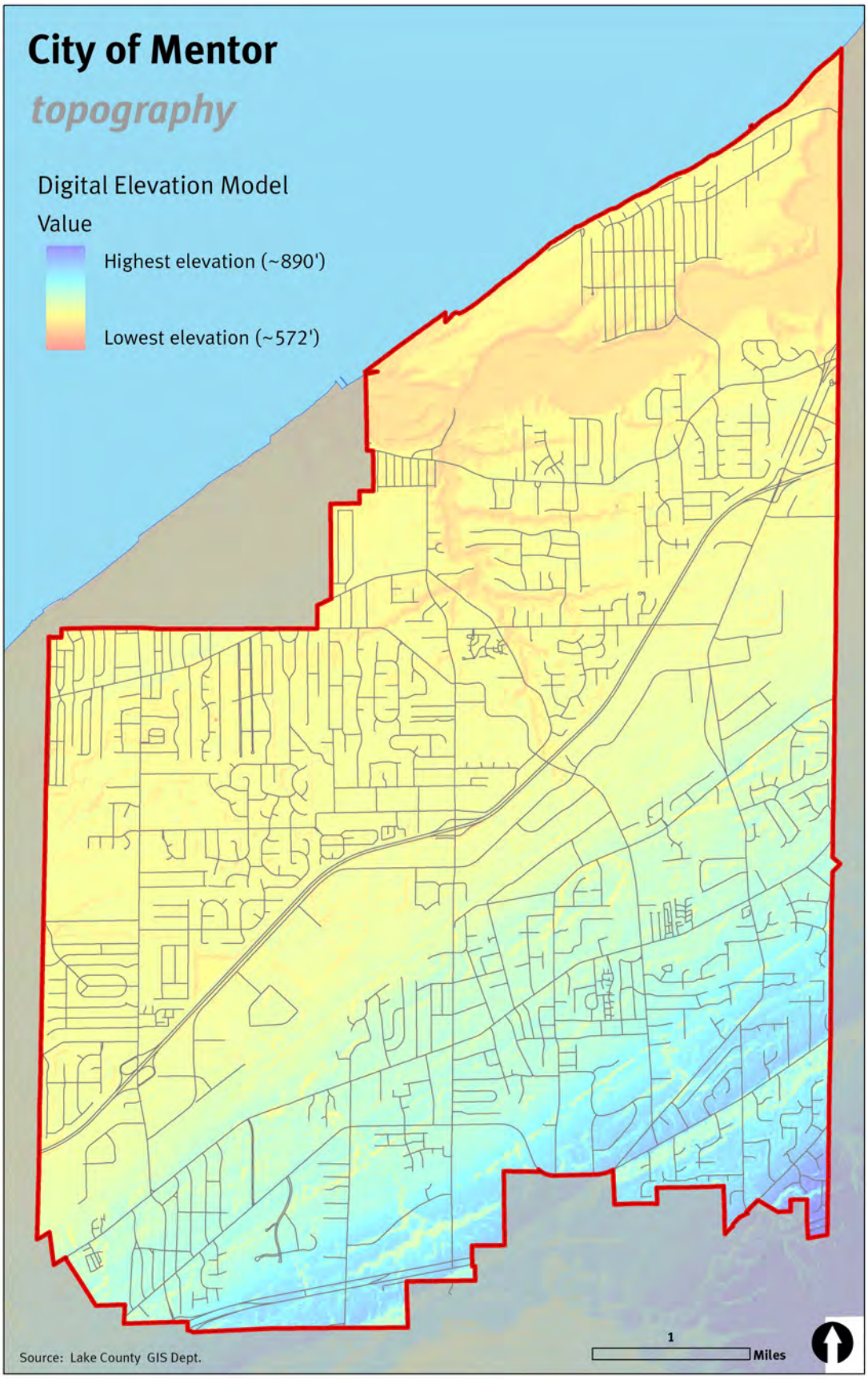
10.5 TOPOGRAPHY

The topography of Mentor and Lake County resulted from glacial movements and the changing lake levels of the prehistoric predecessors of Lake Erie. The city is generally very flat, with moderately steep topography found in the southeast corner of the City; along the ridge north of Mentor Avenue and Jackson Street; and along the Marsh Creek and Mentor Marsh valleys (Map 10.8). Overall, the land falls from a high elevation of 890 feet above sea level (southeast corner of the City) to the 572 feet lake level elevation. This 318-foot difference extends over a distance of approximately 6.2 miles, for an average slope of less than 1.0%. Between the railroad tracks and the lake, the fall is only 78 feet across 3 miles, for an even flatter slope of less than 0.5%.

Significant man-made alterations have been made to the natural topography including the elevated rights-of-way of State Route 2, I-90, and the railroads.

The significance of Mentor's very flat topography is that it impacts the City visually by restricting vistas or long distance views. It is therefore difficult to develop a spatial image of the community since landmarks are not generally visible on the skyline. The flat topography also slows the flow of surface water and results in easy obstruction of major drainage ways.

Map 10.8: Topography



10.6 LAKE ERIE

Lake Erie, the great body of fresh water forming Ohio's north coast, is the fourth largest of the five Great Lakes and the 12th largest freshwater lake in the world.

The common perception may be that Lake Erie is a timeless entity, formed in the distant past and as ancient as any visible rock or landscape, and a feature that will remain essentially unchanged for eternity. Geologists, however, view Lake Erie, in its present form, as a very recent feature – less than 4,000 years old -- that is destined for a relatively short life, geologically speaking. The known history of the lake and its predecessors has taken place in the last 14,000 years.

The presence of Lake Erie was downplayed in the 1960 Lake County Comprehensive Plan. The plan's future land use map envisioned the Lake Erie coastline as an area lined with medium-to-high density residential uses and heavy industry, with only a few areas untouched by development.

Residents and businesses increasingly recognize that Lake Erie and its tributaries are a rich resource, providing both a natural habitat with few equals and a catalyst for future sustainable economic development.

The Lake County Planning Commission, citizen groups, local government agencies and the State Department of Natural Resources, have been working to reverse and avoid the errors of the past, and maintain a healthy balance between the wise use and thoughtful protection of the resources of coastal Lake Erie.

The Western Lake County Coastal Comprehensive Plan was completed in August 2004. The study region of this plan includes an area 1000 feet shoreward of Lake Erie between the Lake-Cuyahoga county line and the City of Mentor-Painesville

That's a lot of H•O

The Great Lakes contain about 1/5 of all the freshwater on the planet. They contain 95% of the nation's supply of fresh water.

If all the water within the Great Lakes was spread evenly across the United States, the country would be covered under 9.5 feet (3 meters) of water.

Sizing up the Great Lakes

The Great Lakes extend 575 miles (925 kilometers) from the northern tip of Superior to the southern shore of Lake Erie, a spread of eight degrees in latitude.

From east to west, the Great Lakes extend more than 800 miles.

The Great Lakes have more than 10,000 miles (16,000 kilometers) of shoreline, longer than the entire Atlantic and Pacific coasts of the USA.

