LEIGHTON TOWNSHIP, MICHIGAN

A COMPREHENSIVE PLAN



Planning Commission Adopted June 8, 2005 Township Board Adopted July 14, 2005



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SECTION I: INTRODUCTION

CHAPTER 1. SUMMARY

This Comprehensive Plan represents the culmination of many months of work by numerous local residents and local officials. It reflects deep concern for the preservation of pastoral character in the community. The effort that went into this plan illustrates a strong commitment to retain and strengthen local quality of life. The plan outlines the preferred future for the community and a set of comprehensive strategies to bring it to fruition. The Plan is reasonably general in scope, recognizing that planning for the future is a delicate blend of art and science and that sufficient flexibility will be needed to respond to the challenges of the future.

This Plan was developed in response to a desire in the community to rebuild and strengthen existing assets. The earlier Comprehensive Plan was approximately ten years old and no longer reflected current trends in growth and development. The plan is based on recognition on the part of the Planning Commission to view the potential of the Township in the context of long term planning. The fundamental purpose of the Comprehensive Plan is to enable the Township's Planning Commission to establish a future direction for the Township's physical development. Once officially adopted and maintained, this Plan will serve as an advisory guide for the physical conservation of certain areas and for the development of other areas.

Because of constant change in our social and economic structure and activities, the Plan must be maintained through periodic review and revision so that it reflects contemporary trends while maintaining long range goals. The Plan will be effective to the degree that it:

- Reflects the needs and desires of the citizens of Leighton Township;
- Realistically interprets and reflects the conditions, trends and the dynamic economic and social pressures that are brought about by change; and
- Inspires consensus and cooperation among the various public agencies, developers, and the citizens of the Township toward achieving common goals.

The fundamental purpose of the Comprehensive Plan is to enable the Township's Planning Commission to establish a future direction for the Township's physical development.

THE PURPOSE OF THE COMPREHENSIVE PLAN

When the Master Plan Advisory Committee began the plan preparation process it had several objectives. First, it was important to clearly define the priorities of the Township with regard to community character and land use. Secondly, the Township sought to develop a plan that is tailored to local conditions and yet coordinated with the planning activities of the metropolitan area. Thirdly, the planning process was seen as an opportunity to build and strengthen a community consensus about the future land use patterns in the Township. Finally, the Master Plan Advisory Committee sought realistic and effective mechanisms to achieve the plan's objectives.

This Community Comprehensive Plan accomplishes all these objectives. More specifically, this Plan will serve the Township in the following ways:

- 1. It provides a comprehensive means of integrating proposals that look years ahead to meet future needs regarding general and major aspects of physical conservation and development throughout the Township.
- 2. It serves as the official, advisory policy statement for encouraging orderly and efficient use of the land for residences, businesses and industry and for coordinating these uses of land with each other, with streets and sidewalks, and with other necessary public facilities and services.
- 3. It creates a logical basis for zoning, subdivision design, public improvement plans, and for facilitating and guiding the work of the Planning Commission and the Township Board as well as other public and private endeavors dealing with the physical conservation and development of the Township.
- 4. It provides a means for private organizations and individuals to determine how they may relate their building and development projects and policies to official Township planning policies.
- 5. It offers a means of relating the plans of Leighton Township to the plans of other communities in the West Michigan region.

PLAN METHODOLOGY

The planning process involved four inter-related phases:

- Data Analysis A Community Profile;
- Goals and Objectives Creating a Policy Foundation;
- Plan Preparation Analyzing the Issues and Defining the Preferred Future; and
- Implementation Strategies Getting There from Here.

During the first phase, demographic, economic and land use data was gathered to support the Plan. The purpose of this effort was to develop a comprehensive impression of the patterns of growth and the challenges that will impact the Township. The objective of the second phase was to establish a policy basis for the Township's planning and land use regulations. A futuring workshop was held on December 1, 2003 to gather public input through a nominal group process. Using the output of the futuring workshop, the Master Plan Advisory Committee with the assistance of other Boards and Commission members began the process of defining goals and objectives for the future of Leighton Township. These are presented in Chapter 9 of this Plan.

The third phase involved drawing together the input from the previous two and preparing a revised Future Land Use Plan, which is reflected in Section III of this Plan. The future land use designations and map (Chapter 10) were developed in a series of interactive meetings of the Advisory Committee with the assistance of other Boards and Commission members and the Township planning consultants.

The final phase of the process involved the development of specific implementation strategies to carry out the plan. These are reflected in general terms in Chapter 11. At the conclusion of the fourth phase, the Planning Commission held a public hearing on the entire plan to garner public input.

THE ORGANIZATION OF THE PLAN

This Plan is organized into three sections, each consisting of one or more chapters. Section I includes this introductory chapter which outlines the purpose of the plan, the process for its development, and acknowledgements to those involved. Section II is the Community Profile, which presents an overview description of Leighton Township from the perspective of:

- Natural and Cultural Features (Chapter 2)
- Population (Chapter 3)
- Housing and Economic Development (Chapter 4)
- Land Use and Development Patterns (Chapter 5)
- Community Facilities and Services (Chapter 6)
- Transportation and Public Utilities (Chapter 7)
- Implications (Chapter 8)

Section III constitutes the Future Land Use Plan, which includes the Township's Goals and Objectives (Chapter 9), the Future Land Use Plan (Chapter 10) and the Action Plan (Chapter 11).

The final section of the plan is the Bibliography which outlines all the various resources consulted in the completion of this Plan.

ACKNOWLEDGMENTS

The process to prepare this Plan has involved numerous community residents as well as public officials. The following individuals have provided key input and their contributions are gratefully acknowledged:

Dar VanderArk	David VanderWoude
Rod Alderink	Randy Heyboer
Scott Chestnut	Ken Napper
Dale Suwyn	Mark A Kaechele
Arlene Oetman	Dick Suwyn
Brian Martin	Mary Jane Merren
Kent Tebben	David Wright
Dave Kaechele	Charles Fisher
David Mohr	Ronald Mrozinski
Paul Hendriksma	Roger & Cathy Reimink
Robert Tanner	Al Zuidema
Ronald Schrotenboer	Ronda DeHaan
Gordon VanLaan	MaryLou Nieuwenhuis
Fred Hendriksma	Char Troost

SECTION II: COMMUNITY PROFILE

In this section of the Comprehensive Plan, a general profile description of Leighton Township is presented. This section is not intended as an exhaustive inventory of all the numerous aspects of the community. Rather, its purpose is to give some general impressions of the natural features, demographics, land use patterns and infrastructure that make up the Township.

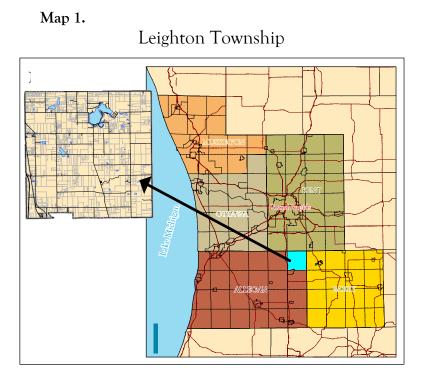
The material in this section presents a "snapshot" of current conditions within the Township and recent trends in population and housing. It sets the stage for the finalization of plan goals and objectives, the future land use plan and map, and implementation strategies. All of those materials form the actual Comprehensive Plan set forth in Section III of this document.

Each section includes an introduction along with a brief discussion of the land use trends that are relevant. The material presented in the Community Profile has been drawn from existing research and published texts. This approach provides an efficient use of the resources of the Township in completion of the Plan.

The Community Profile provides a brief look at current conditions.

CHAPTER 2. NATURAL & CULTURAL FEATURES

It is important to begin an assessment of the community with a description of its natural attributes. This chapter presents a description of the topography, soils, water resources, and woodlands that form the



natural context for the community.

Leighton Township is located in southwest lower Michigan in Allegan County (see Map 1). The Township is on the outskirts of the Grand Rapids metropolitan area. Leighton has been a rural community with agriculture as the main focus for many years. The Township is seeing an increasing amount of growth pressures from the rest of the region, and these pressures are impacting some natural features.

Climate

According to the NOAA Climate Survey¹ that recorded annual climatic conditions between 1960 and 1995, temperatures in the Township

averaged 26°F in the winter. These temperatures, along with an average of 52 inches of snowfall annually, are conducive to many wintertime activities such as cross-country skiing, snowmobiling, and ice fishing.

During the summer, the average temperature of 78°F makes for a pleasant and comfortable environment for fishing, biking, hiking, and many other outdoor summer activities. The average annual rainfall for the Township is 32 inches.

TOPOGRAPHY, SOILS & WOODLANDS

1

Topography is a characteristic of soil that generally illustrates the slope or "lay of the land". As the glaciers melted and receded to the north, they deposited debris (i.e., soils sediment and rocks) in the form of till and

National Ocean and Atmospheric Administration Website, National Climate Data Center, 2001.

moraines. Till was typically deposited in a uniform manner as the glacier receded, while moraines were created when the glacier essentially "dumped" its debris in one particular location. The slopes and drainage of the area have, therefore, been determined by where and how much glacial debris was deposited in particular areas.

Topography can create limitations for development if the slopes are too extreme. The topography in the Township rarely exceeds twenty-percent slope and, therefore, does not create severe development limitations. Potential development limitations may exist in the flood plains of the community as these soils can experience constant or seasonal wetness and steeper slopes. The Rabbit River, having a large drainage area throughout much of northeastern Allegan County, has created some of these topographical attributes.

Soils

According to the U.S. Department of Agriculture Soil Conservation Service, "Soil Survey of Allegan County" (1984)², the soils in the Township fall into five distinct soil groups: Glendora-Adrian-Granby Association, Capac-Rimer-Pipestone Association, Chelsea-Ockley-Oshtemo Association, Marlette-Capac-Metea Association, and Oakville Association. Map 2, Soil Development Suitability, which is useful from a generalized land use planning perspective, illustrates the development compatibility of soils types in the Township³, and Map 3 shows general coverage of these soil groups. The following discussion describes the characteristics of each.

A large portion of the Township contains *Chelsea-Ockley-Oshtemo* soils, which are generally nearly level to gently rolling. The well-drained soils in this association are essentially well-suited for development and are formed in sandy and loamy material, on moraines, outwash plains, terraces, and valley trains.

The slopes and drainage of the area have been determined by where and how much glacial debris was deposited in particular areas.

² Soil Survey of Allegan County, Michigan, U.S. Department of Agriculture Soil Conservation Service, Michigan Agricultural Experiment Station, 1984.

³ "Good", "fair" and "poor" are used to generally determine the septic system and development suitability of the soils. "Good" indicates that soil type, porosity, permeability, drainage and slope are such that land development and septic system construction can occur generally without any major problems. On site inspections are required to determine site-specific suitability.

Insert map 2

Back of map 2

Insert map 3

Back of map 3

The *Marlette-Capac-Matea Association* is also generally well suited for development, though it can sometimes be very hilly. This soil association is characterized by moderately well drained, somewhat poorly drained, and extremely well drained soils formed in loamy and sandy material, on moraines, and till plains.

The western portion of the Township is distinguished with the *Capac-Rimer-Pipestone Association*. Development suitability for this association is generally considered fair, since a somewhat poorly drained soil formation can often limit septic suitability. This soil association is nearly level to undulating, and forms in loamy, sandy, and silty material on moraines, till plains, lake plains, and outwash plains.

The Glendora-Adrian-Granby Association characterizes the central southeastern portion of the Township. These very poorly drained soils are generally not well suited for development and are not considered compatible for septic systems. This association forms in organic and sandy material on flood plains, outwash plains, lake plains, and till plains.

Finally, the *Oakville Association* is found in two small patches in the southern portion of Leighton Township. These relatively sandy soils can be nearly level to steep and moderately well drained. The *Oakville Association* is generally ill suited for development and has been called an "inland sand dune". These soils form on outwash plains, lake plains, dunes, moraines, and beach ridges.

Woodlands

While much of the land of the Township was cleared for farming and development, remnants of original forest and significant second growth forest areas are still evident. More than 4,800 acres of the Township are covered by undeveloped forestland.⁴ Most of this is deciduous forest or wooded wetland, although there are numerous tracts of maturing evergreens originally planted for the purposes of soil conservation.

⁴ Michigan Resource Inventory Service

LAKES, WATERSHEDS, WETLANDS AND DRAINAGE

Green Lake

Generally, inland lakes near metropolitan areas often experience environmental stress as a result of increased residential development and a population with greater disposable income and leisure time for aquatic



Green Lake offers excellent recreational destinations, residential locations and wildlife habitat.

activities. As metropolitan areas spread farther out into the country, outlying inland lakes attract an increasing year round residential population, and dense residential development occurs due to relatively minimal dimensional requirements. As more residents move to the lakeshore, more people will seek the use of the lake for recreational purposes.