Lake Erie – Our Great Lake County, Ohio

Lake Erie is the 12th largest freshwater lake in the world.

Lake Erie has 871 miles (1,400 kilometers) of shoreline. There are 262 miles (421 Kilometers) of shoreline in Ohio and at least 26 islands in the western basin of Lake Erie. The exact number varies depending on water levels.

Lake Erie is the most southern, shallowest, warmest and most biologically productive of all the Great Lakes.

Lake Erie supplies more fish for human consumption than the other four Great Lakes combined. The Lake Erie walleye sport fishery is widely considered the best in the world.

Lake Erie's deepest point is 210 feet (64 meters). Lake Erie has three basins: the western basin includes the islands area, the central basin extends from the islands to Erie, PA, and Long Point, Canada, and the eastern basin extends from Erie, PA, to the east end of the lake. The western basin averages 80 feet (24 meters) in depth.

Lake Erie is 241 miles (387 kilometers) long with a widest point at 57 miles (92 kilometers) and the narrowest point at 28 miles (45 kilometers). It covers 9,910 square miles (25,667 square kilometers) and drains 30,140 square miles (78,062 square kilometers).

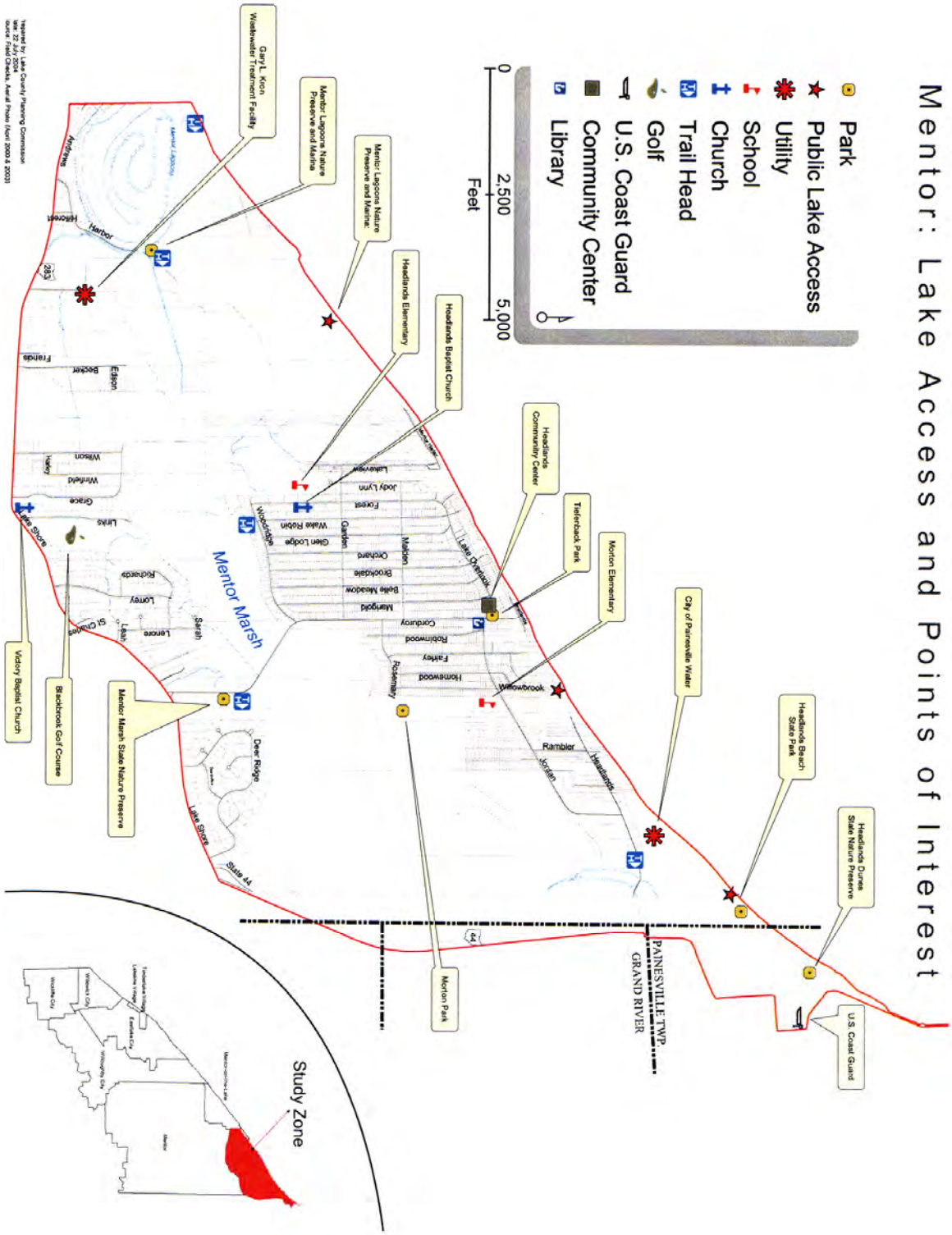
Ninety-five percent of Lake Erie's water comes from the upper Great Lakes via the Detroit River.

A drop of water entering Lake Erie from the Detroit River will take only two and a half years to reach Niagara Falls. Compare this short time to Lake Superior where a drop of water will take 191 years to move out of the lake.

Source: Lake Erie Coastal Ohio Fact Sheet

Township boundary. The report inventories existing conditions, current and proposed projects, and also examines current and projected needs within the study area (Map 10.9)

Map 10.9: Lakefront Points of Interest



A second more detailed study, the Lake County Coastal Development Plan, was completed in 2005. The plan describes the overall coastal environment and documents a response to this environment resulting in an accessible, economically viable and locally relevant Lake County coastline. The creation of the plan is intended to:

- Lead to enhanced grant award leverage created by a regional effort.
- Serve as a catalyst for landside planning of projects at the local or regional level.
- Facilitate the selection of specific coastal projects for implementation.

Although the plan deals mainly with coastal area development, it makes the following recommendations regarding natural resources.

- Local governments should assess their coastal areas, and determine what they need to protect.
- Parkland acquisition costs should include funding for shoreline stabilization projects.
- Develop shoreline protection projects.
- Overall protection of historic and cultural sites, beaches, scenic views, natural resources, natural features and recreational opportunities, as well as the lake itself.
- Control non-point source pollution and stormwater runoff.

In Mentor, long-term projects include:

- Harbor channel improvements at the Mentor Lagoons;
- Amphitheater;
- Stewardship center;
- Observation tower; and
- Expansion of the trails in Mentor Marina and Nature Preserve

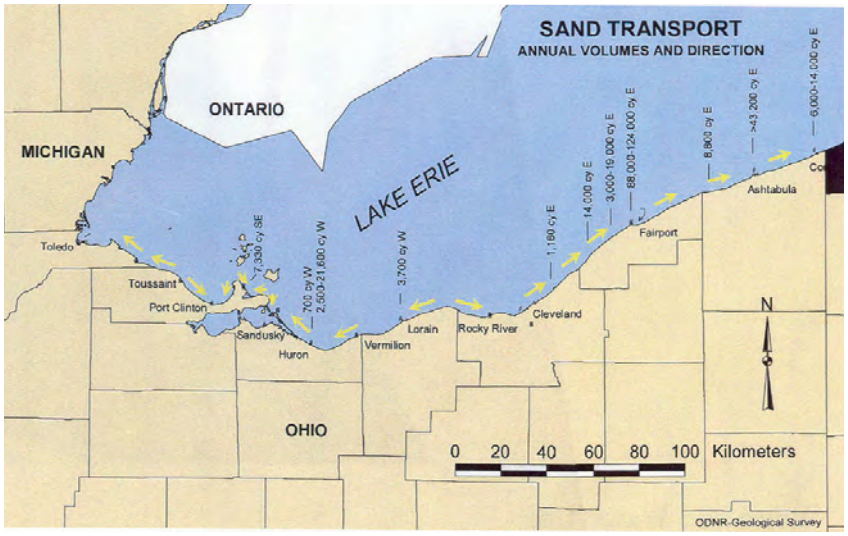
10.7 LAKE ERIE EROSION

Lakeshore erosion is the predominant geologic hazard at certain locations. Steep bluffs are formed where the waves impact the land. The height of the bluffs varies in the City. In Mentor, erosion is most noticeable along the Headlands area. Bluffs along the shoreline range from 5' to 45' in heights. Beaches are found in eastern and western sections of Mentor. From the lagoons east to the Headlands the beaches average about 100' in width. Beaches along the Headlands are extremely narrow and in some cases almost nonexistent, but begin to widen toward the Headlands Beach State Park area. Beaches along Mentor-on-the-Lake are generally quite narrow except the area just west of the Lagoons.

High bluffs along the Lake Erie shore are subject to other natural processes. The most dramatic process is called slumping. High bluffs fail naturally, and through time will eventually attain a natural stable angle of repose, or a stable slope. As the bottom of a bluff is cut away by erosion, the weight of bluff materials will cause the face of the bluff to break free. When this happens, large blocks of bluff material will collapse and fall into the lake. Waves will scour away silts and clays, leaving behind sand and stone. This is a natural beach-building process. The loss of sand caused by entrapment, groundwater seepage, surface water runoff, human activity, or changes in land use that would alter the hydrology or vegetation on a site can accelerate slumping.

Map 10.10: Littoral Sand Transport

Sand loss also has an effect on the slope beneath the water. Since beaches in the study area are narrow, there is little sand on the lake bottom to absorb wave energy. As a result, waves excavate the lake bottom close to shore. As near-shore depths increase, the amount of wave energy increases, thus increasing erosion along the shoreline.



Previous efforts to slow or stop erosion have met with limited results. Excessively long groins trap sand that would have been deposited on the downdrift shore, making those areas more susceptible to erosion; there is less sand available to buffer wave action. Owners of lakefront property in the Lake County area have often taken inappropriate measures to stop erosion, such as dumping construction debris and large objects on the beach. Dumped material will often get stirred up during a storm, gouging out more of the shoreline and accelerating slumping.

The US Army Corps of Engineers recommend several low-cost methods of protecting shoreline property. Beach fill, creating gently sloped beaches, will cause incoming waves to beak and use up their energy before reaching inland areas. Perched beaches use low retaining walls to trap sand creating a new beach for recreation and shore protection are also suitable protection measures.

Map 10.11: Offshore Barrier Islands

Well-designed offshore barrier islands or breakwaters dissipate the energy of incoming waves, trapping sand behind them without concentrating destructive wave action elsewhere (Map 10.11).

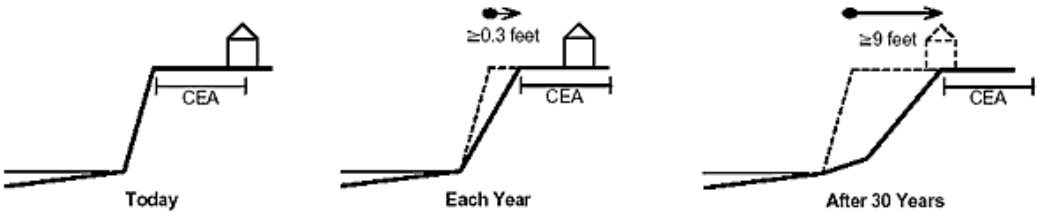
Groin fields trap and retain sand, nourishing the beach compartments between them; however, they should be designed in a way where they will not cause unacceptable erosion of the downdrift shore. As indicated in the map on the previous page, the natural sediment transport is west to east. Inappropriate protection measures often deprive neighboring properties to the east sand needed to maintain natural protection that a beach provides. Revetments are engineered structures placed on steeper banks or bluffs in a way to absorb the energy of incoming waves, without redirecting wave energy to unprotected areas.

This plan recommends the off-shore barrier protection strategy for future erosion control and beach creation exercises in Mentor.

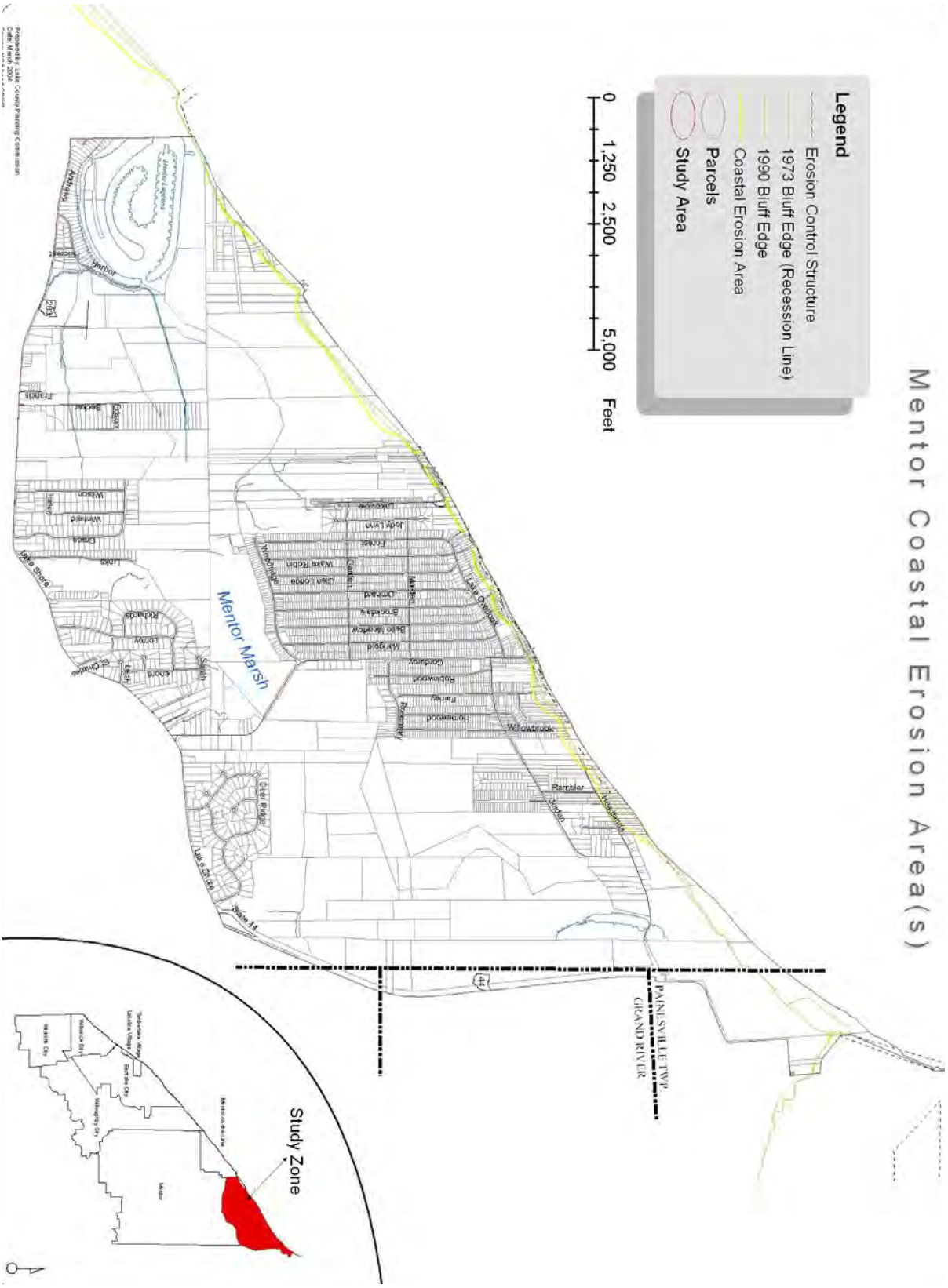
All of Mentor's coastline falls within the the Coastal Management Boundary. Community organization is the key to successful shore protection measures. A well planned, coordinated and properly constructed shore protection system extending for a distance will result in lower cost per lineal foot of protection than an individual piecemeal approach. Protection strategies vary depending on physical attributes of the site, desired results (beach vs. armor stone) and cost.