Green Lake is a defining element of the Township and has attracted much residential growth near and adjacent to its shores. Facing the Township are several issues related to the lake. Central concerns of lakeside residents include noise, crowding, safety, and water quality, which are directly related to the amount of activity on the lake. The Township

must balance increased demands for access to water-based recreation with the desire of lakeside

residents to limit lake activity. Key to this balance are public access, tenure, and lake carrying capacity.

On the east side of the lake there is a small public boat launch and beach. According to the Yankee Springs Office of the Michigan Department of Natural Resources, 80% of motorists traveling to this facility use the boat launch. The DNR office reports that weekends and holidays are the boat launch's busiest times. The parking lot can accommodate 18 motor vehicles, and parking spaces turn over 3 times per day on average, which equates to 54 automobiles on a busy summer weekend day. According to a Michigan State University study, the average day user has 4.7 persons in a motor vehicle, equating to 254 visitors who use the lake on a busy summer day.⁵

Another aspect of lake usage is the percentage of lakeside residents who live on the lake year round. The greater the number of year round

Approximately 254 people visit Green Lake on a busy summer weekend day or holiday.

⁵ Michigan Department of Natural Resources; Yankee Springs Office

residents, the potential is greater for more people to be on the lake at any given time. As Leighton Township becomes suburbanized, it is likely that more seasonal dwellings will be converted into year round dwellings, especially as land values increase and access to the area improves.

Data from various sources indicates that the number of lakeside homes in the Green Lake area has increased from approximately 140 homes in 1950 to over 350 homes in 2004. In 1950, 34, or 24%, of those homes were used by year round residents. In 2004, 197, or 54%, of the homes, were occupied year round. Based on U.S. Census estimates of 2.9 people per household, the year round population of the Green Lake area is almost 600.

Residents around Green Lake have expressed a desire to limit boating activity since excessive boating can degrade the lake for recreational purposes and threaten water quality.

The carrying capacity of any lake is defined by the number of boats or other watercraft that can be on the lake without being destructive to water quality and recreational safety. This threshold is related to many factors including the size of the lake, its depth, its shape, bottom soils and bank characteristics, the number of homes on the lake, access due to keyholing, and the number of visitors that the lake attracts.

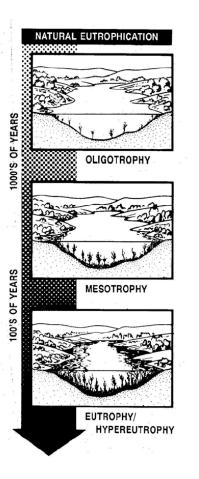
The Township must define the carrying capacity of Green Lake to determine future policies. If it is shown that current boating and recreational activity may be damaging to the lake, the Township may be justified in establishing policies that restrict access.

A carrying capacity analysis may involve several steps. Based on information from "Carrying Capacity Analysis & Ordinances Providing Lake Access Regulations", as developed by the Planning and Zoning Center, an inventory of the water body must be accomplished, including an analysis of physical characteristics, development intensity, present use, mooring activities, and may include a build out analysis. Also, an important step is to determine the "functional" space of the lake, or the net traversable acreage which can accommodate boats. Carrying capacity should be expressed as acres per boat, and an analysis could even recommend mooring locations based on lake characteristics.

Green Lake is a high quality water feature, but with additional growth along the shoreline and elsewhere within its watershed, some property owners fear water quality may suffer. Concerns include the introduction of invasive species (e.g., zebra mussels), motorized watercraft fuel spills,

Over the past 50 years, the percentage of homes used for year round residence has increased from 24% to 54%.

The greatest risk to the quality of Green Lake is likely artificial fertilizers.



Lake Life Cycle. Note that human activity can shorten this process to a few decades.

Source: "Managing Lakes and Reservoirs," North American Lake Management Society.

fertilizer runoff, erosion, increased sediments, and wastewater discharge. Presently, the greater risk is fertilizer runoff, as very few point sources exist.

Some of the concern about the quality of Green Lake has developed due to early signs of eutrophication. Eutrophication is an aging process resulting from increasing levels of dissolved nutrients, such as phosphates, in surface water. This process occurs naturally but can be accelerated through pollution or other impacts of human settlement around water bodies. Increased nutrients foster excess weed growth and algae growth which can clog the surface waters and hamper many recreational activities. While some aquatic weed growth is desirable as cover for fish, when the weeds die, oxygen in the water is depleted. This can degrade the quality of invertebrates and fish species in the lake and can result in anaerobic conditions that foul the air and result in massive kills of aquatic animals, or "fish kills."

Some lakeshore areas were previously impacted by septic tank drain field effluent that found its way into the surface water rather than migrating through the soils for a sufficient distance to enable the natural filtration of nutrients to be completed. Before public sanitary sewer was installed around Green Lake, many of the septic systems were leaching pollutants into the lake, accelerating eutrophication and decreasing water quality. However, the public utility has played a significant role in addressing this problem.

Development along the lakeshore can accelerate the increase in phosphorous levels. This is particularly true where grassy lawns are maintained along the shoreline with artificial fertilizers that are carried by irrigation and storm runoff into the lake. These fertilizers introduce nutrients into the water and accelerate eutrophication. The immediate cause and effect of fertilizer runoff can often be seen on hot summer days a day or two after major rainfalls when on most inland lakes and even on the Great Lakes; an "algae bloom" will result. The Township could attempt to address this problem by implementing a set of lake overlay provisions that limit use of fertilizers, or it could strongly encourage voluntary efforts by residents, possibly through a partnership with the Lake Association, to better manage fertilizer runoff.

It is important to note that improving lakefront areas by increasing natural vegetation to promote the natural filtration of runoff and to reduce impervious surfaces can greatly benefit water quality. In addition, this practice may retard the rate of runoff into the lake and may reduce erosion. $^{\rm 6}$

Watersheds

A watershed is a region of land that is drained by a particular river or river system. Watershed systems include many smaller tributaries such as creeks and streams that feed into a larger river and are influenced by elevation or the lay of the land.

The Kalamazoo River Watershed is the primary watershed in Leighton Township, which is fed by several sub-watersheds including the Rabbit River Watershed. The very northeast corner of the Township is part of the Thornapple River Watershed. The Grand River Watershed drains a tiny part of the Township just north of Huckleberry Lake.

Watersheds are a reminder that natural processes do not follow political boundaries, and planning for healthy environments can transcend the abilities of individual jurisdictions. Watershed projects in the area include the Rabbit River Watershed Planning Project in the northern portion of Allegan County. This project, in association with the Allegan Conservation District, will provide landowners, farmers, and residents an opportunity to establish goals for local water quality. The project will include the identification and establishment of critical watershed areas, propose best management practices, and production of a Watershed Management Plan covering the 187,200 acre watershed.

Water quality within a watershed is directly related to the land management practices within that watershed. For example, if a new development creates a large amount of impervious surface (i.e., asphalt) and stormwater is not properly managed, it is possible that the rate and volume of flow into the creek, stream, or river will increase to a point that stream bank erosion occurs. Stream bank erosion will increase silt material on the streambed, change the chemistry of the water with phosphates, nitrogen, and other chemicals, and alter the turbidity of the water. All of these changes may have an effect on the wildlife that is dependent on the stream or river for survival. Map 4 illustrates the rivers, streams, lakes, and wetlands in the Township.

Water quality within a watershed is directly related to the land management practices within that watershed.

⁶ John D. Warbach, Ph.D. "Imperviousness Regulations." Planning and Zoning News, 1998

Wetlands

According to the National Wetlands Inventory, much of the area around the Green Lake Creek is characterized as wetlands. In addition, large groupings of wetlands are located in the central part of both southern quadrants of the Township.

Wetlands are complex ecological systems that provide a number of important benefits. Wetlands reduce flood hazards by providing additional stormwater storage. Wetlands that overlay groundwater recharge areas improve groundwater quality by filtering the water as it percolates through the soil. Wetlands located along a watercourse protect surface water quality by filtering surface run-off. Finally, wetlands are highly productive ecosystems, which provide an essential habitat to much of Michigan's fish and wildlife.

PRIME AND UNIQUE FARMLAND

Soil data, provided by the Soil Survey of Allegan County, provides a wealth of information on soils in the County and Leighton Township. The Soil Survey contains predictions of soil behavior for selected land uses. The survey also highlights selected restraints in the soil. Such information is helpful when analyzing soils for prime and unique farmland. When determining whether or not land is prime farmland, consideration must be given to soil composition, slope, saturation, and nutrient levels to determine the soil status. Using the soils map and the soil characteristics from the soil survey, prime and unique farmland can be mapped in Leighton Township.

Map 5 illustrates prime and unique farmland in the Township. Prime farmland and prime farmland if drained usually has slight to severe septic system limitations. This is more justification for its preservation, since land with septic and drainage issues should not be developed.

Insert Map 4.

Back of map 4

Insert map 5

Back of map 5

Unique farmland is land that is well suited for specialty crops, adding to the diversity of Leighton's cropland. Knowing generally where prime and unique farmland exist can give an impression of what farmland to target for preservation.

OPEN SPACE

For the purposes of this community profile and Master Plan process, open space is generally considered undeveloped land, whereas a greenway is a corridor of protected open space that is managed for conservation and/or recreation. Generally, greenways follow natural land or water features, such as ridges or rivers, or human landscape features, such as abandoned railroad corridors or canals.

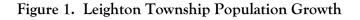
Leighton Township presently has a considerable amount of undeveloped and unprotected privately held open space. In addition, there is a trend toward a patchwork of privately held open space as increasing numbers of developers incorporate protected common areas as elements of subdivision design. Nonetheless, there are no formal trail links between these areas.

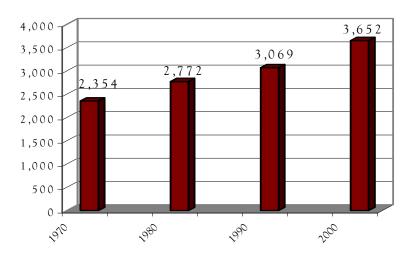
Allegan County is planning to construct a trail that would run parallel to US 131 on an abandoned rail corridor. Such an amenity would involve the cooperation of Dorr Township, the City of Wayland, Wayland Township, and Leighton Township and result in an attractive amenity for the entire region.

CHAPTER 3. POPULATION

Population and demographic change are some of the most important measures to express growth and its likely impact on land uses in a community. It is fundamental to understand the Township's population and its growth trends in order to prepare a realistic Master Plan. This section of the Community Profile Report is intended to describe the characteristics of the Township's population and demographic trends. The data presented here will serve as an informational foundation for making conclusions about the Township's present and likely future.

To begin with, it is appropriate to determine the overall growth the Township has experienced in the very recent past (i.e. 20 to 30 years). The Township has primarily existed as a rural farming community, experiencing slight growth over time. Since 1970, the Township's population has increased from 2,354 to 3,652 in 2000, or by a total of 1,298, at an average annual rate of 1.84% (according to United States Census Summary File 1 and 3). During this same period, Allegan County and the State of Michigan grew at average annual rates of 1.75% and 0.39%, respectively.

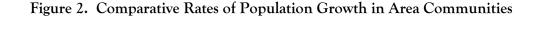


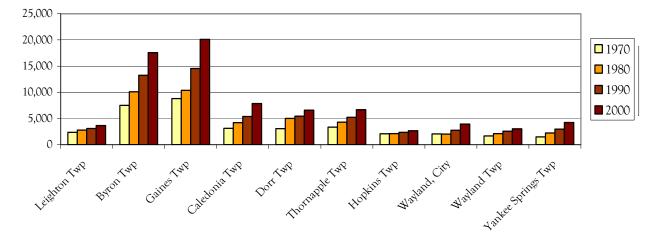


Source: U.S. Census Bureau

It is also helpful to put the Township's population change into the context of the region and compare population growth with neighboring communities. Figure 2 compares the 30-year population growth history

The Township has primarily existed as a rural farming community, experiencing slight growth over time. in Leighton with that of eight other Townships in the immediate area. Every surrounding Township has continued to see increasing growth. Most of this growth can be attributed to the overall pattern of outmigration from urban to suburban and rural areas in Metropolitan Grand Rapids, and a strong West Michigan economy. The completion of the Southbelt (M-6) may exacerbate this growth.