The Ohio Department of Natural Resources has developed the Coastal Erosion Area (CEA) for the entire shore of Lake Erie (Maps 10.12, 10.13). Established in 1998 (currently being revised), a Coastal Erosion Area is a designated land area along the Lake Erie shore that is anticipated to be lost due to Lake Erie related erosion *if preventative measures are not taken*. More specifically, a Coastal Erosion Area begins at the top of a bluff, bank, or beach ridge and includes all land predicted to erode within a 30-year period if that distance totals nine or more feet. The program then requires a CEA permit to be issued by ODNR for construction activities lakeward of said line.

Map 10.12: Coastal Erosion Area



Map 10.13: Mentor Coastal Erosion Areas



10.8 WATERSHEDS AND DRAINAGE

A watershed is an area designating where water will flow.

Map 10.14 shows four watershed areas of the City. Most of the land in Mentor is located in land that follows directly into Lake Erie through two watersheds. The larger of the two is also known as the Mentor Marsh Watershed. Unlike other watersheds that are designated as Lake Erie Direct, the Mentor Marsh has only one access point to Lake Erie instead of multiple points which are common in the Lake Erie Direct Watersheds. Mentor Marsh Watershed has multiple major streams; Heisley Creek and the Wasson Hurst Hawgood Ditch, flowing into it.

Mentor has land in the two major river watersheds, the Chagrin and the Grand. Ward Creek, which is located on the southwestern side of the City, flows into the Chagrin River. The Ward Creek Watershed includes Newell Creek. Kellogg Creek, which is located south of State Route 84 flows into Big Creek, which flows into the Grand River.

What's a watershed?

The term watershed describes an area of land that drains downslope to the lowest point. The water moves through a network of drainage pathways, both underground and on the surface. Generally, these pathways converge into streams and rivers, which become progressively larger as the water moves on downstream, eventually reaching an estuary, lake and the ocean. Other terms used interchangeably with watershed include drainage basin or catchment basin.

Watersheds can be large or small. Every stream, tributary, or river has an associated watershed, and small watersheds join to become larger watersheds. It is relatively easy to delineate watersheds using a topographic map that shows stream channels. Watershed boundaries follow major ridgelines around channels and meet at the bottom, where water flows out of the watershed, a point commonly referred to as a stream or river.

The connectivity of the stream system is the primary reason for doing aquatic assessments at the watershed level. Connectivity refers to the physical connection between tributaries and the river, between surface water and groundwater, and between wetlands and water. Because water moves downstream, any activity that affects the water quality, quantity, or rate of movement at one location can affect locations downstream. For this reason, everyone living or working within a watershed needs to cooperate to ensure good watershed conditions.

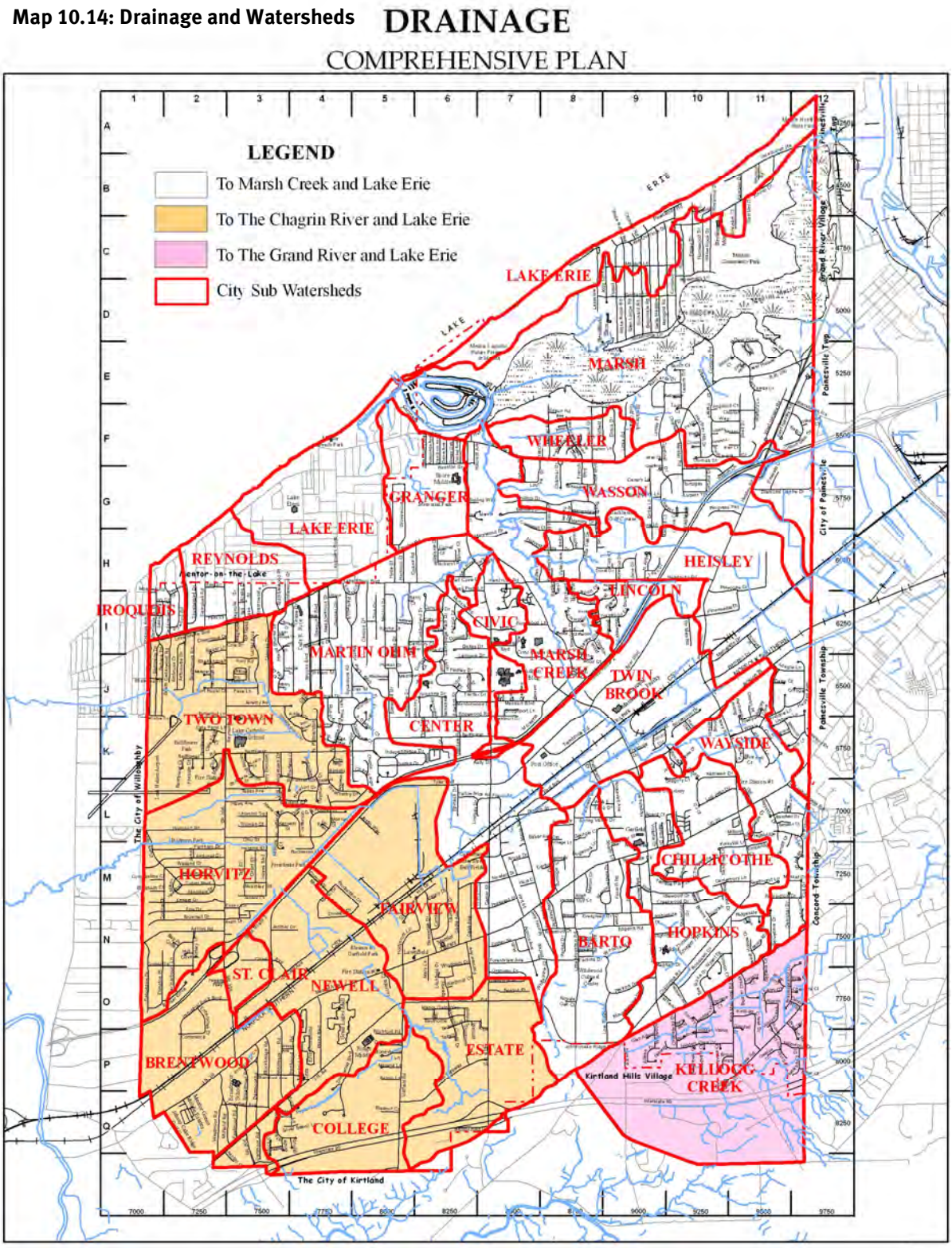
-- Watershed Stewardship Education Program Training Guide, Oregon State University and Sea Grant Extension