Source: U.S. Census Bureau

Projections

Statistical averaging techniques were employed to project the Township's population growth to the year 2030. These approaches are meant to provide a very general sense of growth, particularly in communities that have rapid rates of growth or decline, which may run counter to past statistical trends. These generalizations are limited. Future trends are based on past trends documented by the United States Census Bureau.

These projections have implications regarding future land use requirements, the demand for various public services and capital improvements, and help to set realistic expectations about growth in a community. The following describes the projection techniques.

The Constant Proportion (or ratio) Method of projecting population assumes that Leighton Township will continue to represent the same percentage of Allegan County's projected population in the years 2010, 2020, and 2030 that it represents today. In 2000, Leighton Township comprised 3.456% of Allegan County's total population. Using the population projections for Allegan County prepared by the Planning & Zoning Center in the completion of the Allegan County Comprehensive Growth Management Plan in 1999, and extending those trends through 2030, the following illustrates the results of the constant proportion method for Leighton Township.

CONSTANT PROPORTION METHOD

		2010	2020	2030
	2000	Population	Population	Population
	Population	Projection	Projection	Projection
Allegan County per County Pla	,	123,678	141,291	167,000*
Leighton Twp	3,652	4,274	4,882	5,770

* The 1999 County plan did not project County population through 2030, this figure results from an extrapolation of the rates of growth projected from 2000 through 2020 for another ten years.

The Growth Rate (or geometric) Method projects future population growth or decline based on the rate of growth in the Township in the past. Using the growth rate method, the following assumes that growth in the future will occur at the same average rate as has occurred annually since 1970. As indicated previously, the Township's population has grown every year, although the rate of increase has been relatively stable and predictable.

GROWTH RATE METHOD

E	Average Annual Growth Rate	Į			
	1970-2000	<u>2000</u>	<u>2010</u>	<u>2020</u>	<u>2030</u>
Leighton Twp	1.84%	3,652	4,382	5,259	6,310

The Arithmetic Method is similar to the growth rate method in that population projections are based on growth that occurred in preceding decades. This method, however, bases population growth on the overall average increase in the number of persons per year, rather than on growth rates. The following projections are based on the average net increase of 1,298 persons between 1970 and 2000, in Leighton Township, based on U.S. Census figures as reported in the County Plan.

ARITHMETIC METHOD

	Average					
	Increase Each I	Decade	2000			
	(Number of Pe	ersons) Pc	pulation	<u>2010</u>	<u>2020</u>	<u>2030</u>
LEIGHTON T	WP 433		3,652	4,085	4,518	4,951

The Building Permit Method may be the most reliable projection technique since it tells the story of present growth trends based on the actual number of residential building permits issued by the Township. Leighton Township has issued 28 residential building permits on average per year from 1996 to August 2003.⁷ The Township's average household size is 2.93 persons⁸. This information is key in projecting population growth, assuming trends remain the same. This population projection technique holds that Leighton Township will grow by 83 persons per year.

BUILDING PERMIT METHOD

Average No	Persons	2000			
Permits/Year	<u>per H/H</u>	<u>Population</u>	<u>2010</u>	<u>2020</u>	<u>2030</u>
28	2.93	3,652	4,482	5,312	6,142

The table below summarizes the preceding information. By averaging the results of these methods, it is reasonable to predict that the population will grow to approximately 4,305 persons by the year 2010; 4,993 by the year 2020; and almost 5,800 by the year 2030.

It is a reasonable assumption to claim that Leighton Township will continue growing. The ample land available for subdivision, natural beauty, and close proximity to choice employers act as the pull that leads to residential growth. The projections summarized below assume that past trends will continue into the future, and are limited by such a supposition. Again, these forecasts are based only on population counts documented by the U.S. Census, and building permit data from the Township.

⁷ Leighton Township, new residential building permits.

⁸ U.S. Census, 2000.

	<u>2000</u>	<u>2010</u>	<u>2020</u>	<u>2030</u>
Constant Proportion Growth Rate Arithmetic Building Permits	3,652 3,652 3,652 3,652	4,274 4,382 4,085 <u>4,482</u>	4,882 5,259 4,518 <u>5,312</u>	5,770 6,310 4,951 <u>6,142</u>
Average	3,652	4,305	4,993	5,793

Table 1POPULATION PROJECTION SUMMARY

Again, it should be noted that these projections are based on past experience. Changes in the region, such as the completion of M-6, which will have an interchange at Kalamazoo Avenue, about five miles to the north, will accelerate population growth. Writing in the American Planning Association Journal, Robert Cervero has documented both "induced growth" and "induced investment" effects as a result of roadway improvements. In effect, real estate development gravitates to improved freeways. The study concluded that, while controlling for other factors, every 10% increase in roadway miles was linked with a 9% increase in vehicle miles traveled four years after roadway completion⁹. Therefore, new roads bring more traffic. More traffic is a clear indication of population growth. The likely effect of the completion of M-6 may be even more explicitly illustrated in the experience of Howard County, Maryland (suburban Washington, D.C.). Studies there indicated that 94% of the properties within a new highway corridor were developed after the highway was completed.¹⁰ It is likely, therefore, to conclude that with Gaines and Byron Townships to the north already rapidly developing, the improved access to Leighton Township will result in accelerated growth.

The above population projections are conservative for another reason. Since 2000, the Township has approved several large developments. The Green Lake Ridge Planned Unit Development was approved for 200 lots. Harvest Meadows is presently being improved, and when completed, will have 73 lots. Hunter's Glen, a manufactured housing community, will offer 400 sites when completed. Green Lake Cove will offer 32 lots. Horse Shoe Estates will offer 31 lots. These communities have potential to develop into over 730 households. The average

The commute to and from Leighton Township will be greatly enhanced with the Paul Henry expressway approximately 5 miles to the north.

This equates to 2,139 new residents, based on new developments that have occurred since the last Census alone.

⁹ Cevero, R., APA Journal, Road Expansion, Urban Growth, and Induced Travel, 2003

¹⁰ Washington Business Journal, In Depth: Commercial Real Estate, 2001

household size in the Township in 2000 was 2.93 persons.¹¹ This equates to as many as 2,139 new residents, based on new developments that have been approved since the last Census alone. This is greater than past growth rates memorialized in the 28 permits per year averaged from 1996 to 2003.

Byron and Gaines Townships are second tier suburbs of Grand Rapids. Between 1970 and 2000, they grew by 57% and 56%, respectively. As this growth travels south, Leighton will develop into a third tier suburb. Therefore, the impressive growth rates that Byron and Gaines saw over the last 30 years can theoretically be imposed on Leighton in the future.

With these indicators of accelerating growth, it is appropriate to adjust the numeric averaging techniques reflected above. Unfortunately, there is no simple formula for such projections, but based on the experience of other communities, it is concluded that Leighton Township may expect rates of population growth in the range of 2% to 3% per year at least through 2030 and maybe beyond. Thus at the most conservative, the Township's 2030 population would be about 5,800, as indicated above. Factoring in the higher rates of growth that are likely to result from the improved access and other factors, the 2030 population would range from about 6,600 to over 8,800 persons.

Age Characteristics

Another opportunity to measure change involves comparing the age distribution of a community over time. This assists planners in determining the type of housing demands and recreational facilities that may be needed. For example, if a large portion of the population is younger, the Township would benefit from park and playground facilities. It has been expressed that retirees in Leighton Township sometimes are forced to move away due to lack of senior living opportunities within the community.

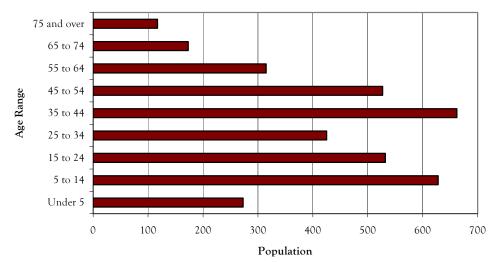
In 2000, the median age of Leighton Township residents was 34.3 years, slightly younger than the County (35.2 years), State, and the U.S. (35.5 and 35.3 years, respectively). The median age represents the mid-point in the range of all ages within the Township and County; one-half of the population is younger and one-half of the population older. Demographers usually take the median age as a surrogate measure of the overall age of the population. Analogous with national and statewide trends, the population of Allegan County and the Township are aging. In 1980, the median age of the County was 28.5 years; and by 1990 it

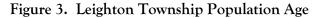
Based on available data, Leighton Township may expect rates of population growth in the range of 2% to 3% per year.

It is challenging for older people to find senior living opportunities within the community.

¹¹ 2000 U.S. Census

had risen to 31.9 years. The last Master Plan for Leighton Township notes that the median age for the community in 1980 was 28.2, and had increased to 31.1 in 1990.





The 20 to 44 years age group is important as it illustrates the prime wageearning population, and is the main age division for family formations. About 34.8% of the Township's population falls in the 20 to 44 age group. These age groups symbolize a demand for single-family housing developments and recreational facilities for children. These age groups signal future increases in the 5 to 19 years age groups, and increases in commercial services to serve these groups. Twenty-three percent of the Township is 45 to 64. This group is generally the "empty-nester" type with high incomes. Indicating retirees and seniors, 7.9% of the Township is over 65. These statistics taken together are indicators that the Township will need to accommodate senior living and recreational opportunities to serve both older and younger populations.

Education

The 2000 Census indicates that within Leighton Township approximately 42.2% of the population over 25 years of age have the equivalent of a high school education, with 11.2% having a bachelor's degree or higher. In Allegan County, roughly 39.1% of the population has at least a high school education with 15.8% reporting a bachelor's degree or higher.

The only public school facility within the Township, Moline Elementary, in the Wayland Union School District, has been closed due to low enrollment.

Source: U.S. Census Bureau

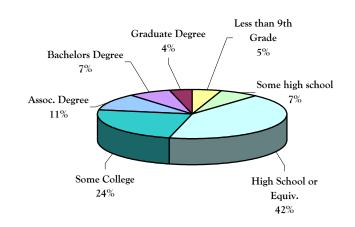


Figure 4. Educational Attainment in Leighton Township¹²

The U.S. Census reports that 31.3% of the population in Michigan has a high school education or similar equivalency, and 21.8% has at least a bachelor's degree.¹³ A greater percentage of the population in Leighton Township has attained at least a high school education when compared with the State. Nonetheless, a greater percentage of the State's population has attained advanced degrees at the college or graduate level.

Income

Median household income is traditionally used to measure the economic strength of an area. Comparatively, it is also a helpful indicator to identify disparities among jurisdictions. Income can also have land use implications, since people with high incomes usually invest more in their houses, and therefore typically expect more from local government. Figure 5 on the following page compares the 2000 median household income in the Township with its nearby neighbors. The median household income in the Township was \$51,743, compared with \$45,815 in the County and \$44,667 in Michigan. Caledonia Township had the highest median household income in the Leighton area in 2000 - \$63,032 - while Hopkins Township has the lowest - \$46,296. Leighton's population earned average incomes when compared to the surrounding communities, as seen below.

¹² U.S. Census Bureau, 2000.

The median household income in the Township was \$51,743 compared with \$45,815 in the County and \$44,667 in Michigan.

¹³ Ibid.

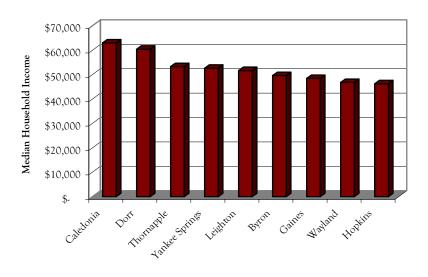


Figure 5. Comparison of Incomes in Neighboring Townships¹⁴

In 1990, the per capita income in Leighton Township was \$13,594 and had increased to \$18,736 by 2000, an increase of almost 38%.¹⁵ During this period, per capita incomes in Allegan County increased from \$9,446 to \$19,918, an increase of 110.8%.

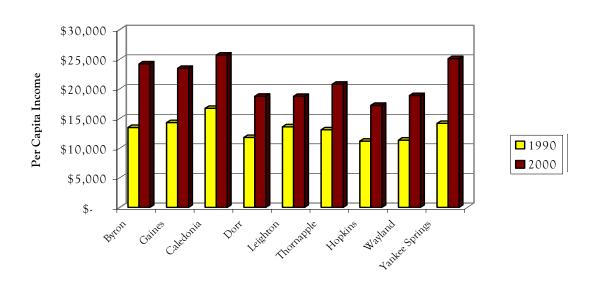


Figure 6. Comparative Growth in Per Capita Incomes¹⁶

¹⁴ U.S. Census Bureau, 2000.