The capacity of the drainage facilities to accommodate storm water runoff will likely continue to affect future development in the City. Poor management of developmental impacts on the surface drainage system results in flood damage to homes, businesses, and public facilities and limits the developability of flooded vacant parcels. Erosion, siltation, and blockage of drainage courses, catch basins, and culverts by debris from careless construction methods further exacerbate the problem.

This plan endorses implementation of the Capital Improvement Plan projects identified to address drainage issues. These include, among others:

- Two-Town detention basin between Jeremy Drive and Bellflower Rd.
- Drainage assistance program and roadside ditch enclosure program
- Westmoor storm sewer improvement
- Culvert Improvement at Kellogg Creek and King Memorial Rd.
- Headlands Rd. outfall
- West Branch Marsh Creek LOMR

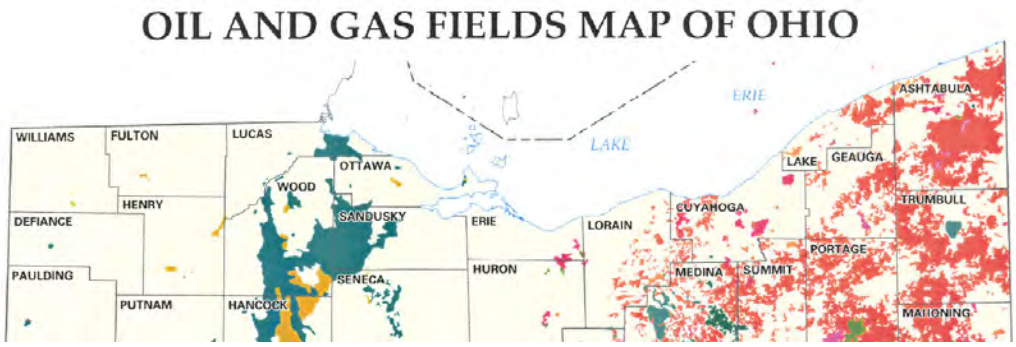
Map 10.14: Drainage and Watersheds



10.9 GAS AND OIL DRILLING

The Oil and Gas Fields Map of Ohio indicates pockets of gas fields in Mentor. This area (red on map) is a combination of three different geologic profiles: Devonian Ohio Shale and Siltstone, Silurian-Devonian "Big-Lime" and Silurian "Clinton/Medina" sandstone.

Map 10.15: Oil and Gas Fields Maps



According to the Ohio Department of Natural Resources' "County Engineers List", there are 450 oil and natural gas wells in Lake County, 47 of which are in Mentor. (Many of the counted wells appear on DNR oil and gas townships maps as existing, but generally are very old and have not been field verified; they may or may not exist.)

Most of Ohio's 62,902 active oil and gas wells are classified as "stripper" wells or wells that produce less than 10 barrels (42 gallons) of oil per day or less than 60,000 cubic feet of gas per day. The total production from wells in Mentor is not tabulated.

Ohio House Bill 278, passed in September 2005, declared that the Division of Mineral Resources Management in the Department of Natural Resources has exclusive authority to regulate the permitting, location, and spacing of oil and gas wells in the state. House Bill 278 bans cities and villages from regulating oil and gas drilling. House Bill 278 reads:

> *This chapter or rules adopted under it shall not be construed to prevent any municipal corporation, county, or township from enacting and enforcing health and safety standards for the drilling and exploration for oil and gas, provided that such standards are not less restrictive than this chapter or the rules adopted thereunder by the division of mineral resources management. No county or township shall adopt or enforce any ordinances, resolutions, rules, or requirements relative to the minimum acreage requirements for drilling units; minimum distances from which a new well or related production facilities may be drilled or an existing well deepened, plugged back, or reopened to.... No county or township shall require any permit or licenses for the drilling, operation, production, plugging, or abandonment of any oil or gas well, not any fee, bond or other security, or insurance for any activity associated with the drilling, operation, production, or abandonment of a well, except for the permit provided for in section 4513.34 of the Revised Code and any bond or other security associated therewith.*

Companies now apply to the state for a permit, and are required only to notify the community and neighbors directly affected by the drilling. State law requires that a driller acquire the rights to 20 acres around the well. Community leaders may still provide comments on drilling

activity during the permit notifications process. Communities can still enact ordinances to regulate drilling, if they do not conflict with state regulations.

Public safety and pollution of the natural environment are concerns that must be weighed against the benefit of any gas or oil well being drilled. Future extraction operations should be conducted in a manner that does not intrude on parks or nearby agricultural and residential land uses, nor should it negatively impact watersheds, waterways, water tables and groundwater resources.

10.10 NON POINT POLLUTION

Nonpoint source (NPS) pollution comes from many sources in both urban and rural areas. Runoff from cropland, parking lots, lawns, mines, and septic systems often contribute to NPS pollution. Pollutants are transported to the surface and ground water by rainfall. During large storms, the runoff to surface water and infiltration to ground water increases, as does the rate of pollutant movement.

Increasingly, NPS pollution originates from urban uses, such as suburban lawns and gardens, street and parking runoff, and construction sites. Urban areas often don't have enough vegetation to slow the rate of contaminant travel. This is evident in areas with high amounts of impervious surface (commercial corridors). This can lead to a faster contamination rate where more highly concentrated pollutants are transported into aquifers.

The Ohio Department of Natural Resources recommends using best management practices to reduce nonpoint source pollution. Best management practices are a management strategy that incorporates both engineering and cultural techniques that have been effective and practical in reducing water contamination. Best management practices include the timely and careful application of fertilizers and pesticides, the construction of filter strips surrounding fields that border a surface water source, and creation and protection of wetlands, which act as filters cleaning sediment, nutrients, and other NPS pollutants.

This plan recommends continued collaboration with agencies such as the Chagrin River Watershed Partners, Lake County General Health District, and Lake County Soil and Water District for the implementation of the required NPDES Stormwater Permit.

10.11 WIND POWER

The geographic location of Mentor lends itself to relatively consistent and reliable "commercial grade" wind power. However, wind power is generally compatible with agriculture and other open land uses. The lack of large expanses of open space and the close proximity to moderate/high density residential and civic uses may produce significant visual impacts of land-based wind turbines. Siting land-based wind turbines should consider how they will impact the viewscape from existing residences and prominent scenic vistas.

Current regulations only permit communities to regulate wind turbines that produce less than 5mw. If necessary, the local zoning ordinances should address permitted vs. conditional use, height, fall zone, noise standards and general impacts of the surrounding area.

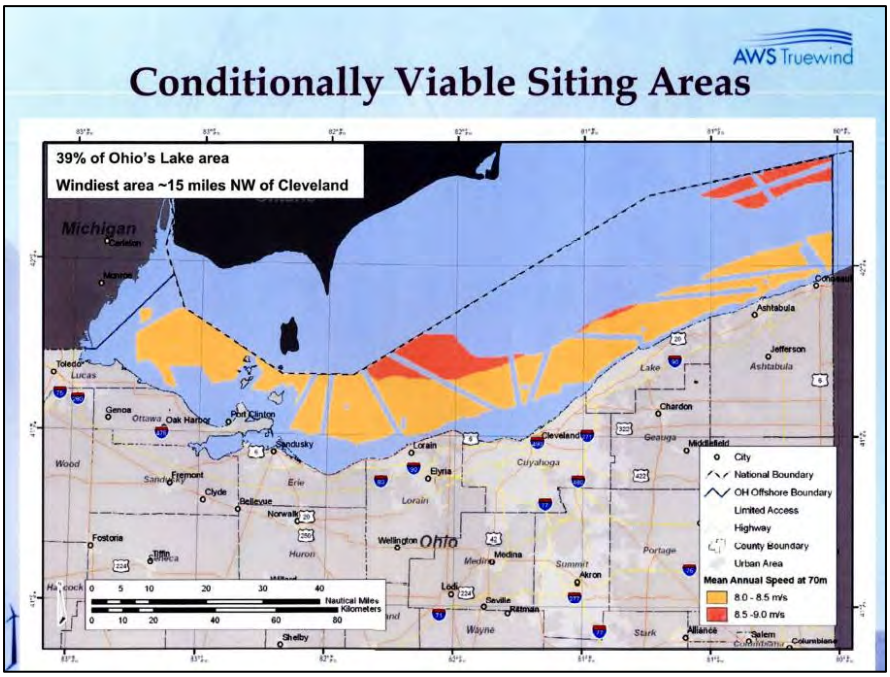
The most promising sites for wind power are expected to be Lake Erie, where wind farms will be both effective and less visually obtrusive. A study by wind research group AWS Truewind shows 39% of Ohio's portion of Lake Erie would be appropriate for an off-shore wind farm. This area includes the coastline of Mentor (Map 10.17).

Wind power may adversely affect avian species – but recent innovations in turbine and tower design have demonstrated that impacts to avian resources can be reduced to less than significant levels.

Map 10.16: Typical Wind Turbine

Bowling Green Wind Farm (Green Energy Ohio). Ohio's first commercial wind turbines were dedicated on November 7, 2003. Bowling Green is home to the first utility-grade wind turbines in Ohio. The four 1.8 megawatt turbines in Bowling Green are the largest west of the Rockies.

Map 10.17: Wind Power Siting Areas



10.12 LAKE ERIE BALANCED GROWTH PLAN (PCA/PDA)

The Mentor Comprehensive Plan will be included in the Chagrin River Balanced Growth Plan. This plan is being developed based on a statewide program for balanced growth being promoted by the Ohio Lake Erie Commission. In 2004 the Ohio Lake Erie Commission finalized the Balanced Growth Program defined as a *local planning framework to coordinate decisions about how growth and conservation should be promoted by State and local investments*. Through this program, CRWP has been working with local communities to develop Priority Conservation Areas (PCA) and Priority Development Areas (PDA) throughout their community (Map 10.18).

- **Priority Conservation Areas (PCAs)** are locally designated area targeted for protection and restoration. PCAs may be important as ecological, recreational, heritage, agricultural, or public access areas. PCAs represent areas where land use change is predicted to have a high impact on the watershed in terms of flooding, erosion, and water quality.

- **Priority Development Areas (PDAs)** are locally designated areas where growth and/or redevelopment is to be especially promoted in order to maximize development potential, efficiently utilize infrastructure, revitalize existing cities and towns, and contribute to the restoration of Lake Erie. PDAs represent areas where land use change is predicted to have minimal impact on the watershed and where other conditions, such as access to highways, existing or planned utility service areas, and existing development, suggest that additional development may be appropriate.

The Priority Development Areas (PDAs) and Priority Conservation Areas (PCAs) were recommended by the Chagrin River Watershed Partners, Inc. (CRWP). These maps were modified and refined with input from the Mentor Planning Commission, Council and Administration, to align with the City's planning goals. In the City of Mentor, the PDAs include:

- Existing industrial and retail areas primarily between SR2 and Mentor Ave.
- Newell Creek area (SR 615/I-90)
- Pockets of commercially zoned land along Lakeshore Blvd.

The PDA locations on the attached map reflect areas where future growth and redevelopment activities may be encouraged. Land in a PDA may be eligible for state policy and funding initiatives to encourage and support its development.

The PCA locations shown on the attached map reflect areas that are existing parks and protected properties and also include sensitive slopes, streams, floodplains, and wetlands. Scenic areas along Lake Erie, Mentor Lagoons, and the Marsh are the primary targets for conservation. In areas adjacent to these sites, lower density residential areas that may be possible to develop or redevelop should utilize conservation development strategies.

Designation of these areas as PCAs does not indicate that these areas will not be developed However, communities could save time and money working with property owners for preservation or interested developers for alternative site designs that enable development but limit impacts to natural resources on these PCA parcels.