¹⁵ The U.S. Census Bureau reports per capita income in current year dollars and to develop an accurate evaluation of true income growth it is necessary to adjust earnings to a common dollar value.

Leighton residents experienced the most modest income increases at about 38%.

Byron Township experienced the greatest increase in per capita income during the decade at approximately 80%. While the entire Leighton Township area has seen fairly significant improvement in incomes during the 1990s, Leighton residents experienced the most modest increases at about 38%. Although the relative improvement in per capita incomes in the Township was more modest, Leighton residents still experienced income growth in the 1990s, and income still remains average when compared to neighboring Townships.

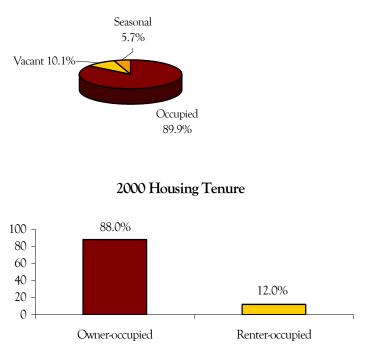
¹⁶ U.S. Census Bureau, 1990 and 2000.

CHAPTER 4. HOUSING AND ECONOMIC DEVELOPMENT

As is the case with most bedroom communities, the primary dwelling type in Leighton Township is single-family homes. A sizeable percentage (88%) of the dwelling units is owner-occupied homes. This provides a healthy housing base and establishes stability. Thirty-five percent of the homes in Leighton Township were built prior to 1939, while 23% were built between 1940 and 1969, 22.4% between 1970 and 1989, and 19.8% since 1990¹⁷. Even though much of the housing stock is older, these owner-occupied homes are a solid indicator of financial investment in the community.

A frequently used analysis of the health of a community is the ratio of renter-occupied housing to owner-occupied housing. Generally, urbanizing communities strive to achieve a 2:1 or 3:1 ratio of owner-occupied to rental housing within the market. The Township's ratio of slightly less than 7:1 is more reflective of a rural, low-density community with fewer rental opportunities.

Figure 7. 2000 Housing Occupancy



There were 1,386 housing units in the Township in 2000. Of those 140 (10.1%) were vacant during the 2000 Census count. When housing vacancy rates exceed 5%, there may be neighborhood stability issues; if

¹⁷ U.S. Census Bureau

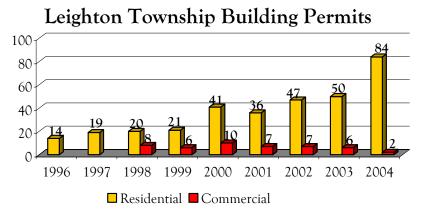
vacancy rates exceed 10%, the community is probably experiencing blight. However, the relatively high number of seasonal homes in the Township (5.7%) around Green Lake and elsewhere may have been a factor in such a high vacancy rate.

In 1990, 3.2% of the housing units were considered seasonal and by the 2000 Census 5.7% of its housing had been deemed seasonal. This is another indicator that the community is valued for its rural charm and heritage, as families and individuals may frequent second homes for privacy or to "get away" from metropolitan areas like Detroit, Chicago, or even Grand Rapids. However, homes around the Green Lake area have consistently been converted from second homes to permanent dwellings. This indicates a trend from recreation community to bedroom suburb, and the Township should expect this trend to continue.

New Development

New residential growth has increased in recent years. It can be assumed that this is primarily because the Township is nearly halfway between Kalamazoo and Grand Rapids with an attractive pastoral allure that attracts people seeking refuge from more urbanized areas. Also, land in the Township may be relatively affordable when compared to more developed areas where land is more scarce. What often happens, however, is so many people move to rural areas for the clean air, green open space, and quiet environment, that these characteristics become eroded from all the growth that occurs.





The average value of the residential building permits issued from 1996 to June 2004 is \$162,363.

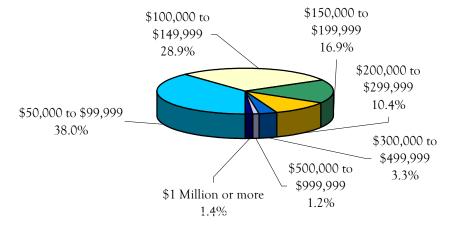
> * Information for 1996 and 1997 commercial building permits was not available. Source: Leighton Township

More proof of growth in the community is the rising number of new residential building permits issued by the Township. Between 1996 and June 2004, 285 homes were constructed in Leighton Township. The number of residential building permits appears to be steadily increasing, indicating a trend of more houses to be constructed in the years to come. In addition, the Township has approved several new developments since the 2000 Census, totaling approximately 730 dwelling units (it should be noted that this figure includes the manufactured home community's 400 sites, but building permit figures do not reflect the sites since building permits are not issued for the development). Figure 8 also illustrates that commercial and industrial development within the Township has somewhat decreased over the last year.

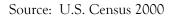
Housing Value

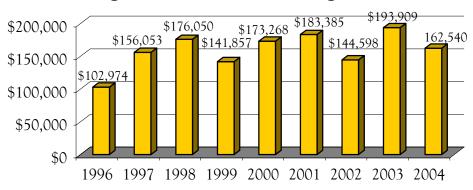
The 2000 Census reported that the largest percentage of owner-occupied homes in the Township is valued between \$50,000 and \$99,999 (38%). Approximately 28.9% of the homes were reported to be valued between \$100,000 and \$149,999. Additionally, 33.2% of the homes are valued greater than \$150,000, and no homes were reported to be valued less than \$50,000. These figures suggest a reasonable amount of affordable housing opportunities combined with robust housing investment. This balance is crucial in promoting a diverse, healthy environment for families.

Figure 9.



2000 Housing Value of Owner Occupied Units





Average Value of New Building Permits

Figure 10.

Source: Leighton Township. Totals for 2004 are as of June 2004.

The average value of existing homes in Leighton Township in 2000 was \$113,400. The average value of a new home built in 2000 in the Township was \$173,268. Based on this, the average home value in the Township should increase as more new homes are built. Figure 10 shows that there is a general increase in the value of new homes built in the Township. As the community becomes suburbanized, this trend should be expected to continue.

Housing Quality

The Township lacks a housing quality enforcement program. The Township has not undertaken a comprehensive housing quality survey to evaluate the impact of developing such a program, though the Township does answer housing negligence complaints by way of the Michigan Building Code. A housing quality survey can be helpful when there is a marked decline in the quality of housing stock in a particular area. Since approximately 10% of the housing stock in Leighton Township was vacant at the 2000 Census, a quality survey may be useful, as such a survey could mark structures for improvement and help to uncover funds for rehabilitation.

ECONOMIC DEVELOPMENT

The following table illustrates occupations broken down into U.S. Census categories for Leighton Township, Allegan County and the State of Michigan.

Table 2Categorized Occupations for 2000

	Leighton '	Twp	Allegan Co	ounty	State of Michigan		
Occupation	Employment	% of	Employment	% of	Employment	% of	
Categories	Employment	Total	Linployment	Total	Linpioyment	Total	
Admin., Prof. & Mgmt.	532	29.1%	12,520	24.0%	1,459,767	31.5%	
Services	113	6.2%	6,866	13.2%	687,336	14.8%	
Sales & Office	424	23.2%	11,493	22.1%	1,187,015	25.6%	
Construction	281	15.4%	5,897	11.3%	425,291	9.2%	
Production	436	23.9%	14,448	27.7%	856,932	18.5%	
Farming	42	2.3%	879	1.7%	21,120	0.5%	
TOTALS	2,180	100.0%	52,103	100.0%	4,637,461	100.0%	

Source: US Census Bureau, 2000

Relative to the County and State, employment in the Township tends to fall more heavily in the construction and farming categories than the other groupings. These occupations can be characterized by lower wage rates than the professional/administrative careers, but higher than some service and production categories. This is consistent with the income information reported in Chapter 2, which illustrates Leighton's per capita and household income to be roughly average among the jurisdictions contiguous to or neighboring the Township.

Illustrative of the transformation of farmland to other land uses, the number of farm related jobs in the Township had decreased from 1980 to 2000. In 1980, there were 88 (7.2%) farming jobs in Leighton¹⁸. In 2000, there were 42 (2.3%) farm related occupations in the community. Therefore, between 1980 and 2000, approximately 52% of the farming related jobs in the Township had disappeared. This is consistent with a larger trend noted in the Allegan County Master Plan which noted that overall farming employment had declined from 17.7% of total in 1970 to about 6.21% estimated by 2000.¹⁹

¹⁸ U.S. Census 1980

¹⁹ Allegan County Comprehensive Growth Management Plan, December 1999.

The Township has experienced development in its two industrial parks. The major employers in the Township tend to cluster in these parks, which are located at the northwest corner of Section 6, and at the western edge of Sections 18 and 19. The major employers include the following companies: Grip-On Tools, Center Manufacturing, Jones Manufacturing, Eclipse Tool & Die, Pylman Power, Windemuller Electric, and Direct Tooling. These industries are the largest employers in the Township.

The Leighton Township industrial tax base is growing, and so is employment associated with these facilities. While non-residential development has increased due to the two industrial parks in the Township, most residents still commute to Metropolitan Grand Rapids, Kalamazoo, or Hastings for work. This commuting pattern can be expected for a countryside bedroom community.

Unemployment rates have increased in Leighton Township and in surrounding municipalities. Reportedly, this reduced employment has been the result of a recession in the national economy. The resulting increase of unemployment is not strictly localized to the area around Leighton Township; most regions of the nation have been impaired by the recession. Observing Michigan Office of Labor Market Information data from 1997 to May 2004, it becomes apparent that unemployment first decreased, then increased dramatically for most of the surrounding townships. Also note that in 2004 unemployment rates began to drop. Leighton has consistently had a lower unemployment rate than the neighboring townships, as seen on the following page.

Community	1997	1998	1999	2000	2001	2002	2003	2004 (Jan- May)
Leighton Township	1.4%	1.2%	1.3%	1.3%	2.0%	2.6%	3.1%	3.0%
Dorr Township	1.9	1.7	1.7	1.8	2.8	3.5	4.2	4.0
Yankee Springs Twp	1.8	1.6	1.6	1.6	2.3	2.6	2.8	2.5
Wayland Township	2.2	2.0	2.0	2.1	3.2	4.1	4.9	4.8
Gaines Township	2.1	1.9	2.0	2.0	3.3	4.2	5.2	4.5
Hopkins Township	3.0	2.7	2.8	2.9	4.5	5.6	6.6	6.4
Byron Township	2.5	2.2	2.4	2.3	3.8	4.9	6.1	5.3
Caledonia Township	2.2	2.0	2.1	2.1	3.4	4.3	5.4	4.7
Thornapple Township	1.8	1.5	1.5	1.5	2.2	2.4	2.7	2.4

Table 3Average Unemployment Rates 1996- 2004

Table 4	
Comparison of 2003 Real Property Valuation ²⁰	

	Agricultural		Commercial		Industrial		Residential	
	SEV	% of	SEV	% of	SEV	% of	SEV	% of
Jurisdiction	(millions)	Total	(millions)	Total	(millions)	Total	(millions)	Total
Leighton Twp	\$ 32.957	18%	\$ 11.745	6%	\$ 10.167	5%	\$ 125.59	70%
Dorr Twp	31.800	16%	16.464	8%	2.523	2%	154.05	74%
Hopkins Twp	41.021	46%	5.237	5%	.240	.3%	42.97	48%
Wayland Twp	16.620	15%	9.349	8%	2.888	3%	84.81	74%

The composition of the tax base for Leighton Township is roughly comparable to that of neighboring communities in Allegan County. For example, residential classifications comprise 70% of the tax base for all but Hopkins Township. Hopkins Township has 46% of its tax base in agricultural real property. Leighton Township has more industrial real property value than other communities, with 5% of the total real

²⁰ Allegan County Equalization Department, 2003 Equalization Report, April 24, 2003.

property value being comprised of industrial activity. Commercial classifications are about equal among the four Allegan County communities.