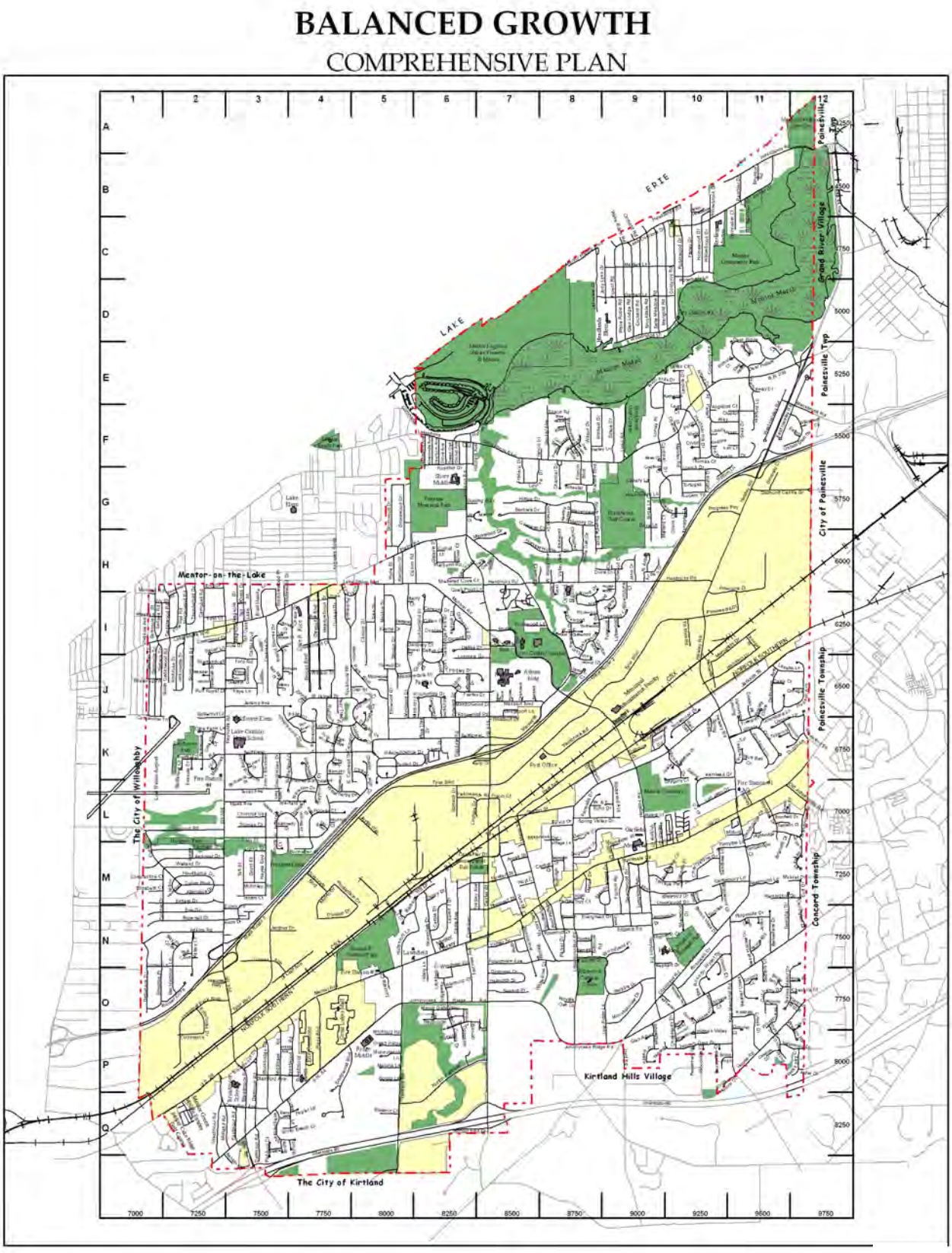
The PCAs and PDAs designated by the City of Mentor are included as part of the *Chagrin River Balanced Growth Plan*. This plan will include designation of PCAs and PDAs throughout Mentor and the Chagrin River watershed.

A key component of the Balanced Growth Program is that, where possible, the state should align policies, programs, and incentives to support the implementation of locally designated Priority Conservation Areas and Priority Development Areas. Communities endorsing the locally designated PDAs and PCAs will be recognized by the State as participating in the *Chagrin River Balanced Growth Plan*. This participation has a number of benefits to local communities. Some of the benefits of participation in the Chagrin River balanced growth planning process include:

- Increased state assistance for local projects;
- Support for local zoning;
- Additional state incentives, such as points on grant applications and lower interest rates on state loan programs;
- General local benefits, including minimizing long-term infrastructure and stormwater management costs and advancing the preservation of the semi-rural character of the city.

This plan encourages the utilization of this tool during the preliminary stages of development discussions in the City.

Map 10.18: Priority Conservation Areas *(green)* and Priority Development Areas *(yellow)*



10.13 GOALS AND POLICIES

GOAL 1

"PROTECT AND CONSERVE NATURAL RESOURCES THAT PROVIDE FOR THE ENJOYMENT, COMFORT AND HEALTH OF THE COMMUNTIY"

Policies:

A. Continue participation in the Chagrin River Watershed Balanced Growth Program, in conjunction with Chagrin River Watershed Partners, Inc.

B. Identify areas for acquisition or easements that are unique in their natural environment, landforms, or views.

C. Protect existing trees and natural areas. Re-establish native trees and vegetation where appropriate throughout the City.

D. Encourage Green building practices, such as permeable pavement and green roofs, which are intended to reduce groundwater runoff and the carbon footprint.

E. The City will work to promote conservation along streams through the location of parks, open space, floodplain preservation, requirement of forested buffers, and promotion of conservation easements.

F. Promote conservation development patterns in environmentally sensitive areas.

G. Consider riparian setbacks on all designated watercourses.

H. Continue to work with local, state, and regional partners on the preservation of the Mentor Marsh.

GOAL 2

"LAKE ERIE COASTLINE WILL BE PRESERVED"

Policies:

A. The City, in conjunction with state, federal and local government agencies, will seek the continued preservation and restoration of natural habitat areas and high priority coastal sites along Lake Erie.

B. New development along the Lake Erie shore should be clustered, to preserve natural and environmentally sensitive areas and high priority coastal sites, and provide public access to the lakefront.

C. Shoreline protection techniques should be implemented to slow erosion and rebuild a natural environment that is more resistant to future erosion.

D. Shoreline protection techniques should be minimally invasive, both physically and visually. Shoreline protection techniques that ultimately result in the creation of new beaches and recreational areas will be encouraged.

E. Public access to natural resources along Lake Erie will be expanded, provided it does not hurt such resources.

F. The use of shoreline protection techniques that would potentially increase erosion in other areas will be strongly discouraged.

GOAL 3

"MANAGE THE IMPACTS OF DEVELOPMENT UPON THE NATURAL AND MAN-MADE STORMWATER MANAGEMENT INFRASTRUCTURE SYSTEM."

Policies:

A. Require that all new development be designed and constructed in a manner which minimizes and controls stormwater impacts on adjacent properties.

B. Encourage the construction of stormwater management facilities which serve multiple developments wherever possible.

C. Ensure that the City of Mentor shall have the right of access to perform cleaning/repair/improvement upon every major drainage facility which has significant implications for downstream watershed conditions.

D. Ensure that responsibility for the long-term maintenance of stormwater management facilities be clearly assigned and accepted as part of council approval of a subdivision.

GOAL 4

EVERY EFFORT SHOULD BE MADE TO MINIMIZE DISRUPTIVE OIL AND GAS EXTRACTION IN MENTOR."

Policies:

A. Legislation that affects the placement of oil and gas wells should be monitored. Legislation that supports overriding local authority regarding well placement should be opposed or changed.