	1	Agricultural			Residential	Residential		1997
	1988	1997	%	1988	1997	%	Total	Total
Jurisdiction	(millions)	(millions)	Change	(millions)	(millions)	Change	(millions)	(millions)
Leighton	\$8.685	\$14.944	72.07%	\$22.873	\$49.701	117.29%	\$33.574	\$71.379
Twp								
Dorr Twp	8.899	14.571	63.74%	30.037	81.934	172.78%	40.524	105.138
Hopkins Twp	10.276	19.155	86.40%	9.195	24.029	161.32%	20.333	46.111
Wayland Twp	6.450	9.100	41.09%	13.568	38.111	180.89%	22.449	52.733

Table 5
Comparison of 1988 & 1997 Real Property Valuation ²¹

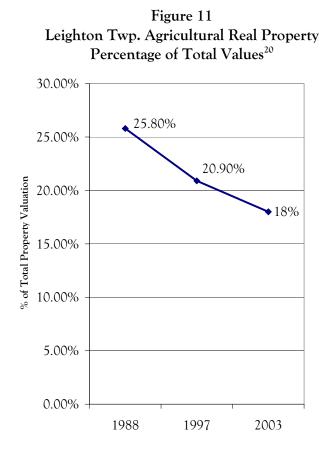
Table 4 provides a comparative look at the change in agricultural and residential real property valuation using the years 1988 and 1997. This is helpful because with more study, the conversion of agricultural land to residential uses becomes apparent. Figures 11 and 12 provide a side-by-side comparison of the changing nature of farmland and property values in the Township. Figure 11 shows the trends of agricultural real property as a percentage of the total Township equalized values. Figure 12 shows agricultural real property valuation in millions of dollars.

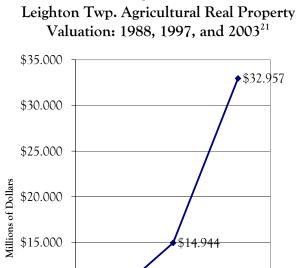
While the value of the Township's agricultural land continues to rise (Figure 12), the percentage it comprises of the total is decreasing (Figure 11). The equalized value increases naturally due to the expected and incessant rise in property values. The percentage is decreasing because agricultural land is continually being subdivided and converted to other use. As this pattern continues in the future, Leighton Township's rural character may face challenges with respect to an increase in rezoning requests for denser developments and associated land use implications such as traffic congestion.²²

²³ Ibid.

²¹ Allegan County Equalization Department, 2003 Equalization Report, April 24, 203.

²² Ibid.





\$8.685

1988

1997

2003

\$10.000

\$5.000

\$0.000

Figure 12

CHAPTER 5. LAND USE AND DEVELOPMENT PATTERNS

Leighton Township is slightly less than 36 square miles, or 23,040 acres. The City of Wayland encompasses roughly 184 acres of former Township land. The Township is divided into 36 sections. Leighton has remained a rural bedroom community with farmland and woodlands scattered throughout the Township. There are some relatively concentrated residential uses in the Moline area, near Green Lake and Hidden Lake, and north of the City of Wayland. More intense land uses, such as commercial and industrial, are found along the western border of the Township, while the northwest corner of the Township has experienced the most industrial growth in recent years. The northern portion of the Township is experiencing the greatest pressure for housing development.



LAND COVER

the Land cover expresses combination of vegetation and land use that envelops the land in a community. The land cover in Leighton Township, depicted in Map 6, is based on computerized mapping prepared in 1992 by the Michigan Resource Inventory Service. It is important to note that the map was prepared from aerial photography and reflects small-scale multiple groupings of land type categories; therefore the map is intended not to reflect zoning or exact land uses.

The rural character of Leighton Township is characterized by farmlands, fallow fields and native southern Michigan prairie lands.

Parcel lines or zoning boundaries do not restrict the information depicted in the map; instead, the

boundaries shown follow natural and man-made structures. For existing zoning, see Map 7.

The land cover in the Township has been categorized into six groupings with the acreage percentage for each general category estimated as follows:

LAND COVER CATEGORIES

CLASSIFICATION, PERCENTAGE OF TOTAL AREA*

LAND COVER DESCRIPTION

Pasture/Hay, 41%	Grasses & livestock grazing
Small Grains, 34%	Wheat, barley, oats & rice
Deciduous Forest, 18%	75% or more is deciduous
Woody Wetlands, 4%	Forested swamps & marshes
Open Water, 2%	Lakes, streams
Low Intensity Residential, 1%	Constructed mat'ls & vegetation
Mixed Forest, < 1%	No vegetation exceeds 75%
Evergreen Forest, < 1%	75% or more evergreen
Commercial/Industrial/Transportation, < 1%	Railroads, highways
Urban/Recreational Grasses, < 1%	Recreational vegetation
High Intensity Residential, < 1%	Heavily built-up urban center
Emergent Herbaceous Wetlands, < 1	Perennial vegetation 75% or more

*The sum of the percentages may slightly exceed 100% due to rounding.

Land Use and Zoning

The Township is dominated by agriculture and rural development patterns. Most of the Township is zoned for agricultural uses. The other primary zoning district in Leighton Township is the Rural Estate District, which is found principally in the northern half of the Township, where pressure for farmland subdivision is strongest. The zoning classifications intended for more intense residential development are chiefly found around the Green Lake area. Clustering in Sections 31 and 32 of the Township, north of the City of Wayland, are the Rural Estate, Low Density Residential, and General Business Districts. Along the western edge of the Township are the Medium Density Residential, Low Density Residential, Neighborhood Business, and Industrial Districts. Map 7 shows the official zoning of the Township.

The Low and Medium Density Residential Districts, and one of the Township's industrial parks, characterize the Moline area.

The Rural Estate and Agricultural Districts dominate the map for Leighton. Minimum lot sizes in these zones were changed from 3 acres and 1 acre, respectively, to 2 acres in January 2003. The Township

realized that large minimum lot sizes are a key contributor to the loss of farmland, as large portions of former farms become unused yards for new homes. Very low-density residential development may appear to be "rural" by design, but this type of sprawling land use absorbs farmland quickly. The Township has recognized this, and has modified the Zoning Ordinance recently to allow provisions for higher density housing clusters in exchange for protected open space. The Township has also developed a sliding scale for determining residential densities. Under this approach, the number of building permits allowed on a property in the Agricultural District is based on land split rights, and therefore a developer cannot develop more units than permitted under legal divisions.

Similar to zoning, land use in the Township is dominated by agriculture and rural development patterns. A small neighborhood commercial area is found southwest of Green Lake. Lakeside residential development is compact and abutting the roadways, and as one travels away from the lake, residential development becomes less dense. Around Huckleberry Lake and north of the City of Wayland is low-density residential development.

Township residents have indicated that the agriculture industry is not as rewarding as it once was. The combination of US-131 with the construction of the Southbelt (M-6) in northern Gaines Township may make new growth inescapable, which would increase property values and therefore increase the tax burden on farmers. Farmers would have more of an incentive to sell land to developers, and the process repeats itself.

A survey completed by the Township's planner found that in 1997, over 10,000 acres of land in the Township were included in active farming operations. The survey also revealed that 20,000 acres of the Township's 23,040 were still undeveloped. According to the 2003 Allegan County Equalization Report, approximately 14% of the Township's acres are classified as agricultural. This disparity can be explained in part by a decline in the amount of land in production and by the assessing process which may classify some properties based on their development potential.

Large minimum lot sizes contribute to loss of farmland.

The agriculture industry is not as rewarding as it once was.

Insert map 6

Back of map 6

Nevertheless, farmland acreage in the Township is decreasing. By comparing a land use and zoning map from the last Master Plan, which is about ten years old, to a recent map, it is possible to determine an approximate calculation of the total acres of farmland that have been subdivided over the last ten years. For specific parcels, where the past map showed an agricultural use, and the recent map indicated lot splits and/or residential development, lot splits and subdivisions were measured. Using a simple visual scan of the map on section-by-section basis, it is possible to identify about 1,865 acres of former farmland that has been divided and likely converted to other uses in the past ten years.

Regional Perspective

There may be some potential conflicts between Leighton Township's shared border with Dorr Township. Dorr's Future Land Use Map (1999) indicates that the Township is planning for industrial development along most of its eastern border. South of 146th Avenue in the northwestern portion of Section 7, Leighton has zoned for agricultural uses. The area directly across Division Avenue in Dorr is planned for industrial uses. The area south of 142nd Avenue in Dorr is planned for more industrial growth, while Leighton has zoned for Rural Estate development and commercial activity.

The City of Wayland (map dated 1998) has zoned lands for Planned Industrial along its northeastern border with Leighton. This is not necessarily inconsistent with Leighton's Rural Estate and Agricultural zoning, which is directly adjacent, since the property is used as a wastewater treatment plant, and is planned for community service. Wayland Township (map dated 2002) has planned for Low Density Residential and Agricultural development, abutting Leighton's Agricultural District. This presents no conflicts with the current Leighton Master Plan.

Thornapple Township (map dated 1997) to the east has planned for agricultural, open space, low density residential, and forest and wetland land uses along their border with Leighton Township. Leighton Township's eastern sections are zoned Agricultural, and therefore there should be no conflicts along this boundary.

Southwestern Gaines Charter Township, Sections 31 and 32, are mostly planned for Business Technology Planned Development. This land use designation extends from Division to Kalamazoo along most of 108th Street. One of Leighton's industrial parks is found at Division Avenue and 108th Street, and is, therefore compatible with the uses in Gaines

Roughly 1,865 acres of farmland have been subdivided in the last ten years. Township in this area. To the east Leighton is zoned for Rural Estate and Agricultural development, which may give rise to potential conflicts with the more intensely zoned areas in Gaines Township, west of Kalamazoo. East of Kalamazoo, the planned uses are fairly consistent. Insert map 7

Back of map 7

CHAPTER 6. COMMUNITY FACILITIES AND SERVICES

Community facilities, such as schools, parks, and libraries, play a significant role in preserving quality of life. This chapter addresses these facilities, as they exist at present.

Schools, Parks and Facilities

Three public school systems serve Leighton Township: Caledonia, Wayland Union, and Thornapple Kellogg. The three school districts serving Leighton Township have a combined enrollment of over 9,000 students. Most of the Township is served by Wayland Union Schools, with the northeastern sections being served by Caledonia, and the eastern sections being served by Thornapple Kellogg. These districts collectively offer three high schools, three middle schools, and 12 elementary schools.

Moline Elementary is the only public school facility in the Township, though it has been closed due to low enrollment. The Wayland Union School District is down 110 students from February 2003, and there is no prospect to open Moline Elementary within the next four years. At the beginning of the 2002 academic year the school had a total enrollment of 155, and at least 200 are needed to sustain it.²⁴

While these facilities are outside the jurisdictional boundaries of the Township, three private schools may serve the Leighton community: Moline Christian, Saint Theresa, and South Christian. These facilities may also serve portions of the broader metropolitan area.

While several colleges are within an hour's driving distance, there are no opportunities for higher education in the rural Township. Kalamazoo College, Kalamazoo Valley Community College, and Western Michigan University are in Kalamazoo. Schools located in and near Grand Rapids include: Grand Valley State University, Aquinas College, Calvin College, Cornerstone University, Grand Rapids Community College, and smaller schools, such as Davenport University.

Leighton Township operates two park facilities, though the active recreational facilities in these parks are limited. These facilities include:

- Leighton Township Park, on Green Lake (.4 acres)
- ➢ Moline Park, 12th Street (8 acres)

The only public school facility in the Township has been closed due to low enrollment.

Township residents have expressed the need for more recreation opportunities.

²⁴ Wayland Union School District

Moline Park offers a ballpark to patrons. Leighton Township Park is essentially a small swimming and picnic area. The State of Michigan maintains a small boat launch along the east side of Green Lake. Township residents have expressed the need for more recreation opportunities – such as a community trail. The City of Wayland presently serves the younger population with facilities, such as Wayland City Park (20 acres), which provides a playground and benches for the public. The Yankee Springs State Recreation Area, approximately 5 miles southeast of the Township, provides lakes, beaches, trails, historic information sites, and boating, and attracts patrons from Michigan, Indiana, Ohio, and Illinois. Holland State Park and other Lake Michigan resort and beach amenities about thirty miles west also attract people from all over the region.

Public facilities generally impart the opportunity for educational experiences, cultural events, and meeting spaces. These facilities in Leighton Township include:

- ▶ Leighton Township Library, 4467 12th Street
- Leighton Township Hall, 4475 Kalamazoo Drive

Township officials have indicated that the Township Hall will need to be expanded in the future. While the present site of the Township Hall sits on 1.3 acres with available room for expansion, the last Master Plan suggests that the Moline area should be home for a new Township Hall. Nonetheless, recent Township Board discussions indicate a desire to build a new Township Hall in a more central location. The new Leighton Township Library was built in the Moline area, in hopes that Moline would begin to emerge as a "Town Center", or cultural, institutional, and retail nucleus.