GOAL 5

"CONSIDER LOCAL REGULATIONS FOR ALTERNATIVE ENERGY SOURCES INCLUDING WIND POWER AND SOLAR ENERGY."

Chapter 11

The Plan Summary

11.1 INTRODUCTION

The information presented in this plan and strategies indicated on Map 11.1 will assist current and future decision-makers with development, preservation, and zoning decisions over the next five to ten years. These recommendations do not supersede the current zoning map or ordinance.

11.2 FUTURE DEVELOPMENT AREAS

Future non-residential development in Mentor should continue to be concentrated in two primary areas: Tyler Blvd. corridor for manufacturing / light industrial uses and the Mentor Ave. corridor for retail and limited office uses. While vacant industrial land exists, speculative building, albeit not directly controlled by the City, may dilute the marketing of existing facilities. To the extent possible, larger vacant parcels should be designated for those future uses that are unforeseen in the current marketplace.

New retail, hospitality (hotels, restaurants, and entertainment), office, and potential white collar industrial type uses should be the target for the emerging business node at the Diamond Center. Nearby residential developments, current improvements to Heisley Road ,and planned upgrades to SR 2 and the new interchange along SR 44 will enhance the accessibility of this area.

Mentor Avenue will continue to be a commercial retail destination for consumers and potential businesses. There is a sufficient amount of existing commercial opportunities (built and vacant land) available along the corridor. This plan does not recommend large-scale rezoning for commercial activities. Additional commercial land on the fringes of the traditional retail corridor may be detrimental to the long-term stability of other areas in the City.

Outlot development and complete on-site redevelopment is encouraged in the commercial core. The Great Lakes Mall may be an ideal location for consideration of a mixed used zoning strategy that incorporates both outlot and onsite redevelopment (see section 11.4). Onsite redevelopment may be applicable for consolidated parcels within the Old Village Area. Redevelopment activities should be in conformance with a detailed master plan of the area and include a consistent, achievable design standard with all buildings regardless of size and potential use.

Professional office, medical facilities, minimal highway convenience, and varying residential styles should continue to be the focus of the Newell Creek area.

In predominately built out communities, similar to Mentor, the remaining vacant land available for residential development may be limited to due size or environmental

constraints. Future developments must be cognizant of the natural characteristics of the site when planning the initial layout and all efforts should be made to preserve these amenities. As discussed in Chapter 4, amendments to the Residential Village Green (RVG) ordinance could strengthen the City's ability to preserve remaining open space areas (riparian corridors, wetlands, woodlands, etc.) in private developments.

Future developments must also be able to meet market demands. For example, the market for traditional larger homes on fee simple lots may decline as the demographic profile of the city changes and homes buyers shift toward condominium style units.

11.3 CONSERVATION AND PRESERVATION

Mentor, along with countless environmental groups, has long realized the importance of providing open space, parks and public lake access to their residents. This plan recommends a long-term strategy of creating linkages between existing holdings. When feasible, the fee-simple acquisition of valuable parcels surrounding the Mentor Marina and Nature Preserve, Mentor Marsh, Lake Erie and existing facilities should be considered. Regional collaboration, as exhibited around the Mentor Marsh, is recommended to create a 'vehicular free' network of open recreational access.

During development review activities, the City should encourage:

- Stormwater management techniques that utilize best management practices (vegetated bio-swales, pervious pavement, rain gardens).
- Riparian setbacks along designated watercourses and high quality wetlands.
- Reduced parking or phased parking requirements for large scale commercial projects to reduce the amount of unused impervious surface.
- Small-scale neighborhood parks within walking distance of those who live there. Too often, "Open space" is simply a strip of green around the perimeter of the development, providing minimal useable open space or recreational impact to the community. Regional-scale open space is prevalent in the City, but neighborhood parks could be expanded to serve new development.

11.4 ACTION PLAN

Strategy 1 Monitor permitted uses along Mentor Avenue corridor (B-2)

Action by: Planning staff, Planning Commission
Time: Winter 2009
Beneficiary: Businesses and community

Strategy 2 Establish Community Reinvestment Area (Old Village Area)

Action by: Economic Development
Time: Winter 2009
Beneficiary: Businesses and community

Strategy 3 Amend RVG zoning parameters

Action by: Planning staff and Planning Commission
Time: Winter 2009
Beneficiary: Community, developers

Strategy 4 Review parking requirements in commercial areas

Action by: Planning staff, City Engineer
Time: Winter 2009
Beneficiary: Businesses and community

Strategy 5 Codify uniform commercial design guidelines (Existing document should be used as a template)

Action by: Planning staff
Time: Winter 2009 / 2010
Beneficiary: Businesses and community

Strategy 6 Amend sign ordinance

Action by: Planning staff
Time: Winter 2009 / 2010
Beneficiary: Businesses and community

Strategy 7 Examine a historic overlay for Old Village Area

Action by: Planning staff
Time: 2010
Beneficiary: Businesses and community

Strategy 8 Create mixed use zoning overlay zoning district (Great Lakes Mall/Plaza Blvd.)

Action by: Planning Commission, Zoning staff, elected officials
Time: 2010
Beneficiary: Businesses and community

Strategy 9 Create a feasible point of sale inspection program

Action by: Planning staff, Building Department, Planning Commission, elected officials,
Time: 2010
Beneficiary: Citizens, homebuyers

Strategy 10 Consider long-term bikeway / pedestrian plan

Action by: Department of Parks, Recreation and Public Facilities, elected officials
Time: Long-term
Beneficiary: Citizens, visitors

Strategy 11 Continue enhancements and facility improvements at Mentor Lagoons Nature Preserve and Marina

Action by: Department of Parks, Recreation and Public Facilities, elected officials
Time: Long-term
Beneficiary: Citizens, boating community, visitors

Strategy 12 Create additional public waterfront access and park linkages

Action by: City, citizens, Lake Metroparks, natural resource agencies, elected officials
Time: Long term
Beneficiary: Citizens

Strategy 13 Use PCA/PDA guidance map during development process

Action by: Planning staff, Planning Commission, elected officials, developers, CRWP
Time: Long term
Beneficiary: Planning Commission, citizens, developers, elected officials

11.5 CONCLUSION

The information presented in this plan indicates a long-term vision for the City. The Comprehensive Plan provides a guide for local decision-makers while evaluating, or developing, practical and feasible land use and zoning proposals.

Continued cooperation between local boards, citizens, businesses, city staff, elected officials and other public agencies will increase the likelihood of the plans success. The recommendations of the plan were created by the City of Mentor with guidance by the Lake County Planning Commission and Chagrin River Watershed Partners. Valuable information was also provided by the City of Mentor Capital Improvement Program.

Competition for new development, redevelopment, and economic development is at an all time high. Thus, it is imperative that the Mentor community examine current and proposed guidelines to assure that future growth follows the community's desires.

Market demands, unforeseen development scenarios, or legal issues may arise which require edits to various portions of this plan. Planning is fluid. Amendments, if necessary, should not derail the overall objectives discussed in the plan.

Map 11.1: Comprehensive Plan Map