Public Safety Services

Leighton Township is too sparsely populated to have its own fully staffed police and fire departments. Two fire barns serve Leighton Township with 28 people who volunteer their time – one in Moline and one at the Township Hall. For police protection, the Township contracts with the Allegan County Sheriff's Department in a joint agreement with neighboring Salem and Dorr Townships. Through this municipal contract, two deputies provide public safety services to Leighton Township residents. This arrangement saves community funds, since the Township relies on the County to train, equip, and pay the deputies.

CHAPTER 7. TRANSPORTATION AND PUBLIC UTILTIES

ROADWAYS

Typical of most townships in Michigan, major roadways will follow section lines. Some major roadways begin this pattern in Leighton Township; however, paved section line roads do not service much of the community. Developing paved section line roads is not requisite for Leighton, given its rural character and low-density population.

County Primary Paved Roads, as reported in the 1999 Allegan County Comprehensive Development Plan include 142nd Avenue, 146th Avenue, 10th Street and Kalamazoo Drive. If development increases in the region, traffic volumes are likely to increase, and roadway improvements may be needed to accommodate the additional traffic. Such additional traffic will challenge the integrity and quality of existing roadways. It should also be noted that expanding roadway systems without addressing land use implications can degrade the rural character of the community²⁵.

Sharing an interchange with US-131 is 142nd Avenue, and such a transportation connection serves to make development more attractive. 142nd Avenue is the Township's only connection with an expressway, and is therefore a vital transportation route for the community. What is more, as neighboring communities develop (e.g., Dorr and Thornapple), 142nd Avenue will become a popular corridor due to access to US-131, which directly leads to Grand Rapids and Kalamazoo.

Also important to note is the eastward extension of 142nd Avenue to Patterson Avenue, as planned by the Allegan County Road Commission for 2004. The Barry County Road Commission has indicated that once that connection is made, they will consider the improvement of Finkbeiner Road (the eastern counterpart of 142nd Avenue in Barry County). The plan is to improve Finkbeiner Road all the way to M-37, north of Middleville. This will create an improved link between US 131 and M-37, resulting in improved accessibility to the Township, and likely more through traffic, making commercial development more appealing.

As indicated in the Allegan County Comprehensive Development Plan, commuting patterns in the County indicate that about 71% of the County's workforce both work and live in the County. The remainder

142nd Avenue will become a popular corridor due to access to US-131.

²⁵ Journal of the American Planning Association, Road Expansion, Urban Growth, and Induced Travel, 2003

commutes to work into the County from elsewhere. According to the County Plan, in 1990, over 18% of the population in the County commuted to jobs in Ottawa County, about 15% commuted to jobs in Kent County, and about 10% commuted to jobs in Kalamazoo County.²⁶ It is fair to assume that a larger percentage of Leighton Township residents commute to Kent County for work due to its proximity to Grand Rapids area employment centers. The mean travel time to work for a Leighton resident is 22.6 minutes, which is an indicator that residents leave the Township for employment.

AIR TRANSPORTATION

The Wayland Area Pilots Association owns Calkins Field Airport, situated in Section 31 of Leighton Township, formerly operated by the City of Wayland. Ultra-light aircraft use the facility's 1,875 turf runway as do some general aviation aircraft suitable for such a facility.

Padgham Field, located in the City of Allegan, offers general aviation services, primarily serving corporate and recreational aviation needs.

Commercial passenger air service is available through the Gerald R. Ford International Airport and the Kalamazoo-Battle Creek International Airport. The Gerald R. Ford International Airport is Michigan's second busiest commercial airport, offering 12 passenger airlines that serve 5,000 travelers each day. Both facilities provide daily service to regional hubs throughout the Midwest.

UTILITIES

The Dorr-Leighton Sewer Authority established in 1978 provides sewer collection and treatment for the western Sections of the Township, including the Moline area. This system was formed as an agreement between the two Townships to build a public collection and treatment system, and was originally funded through a grant from the EPA. The Dorr-Leighton facility collects approximately 150,000 gallons per day, with a treatment capacity of 250,000 gallons per day. This facility was expanded in 2001 from a lagoon plant to a sequencing batch reactor plant, which increases efficiency in operation. The upgraded treatment facility is located in Leighton Township about one half mile southeast of the Division and 144th Street intersection.

There is also a private water facility that provides water for domestic and commercial use, though most of the Township receives water via

²⁶ Allegan County Comprehensive Development Plan, 1999

individual wells. There is currently no connection between this private water system and the Dorr-Leighton Wastewater Authority or the Green Lake Sewer Authority that serves Green Lake.

The Green Lake system controlled by Leighton Township was built in the 1970s to alleviate failing septic systems around the lake. The most recent data from the Green Lake facility indicates the average daily flow is approximately 70,000 gallons per day. The sewage lagoons have a rated capacity of 150,000 gallons per day. A clarifier was recently added at the plant to improve phosphorus removal, and the facility recently switched from a land irrigation discharge to a seasonal surface water discharge. The land irrigation system was at the end of its expected life cycle for such a system; it is no longer necessary to use the irrigation field with a surface water discharge. There is a plan to expand this facility; however, the timetable for expansion will depend on growth in demand and financing capacity.

More residential development in the vicinity of the lake may justify periodic upgrades and expansions to the sewer system, and may also lead to more discussion about a public water system. The Township currently does not provide public water to property in the Green Lake area, and each residence utilizes a private well. With additional growth likely around Green Lake, serious discussions about public water service may be imminent.

In the event that the Green Lake community would necessitate a public water supply, an Infrastructure Needs Study completed in February 2001 suggests that the Township consider an extension from the existing private facility serving the western portion of the Township. If unfeasible or cost prohibitive, an alternative would be for the Township to construct two wells, an approximately 500,000 gallon water tower, and a distribution system, as recommended by the study.

Finally, several residents and businesses in the extreme southwest corner of the Township are serviced by a short extension of the City of Wayland's sanitary sewer system. The City's extension comes northward along Dalia Street.

CHAPTER 8. IMPLICATIONS

The preceding chapters of the Comprehensive Plan have described the existing land use, socioeconomic, and demographic conditions in Leighton Township. In the context of the Comprehensive Plan, it is important to ask and answer the question: What does it all mean? This Chapter begins that discussion by drawing from the data the key issues or concerns that the Plan must address. The following are implications based on the data presented throughout the Community Profile:

- 1. The population in the Leighton region will logically grow significantly within the next ten years, being the "next" tier of communities from Grand Rapids. Such growth may become accelerated with the new Paul Henry Expressway (M-6), and its associated impacts will challenge the character of Leighton Township, and will have implications on Township infrastructure, especially if it spreads over the Township in very low density patterns. Since the last Census, several developments have been approved by the Township, which could bring over 2,000 new residents to Leighton when completed.
- 2. Current growth patterns in the southern suburbs of Grand Rapids, a strong West Michigan economy, and the new Paul Henry Expressway indicate that suburban growth in Leighton may be inevitable. However, these market forces could be justification for the Township to partner with neighboring communities (e.g., Dorr and Gaines) in an effort to grow compatibly with one another. The existing Future Land Use maps for several communities neighboring with Leighton present some potential land use conflicts between borders. Along Division Avenue, an option is to perform a corridor plan in which Dorr and Leighton could implement. Utilities expansion and improvements around the City of Wayland could benefit Wayland Township, the City of Wayland, and Leighton if coordination agreements are made.
- 3. The slow but measured subdivision of farmland presents a serious challenge to the Township's rural character. Nevertheless, since the Township is championing the Master Plan process in its early growth stages, it also provides a unique opportunity to redefine the community's personality. With careful planning, Leighton Township could develop with more robust, diverse businesses, attractive neighborhoods, and a stronger tax base while still preserving high-quality farmland.

It is essential to investigate what the data presented may imply about future conditions in the Township.

- 4. A challenge to the Township will be to increase recreational opportunities. Leighton Township is currently not served by any formal greenways or trail links. With more growth, more people are seeking access to active and passive parkland. Enhancing the Township's two park facilities and/or acquiring property for additional facilities will be paramount in maintaining a high quality of life, especially with an increasing population. Another chance for regional cooperation arises; in conjunction with Dorr, the City of Wavland, Wavland Township, and Allegan County, land adjacent to the Conrail Railroad could be turned over for construction of a regional trail. Allegan County Parks Department is planning a trail that would run adjacent to US 131 on an abandoned rail corridor. This trail segment would begin in Plainwell and connect Martin and Wayland, and proceed north through Leighton Township all the way into Kent County where it would connect with the new M-6 Corridor bike path.
- 5. Developing solutions to preserve farmland and the rural character of the community, while respecting private property rights and intentions to bring cultural, recreational, and social opportunities to the Moline area, will be very important in balancing the planning process. Such options as the transfer of development rights (TDR), and other farmland preservation techniques may be considered as methods in which to preserve farmland. The Township is in a good position to consider this now, since large-scale growth- such as shopping malls and apartment complexes- has not yet occurred in the community.
- 6. The Township should appreciate key unique features, such as Green Lake, as well as community identifiers, such as Moline, and develop methods in which to protect and enhance the usage of these critical areas. Preserving the water quality of Green Lake and the Township's other natural features will be a priority to protect property values and the amenity value of this important feature.
- 7. The Township's rural character is its most attractive feature. Ironically, that "best" feature may be its own worst enemy. With people moving out to cleaner air and green vistas, farmland is becoming devastated. Thus as farmland is slowly phased out by the marketplace, the features that attracted families to the community initially become erased. If this continues, Leighton will likely become the "next" Grand Rapids suburb, in a concentric ring around the city.

The Township's rural character is its most attractive feature. Ironically, that "best" feature may be its own worst enemy.

- 8. By placing higher density residential development in strategic areas around the Township (i.e., where dense residential development already exists and where utilities are available), farmland and open space can be preserved in the Township's agricultural areas. This helps to meet housing needs of the region, but still places priority on preserving farmland. Such a task will require inter-governmental planning and/or utilities expansion.
- 9. As Leighton Township continues to grow, the rural character may face challenges with respect to an uncoordinated increase in rezoning requests for denser developments and associated land use implications such as traffic congestion. Dense development scattered sporadically throughout the Township would fail to enhance and preserve high-quality farmland and rural charm. The Conservation Subdivision and Open Space Preservation regulations in the Township Zoning Ordinance include provisions to preserve open space, and even specifically mention productive farmland. This is constructive, though more could be accomplished with such added regulations as a "farmland preservation zone" or "farm overlay zone". Due to a poor economy or uncertain market trends, however, farmers may seek to sell property for development rather than continue to farm it, and measures to preserve rural character must be balanced with an understanding of the rights of land owners to make economic use of their lands. It should be noted that Michigan's taxing system, including the practice of taxing property at its "highest and best" use, may contribute to loss of farmland.
- 10. Residential developments generally demand more spending in services than they generate in revenue for any community. As the Township takes on more new residential development, the tax burden on residents will increase, and more commercial and industrial zoning may be desired to share the burden.
- 11. The relatively few rental-housing units in the Township reflects a lack of diversity in opportunity. Without enough low cost and short-term units, younger residents and the elderly may be forced to leave the Township as their living situations change. The Township has rezoned lands to R-3 along the east side of Division Avenue to create opportunities for more rental development. In addition, such developments as Hunter's Glen, a manufactured housing community, and Harvest Meadows with some starter homes, do offer "starter homes" for new families in community. Nonetheless, a lack of affordable and short-term rental dwellings may make living in the Township difficult for some young professionals and elderly citizens.

Efforts to preserve rural character must be balanced with an understanding of the rights of individual property owners.

SECTION III: FUTURE LAND USE PLAN

This section of the Plan builds on the Community Profile presented in Section II and extends the Community's vision into the future. The Future Land Use Plan begins with the broad policy foundation upon which the Plan is formed. This foundation is found in Chapter 9 which includes the goals of the Township and the objectives or milestones that support them.

Based on the goals and objectives of the Township, the Future Land Use Plan is presented in Section III. This section includes the Future Land Use Map (page 83), and a description of the general land uses planned for the Township. Finally, this section concludes with the Action Plan. This is a series of implementation strategies that outline a course of action to realize the vision of this Plan.

CHAPTER 9. GOALS AND OBJECTIVES

The Comprehensive Plan will be founded on the following goal statements, each supported by more specific objectives. The goals are intended to describe a desirable end state of the Township about twenty-five years into the future. The objective statements are more specific than the goals and may be regarded as milestones in the journey to achieving the broader goal.

The goal statements, or the policy foundation for the Master Plan, essentially define the values and visions the Plan must support and achieve. As such, goal statements need to be as clear as possible, stated in compelling terms to inspire action. The most effective goal statements will meet the following four criteria:

- ♦ Define a Desired End;
- Be Stated in Positive Terms;
- Be Bold, but Realistic; and,
- Reflect a Consensus.

With these standards in mind, the following goal statements have been crafted based on comments from community involvement workshops to guide growth and development in the Township over the next twenty to twenty-five years. The following objectives suggest activities that must be accomplished if the broader goal statements are to become reality. Most are specific activities or programs that will require the active effort of the Township or other agencies in the area.

A. NATURAL FEATURES AND RECREATION

- 1. The residents of Leighton Township will enjoy connected open spaces, active recreation, including playgrounds and fields for competitive sports, and a Township-wide bicycle trail system. Public access to these recreation resources and natural amenities will be protected and current and future generations of all ages will enjoy their benefits.
 - a. Inventory and record significant natural features and open spaces within the Township to help identify priorities for private conservation and potential land acquisition.
 - b. Establish a Parks and Recreation Board and complete a Parks System Master Plan. The Plan will identify future land

The goals are intended to describe a desirable end state of the Township about twenty-five years into the future. acquisition areas for playfields, will define and support a trail network, and will include a capital plan for any implementation.

- c. Develop and promulgate regulations for trail facilities to be integrated with natural features and new developments.
- 2. Leighton Township will have significant areas of unspoiled open space which provide natural wildlife habitat and protect valuable features and resources such as the community's rolling hills, stream corridors, lakes, roadway viewsheds, wetlands, forestlands, and pastoral character.
 - a. Establish collaborative partnerships with agencies such as the MDNR and the local land conservancies to preserve natural systems.
 - b. Adopt policies that encourage the use of conservation easements.
- 3. Green Lake will be characterized by attractive, environmentally harmonious development designed to minimize water quality impacts and preserve natural amenities associated with the unique feature. Keyholing to Green Lake will be minimized, and recreational areas near the lake will be enhanced to serve all ages and groups.
 - a. Review existing provisions and, as appropriate, implement strengthened utility policies that require developments to extend sanitary sewer and water services.
 - b. Review existing provisions and, as appropriate, implement strengthened anti-keyholing policies and regulations.
 - c. Adopt lakefront zoning overlay district regulations designed to lessen the impacts of fertilizer runoff and sedimentation, and development impacts on Green Lake wetlands, woodlands, and watershed features.
- 4. The Rabbit River watershed will be preserved and protected for its habitat significance and biological function. Recreational opportunities associated with wildlife and aquatic habitat within the watershed will be expanded.
 - a. Refine stream corridor boundaries and craft overlay regulations to buffer water resources from development.
 - b. Utilize information from the inventory of significant natural features and open spaces.

- c. Adopt policies that encourage the use of conservation easements along stream corridors.
- d. Establish partnerships with neighboring communities to preserve important watershed features.

B. FARMLAND

- 1. Significant areas of Leighton Township will support economically viable agricultural enterprises, which include traditional family farms, corporate agribusiness, and hobby and niche agricultural activities that can take advantage of emerging open space/cluster development patterns.
 - a. Continually evaluate farmland preservation options in the context of a shifting agricultural economy.
 - b. Work with agricultural interests and neighboring communities to monitor farmland preservation techniques.
 - c. Adopt permissive agricultural business enterprise (e.g., agritourism, roadside retailing) provisions that will allow farm owners to augment farm income.
 - d. Adjust zoning provisions to give priority to agricultural support businesses when establishing commercial zoning provisions along high-traffic rural corridors.

C. ECONOMIC DEVELOPMENT

- 1. The economic health of Leighton Township will be secured through regional job creation and local industrial growth. Such development will be integrated into the area's natural features, aesthetically attractive, and supported by water, sewer and transportation infrastructure. The Township will support the adaptive reuse of underutilized properties for economic development purposes.
 - a. Evaluate and strengthen utility policies as appropriate to require developments to extend sanitary sewer and water services.
 - b. Define existing and potential industrial and commercial corridors.
 - c. Develop and implement incentives for redevelopment of existing industrial sites.

- 2. Neighborhood Town Centers will be established near existing population clusters at Moline and south of Green Lake to provide services to residents. The Neighborhood Town Centers will be pedestrian-oriented and hamlet-like in character.
 - a. Revise the Zoning Ordinance to accommodate and regulate Town Centers.
 - b. Re-examine road paving and sidewalk policies and revise as necessary to allow for viable and accessible Town Centers.
 - c. Complete Town Center design plans to inform property owners and developers of the Township's intent.
 - d. Develop and implement design standards pertaining to architecture, building material, building color, signage, banners, site utilization and development, and landscaping.
 - e. Cooperate with Dorr Township regarding the development of Moline.

D. TRAFFIC AND TRANSPORTATION

- 1. A safe, comfortable, well maintained, and efficient system of roadways will serve the citizens of the Township, providing effective linkages between and among existing and future neighborhoods, shopping and employment areas.
 - a. Expand the role of the Planning Commission in reviewing and recommending transportation proposals.
 - b. Develop and implement a Transportation Plan to facilitate connectivity of new public and private roads.
 - c. Develop and implement a continuing education program to inform local officials, private enterprises, and residents of the benefits of coordinated transportation improvements.
 - d. Construct and improve roadway linkages between Sections 10 and 11 to serve existing and known new development.
 - e. Construct bypasses for safer travel near the Library at 12th and Division, and near Green and Round Lakes at 145th south of Round Lake.
 - f. Cooperate with Dorr Township and the Allegan County Road Commission regarding funding for improvements to Division Avenue.
- 2. The timing and extent of gravel road improvements will be coordinated with planned and desired economic development

and will be appropriately funded by private and public resources as applicable.

- a. Identify growth areas and strategically prioritize roadways requiring improvements.
- b. Improve roadways in acknowledgment of the recommendations of the Transportation Plan and in recognition of prioritization conclusions.
- c. Explore and implement private funding techniques to balance the public cost for new infrastructure resulting from new development.
- 3. Traffic will flow efficiently along high-development and hightraffic corridors as a result of utilizing sound access management techniques.
 - a. Adopt and implement improved access management standards to preserve the flow of traffic and the safety of motorists.
 - b. Collaborate with Dorr Township and Allegan County to develop and implement amenable access management standards and physical improvements to Division Avenue.

E. UTILITIES AND COMMUNITY SERVICES

- 1. Long-term planning should anticipate that the community around Green Lake will ultimately be served with a central water supply and distribution system supported by private investment.
 - a. Complete an evaluation of future water system needs.
 - b. Undertake an assessment of potential well field sites to identify, preserve and protect wellhead areas in advance of actual need.
- 2. Utility services will be extended strategically in support of growth and development that is consistent with local land use goals and objectives. Development patterns that encourage the Township's natural feature and farmland preservation intentions will be strengthened by utility extension policies.
 - a. Identify future utility needs and future improvement locations in keeping with Township land use goals. Utilize the completed infrastructure needs study.
 - b. If necessary, strengthen utility policies that require developments to extend sanitary sewer and water services. As

growth occurs, require utilities to be concurrently extended commensurate with the anticipated demand and impact of any proposed development.

- c. Adopt and implement zoning provisions that regulate densities based on available utilities.
- d. Evaluate, and adjust when necessary, policies to prevent the proliferation of private utility systems.
- 3. The public cemetery located on Kalamazoo Avenue will be expanded to adequately serve the area.
 - a. Determine the future need of the cemetery and identify neighboring property that would be advantageous for acquisition.
 - b. Develop and implement a capital improvement plan to fund the improvement of the cemetery.

F. HOUSING DEVELOPMENT AND POPULATION

- 1. Leighton Township will have high-quality and inclusionary neighborhoods, which serve all residents, including young families and seniors, with attractive, affordable homes located in safe and quiet neighborhoods that promote human interaction.
 - a. Revise elements of the Zoning Ordinance, including definitions and dimensional requirements, to make housing standards more clear.
 - b. Evaluate minimum square footage and lot size requirements and revise the Zoning Ordinance as necessary to permit a broader range of housing forms.
 - c. Utilize mapped Planned Unit Development zoning districts to enable more creative residential communities.
 - d. Refine the R3 zoning district language to permit attractive medium density residential communities to better serve young families, young professionals and senior citizens.
 - e. Develop and implement a sidewalk ordinance and other standards that require non-motorized connections in the Township's denser zoning districts.

G. PLANNING, GOVERNANCE AND REGIONAL COOPERATION

- 1. Through inter-jurisdictional cooperation and funding, Leighton Township will be serviced by high quality health and safety services.
 - a. Develop policy to encourage the establishment of health facilities within the Township to serve the needs of the community.
 - b. Collaborate with neighboring communities and establish a regional fire and emergency response commission.
- 2. Coordinated inter-municipal zoning and economic development activities will be implemented to enhance the quality of life for Leighton residents and to minimize incompatible adjacent land uses.
 - a. Explore and undertake methods to improve communication among neighboring municipalities.
 - b. Identify potential and desirable joint-planning activities, such as transportation and utilities improvement, and identify legislative and political barriers to achieving partnership.
 - c. Work together with neighboring communities on identified joint-planning activities, such as corridor plans, watershed plans and regional recreational facilities.

CHAPTER 10. FUTURE LAND USE PLAN

The Leighton Township Comprehensive Master Plan establishes general patterns of land use to guide growth and development for the next twenty to twenty-five years. This Plan constitutes a viable and integrated approach to accommodate the impacts of growth suggested by the implications of existing growth patterns. The over-arching intent is to foster efficient patterns of development that preserve the community's important natural features and rural character while accommodating, and even encouraging, particular types of growth in certain desirable areas, as described on the following pages.

The residents of Leighton Township have indicated at a visioning workshop that they are content to remain a "bedroom community" with limited industrial and commercial service development in specified areas. Above all, they desire to retain the natural rolling landscape that offers serene views, wildlife habitat, and a beautiful countryside atmosphere. To honor these values, the community devised a land use framework that seeks to preserve open space, protect lake and water quality, provide for economic opportunity and services, preserve the rural aesthetic, and provide recreation areas.

The overall purpose of the future land use designations is to guide new development in logical patterns while offering fair, and in some cases, value enhancing opportunities for development. The following describes the future land use designations as illustrated on Map 8. Note that the future land use designations on Map 8 are general. Where two or more designations conjoin, either land use class may be appropriate.

It is helpful to understand the existing characteristics of the Township. Generally, the Township may be nominally portrayed in four parts, grouped on the basis of similarities with regards to land use and development patterns. These four parts include lands south of 142^{nd} Avenue; lands generally bounded by 2^{nd} , Patterson, 143^{rd} and 140^{ch} ; lands north of 142^{nd} Avenue; and, the Moline area. The following discussion depicts existing attributes and challenges of these four areas.

Land south of 142nd Avenue consists largely of farmsteads and large lot single-family homes. Scattered mature forests and wetlands are more common in this portion of the Township. With a few exceptions, this area will likely be the last to transform from agricultural uses due to its southern location away from Grand Rapids, and lack of utilities.

The residents of Leighton Township... desire to retain the natural rolling landscape that offers serene views, wildlife habitat, and a beautiful countryside atmosphere. Traditional lot splits are not as prevalent south of 142^{nd} Avenue and agriculture is the dominant land use.



A typical viewshed in Leighton Township south of 142nd Avenue includes farm buildings and open fields.

There are two general land use exceptions to this rural agricultural area. In the southeast corner of the Township, in Sections 35 and 36, are a series of large gravel mines. It is anticipated that this area will be developed residentially when operations are complete. One of the operations involves the creation of a manmade lake that is likely to be converted to real estate lake development having numerous lakefront home sites.

In addition, the southwest area of the Township, including most of Sections 30, 31, and 32, is a unique area of the Township that presents an opportunity for cooperative planning with Dorr Township and the City of Wayland. There are no utilities in this area, and this will limit further development at current urban densities north of Wayland. Warranting discussion is the notion of a community park serving both the City of Wayland

and the Township off the west end of Dahlia Street and adjacent to the Rabbit River in Section 31 and development and connections to a pedestrian trail following the old interurban rail line. Discussions on desirable land uses around the airport should also proceed. Finally, the development of land west of US 131 in Sections 30 and 31 of Leighton, and adjacent land in Dorr, should occur as a result of cooperative planning between the two Townships.

Lands generally bounded by 2nd, Patterson, 143rd and 140th include several large agricultural enterprises and areas, including a dairy concentrated animal feeding operation. The eastern central portion of Leighton Township, this area also includes some large lot single-family home sites that dot the landscape, but the pressures of traditional subdivision development have thus far evaded the area.

A challenge for this agricultural area will be to minimize conflict between residents and farming operations and other intense farming uses. Active farmland around the large animal feeding operation and similar uses will serve as a buffer from residences near more rapidly developing Green Lake and other areas. Should developments happen near these concentrated operations, newcomer/farmer conflict will be inevitable.

It is anticipated that in the long-range future this area will see the types of development the north and west sections of the Township witness.

While the extension of 142^{nd} Avenue to Patterson Road and beyond to M-37 may not be imminent, such an improvement will have implications for this area and for the intersection of Patterson and 142^{nd} . Such implications include pressures for local service and convenience businesses, and pressures for more intensive residential development due to increased accessibility.

Lands comprising most of the northern half of the Township will likely be the first to transform from agricultural uses due to zoning and proximity to expressways and employment. Some of the larger agricultural parcels in this area are towards the west, and include a poultry concentrated animal feeding operation just outside of Moline. The larger parcels in the direction of US 131, if developed, will impact this quadrant of the Township in terms of traffic, road quality, overall character, and service needs.

A major challenge in this north central region of the Township is the lack of a street connection between areas north and south of 145th Avenue east of Green Lake and Round Lake with the rest of the Green Lake/Round Lake community. This disconnect has resulted from the closure of the narrow stretch of 145th at the north end of Round Lake. New residents attracted by the new smaller scale private street developments as well as the major developments, such as Green Lake Ridge, will create dramatically increased traffic volumes east of Green Lake within a few years. These increases will exacerbate the accessibility problem and the majority of traffic will be inclined to flow to the northeast and may ultimately manifest a physical and socio-economic rift within the community. It does not appear to be financially or politically feasible to extend Round Lake Drive to 145th or open 145th to through Both of these alternatives would require condemnation of traffic. valuable lake front properties and would force increased traffic on roadways that are clearly incapable of being upgraded to arterial, or even collector, status. The alternative appears to be improvements along 4th Street and 144th Avenue to accommodate a smoother more efficient flow of traffic. While this route will be circuitous it is likely to remain the only viable approach to maintaining and improving connectivity between the areas.

A challenge to the Township will be to contain commercial development along 142nd Avenue in well-planned nodes, rather than sprawling strip development, as prompted by residential development and traffic volumes through the Township. "Node 1" is west of Green Lake Creek; "Node 2" is the Kalamazoo intersection; and, "Node 3" is the County line. A challenge is to develop 142nd Avenue in a manner amenable to

Lands comprising most of the northern half of the Township will likely be the first to develop. local residents and to avoid the dangerous driving conditions associated with commercial strips (e.g., 28^{th} Street and Alpine Avenue). Based on current trends and development pressures the nodes will likely develop from west to east.

An important factor in this portion of the Township is Green Lake, and how the remaining unimproved property in the vicinity of Green Lake will eventually develop. Much of the undeveloped property adjacent to the lake is to the north. That area totals approximately 395 acres and may accommodate up to 460 dwelling units with present zoning stipulations, assuming all the lands are buildable.

This added population has implications for community services. More people equate to a greater need in school facilities, and water and sewer infrastructure. Also, segregated land uses and relatively low-density growth patterns in new subdivisions near the lake preclude the feasibility of walking, and require use of an automobile. Increasing traffic counts will require new roads. Other additional services, such as emergency and fire responders, will be needed to meet the needs of residents.

As a marketing technique, developers may offer lot buyers access to Green Lake even though all lots do not have direct lake frontage. This can be done through easements and common ownership of access points. Without anti-keyholing provisions the proliferation of semipublic beaches and boat launches scattered around the north end of the lake may be likely. This activity would have implications for lake quality and safety.

Keyholing, or funnel development, is a development pattern where a waterfront lot is designated as common open space for a larger development away from the waterfront.²⁷ A conflict exists: present waterfront property owners often want to minimize public access, while others, including new residents to the area, would enjoy lake access. Currently, the Township has no direct standards to regulate this form of lakeside development and therefore cannot prevent it from occurring. Michigan courts have supported only a few regulatory methods to control keyhole development: a regulatory ordinance concerning boat docking and a zoning ordinance which regulates boat docking; both of which must be reasonable and founded on particular investigation of the individual lake and its carrying capacity.²⁸

The Green Lake community could grow by 460 dwelling units within the next 20 years.

> The Township has no direct standards regulating keyhole development.

²⁷ John D. Warbach, Ph.D. "Regulating Keyhole Development." Planning and Zoning News, 1994

²⁸ Ibid

Lands around the Moline community are characterized by a variety of uses, including industrial, commercial, single-family and multiple-family residential, manufactured housing, and public uses including a park and a library. Moline shares a border with Dorr Township, and the unincorporated village itself is characterized by an aging housing stock with shallow setbacks and an engaging village environment.

Moline has an opportunity to accommodate an intensification of uses to augment the existing village atmosphere and to define and enhance its character. The physical layout of the community, its location, market demand, and the development sector, all coupled with visionary and proactive development policies established by the Township, could reestablish this community as a regional service area. In addition, the Moline area has potential to accommodate affordable housing while increasing quality of life for residents through nearby service uses and parkland.

Insert future land use map

Back of flu map

FUTURE LAND USE DESCRIPTIONS

AGRICULTURAL



Farm fields will characterize the Agricultural designation.

The primary intent of the Agricultural future land use designation is to promote land uses and parcel sizes that are conducive to the enterprise of agriculture. Agricultural activities may include cropland, pastures, orchards, farm markets, related businesses, forestry and forestlands, and animal operations. The minimum lot size is 2 acres and this designation supports the Township goal of rural preservation. Public sewer is not available, anticipated, or encouraged. Higher densities, and development that requires support by public sewer and water collection systems, or private are also discouraged.

When development does occur, the prevalent development pattern within this area will be

through land divisions. Open space and conservation clustering techniques will be encouraged. Such clustering of homes should not increase the overall density of development in the district. The intent of clustering of homes is to minimize curb cuts along section line and arterial roads, utilize community resources wisely, and preserve natural features.

Emblematic of the Agricultural areas are single-family detached homes and farmstead clusters (single-family homes with a series of accessory structures, such as barns, silos, stables and utility buildings). Rural view sheds are expected to be preserved along road right of ways, including trees lining roadways and any unique natural features.

SINGLE FAMILY & RURAL RESIDENTIAL

The Future Land Use Map designates the majority of the north one-half of the Township within the "Single Family and Rural Residential" land use category. This planning district encompasses over 10,000 acres and within it boundaries is located the majority of the Township's current single-family residential development. While it is the aim of the Comprehensive Plan to direct the majority of new single-family residential growth to occur within this general planning area, it is not anticipated that the planning area will see full developed within the 20 to 25 year planning horizon. Assuming an average density of 2 units per acre, the planning area could ultimately accommodate well over 20,000 new homes or 60,000 people. Given that the Township's total population is expected to increase by approximately 3000 people by the year 2030 and assuming 3 persons per household, the actual amount of land consumed by new residential development within that time period is more likely to be in the range of 750 to 1000 acres, or roughly 10 percent of the total area.

With generally sparse current pattern development. its of underdeveloped road system and the lack of utilities, several parts of the planning area, (especially in the south central and east central areas), are not vet viewed as being as ripe for conversion to dense residential use as other areas located further to the north and west. For that reason a policy of managed, incremental expansions of the residential zoning districts is intended to prevail rather than a policy that would allow significant leapfrog changes or the wholesale re-zoning of the planning area. It is therefore anticipated that current zoning classifications within the Single Family and Rural Residential planning district will remain largely in place until market conditions, emerging development patterns and infrastructure improvements clearly warrant changes on an incremental basis.

The Township's single family residential zoning strategy incorporates two single-family zoning districts: R-1 Rural Estate District and R-2 Low Density Residential District. R-2 is the denser of the two districts. The minimum lot size in the R-1 District is 2 acres. Twelve thousand square foot lots (approximately 3 dwelling units per developed acre) are permitted in the R-2 when sewer and water are available. Without utilities the minimum lot size is 15,000 square feet and the maximum developed density in the R-2 district is approximately 2 dwelling units per acre. Developed R-1 and R-2 areas are now characterized by singlefamily homes in traditional subdivisions as well as newer cluster subdivisions that include set aside open spaces and a variety of lots sizes. Within the R-1 areas, agricultural uses are also permitted and may continue as a principle land use activity. This is an important planning consideration and significant physical and cultural trait of R-1 areas.

When a change within the Single Family and Rural Residential future land use planning area is contemplated, whether at the request by a land owner or at the Township's initiative, several factors will be weighed in determining the appropriateness of an R designation over an existing Agricultural designation or the R-1 over the R-2 District. The following factors are among those that will be considered and weighed. The factors are not prioritized nor should they be considered exclusive to all other considerations.

- The demand for housing and the existing supply of available, undeveloped R-1 and R-2 areas nearby and elsewhere in the Township.
- The presence of utilities and or the likelihood and timing of utility extensions capable of serving the particular area when it does develop.
- The soils of the area and their ability to accommodate residential development densities without public sewer.
- The availability and quality of ground water and its sufficiency to support residential water demands.
- The consistency of allowable densities and lot sizes with neighboring developed residential areas and neighborhoods.
- The presence and nearness of farming operations and the direct impacts that a conversion to residences would have on such operations.
- The adequacy of the road system that would be called on to directly support the additional traffic demands, any plans for roads improvement and the timing of such improvements.

Clustering and open space techniques are encouraged in this classification as a way to preserve open space and natural features as development occurs. Open space practices should preserve tree-lined roadways, thus maintaining a rural view shed similar to that of the Agricultural designation. Open space and trailways will be encouraged within new developments and with a focus toward interconnection with future adjacent or nearby developments. It is envisioned that over time the interconnectivity of private open space and trails will evolve into a functional web of connected trails and open space having significant environmental and recreational value.

The Allegan and Barry County Road Commissions are proposing to extend 142nd Avenue so that 142nd Avenue will be a direct route between US 131 and M-37. Should this improvement occur, traffic will increase considerably on 142nd Avenue. Nonetheless, the Township does not envision or promote intense residential or commercial development east of Kalamazoo Avenue. The desired development pattern is to allow the establishment of small distinct commercial nodes of major street intersections, as development occurs from west to east, as opposed to

lengthy stretches of residential or commercial strips. A confined node of commercial uses may be contemplated in the future subject to utility availability.

MULTIPLE-FAMILY RESIDENTIAL

Multiple-Family Residential development will consist primarily of apartment homes, senior living facilities, and attached condominiums. More manufactured housing communities are not desired or anticipated. The maximum permitted density for a single-family and two-family dwelling is the same as the R2 district. The maximum permitted density for multiple family dwellings is approximately 9 dwelling units per acre. Where not serviced with public sanitary sewer and water, density is reduced to approximately 4 dwelling units per acre.



High quality multiple-family housing is anticipated.

Multiple-Family Residential uses are intended to provide affordable and high quality housing for young families, the elderly, and young professionals, and to act as a transition from lower density residential uses to more intense uses. Such uses will be in close proximity to, and will provide pedestrian connections to, commercial services.

This Plan envisions a confined mix of uses east of Division Avenue to blend with the Moline Town Center area. This area east of Division Avenue will consist primarily of residential land uses but may serve as a transition between the Town Center and single family uses to the east and south. Limited small-scale neighborhood commercial uses, similar in form with those of

the Town Centers, may be contemplated in this area. This Plan intends not to foster a large area of single use multiple family developments east of Division.

Play areas for children and other parkland to provide recreational opportunities should be incorporated in new development. Developments will include pedestrian walkways and street layouts should be designed to connect with future developments as they occur. Trail facilities will be incorporated into new developments and will be positioned to join with trails within future developments.

MIXED USE/TOWN CENTER

It is anticipated that the town center areas will provide most of the daily service needs of the nearby residents, and that service uses will actually be knitted in with residential uses. Concentration of residents generates a need for services. These service areas will generate less automobile traffic than the automobile oriented strip commercial form. A key and necessary element will be convenient and safe pedestrian access. Residential uses in the town centers will be similar to that described in the Multiple-Family Residential area. Primary examples of uses include coffee shops, beauty shops, community banks, village-like town homes, and village-like apartment homes. Individual stores will generally not be greater than 5,000 square feet. Public utilities will serve these uses, which are described in more detail below, according to location.

Moline Town Center

Small-scale retail and service uses (local pharmacies, fresh fruit markets, small restaurants) and office service (family doctors and dentists) uses will be near adjacent residential areas. The proliferation of long, sprawling strip commercial facilities will be discouraged, and since these commercial uses serve the adjacent neighborhoods and should be considered a part of the community, the building types and designs should reflect the architectural character of the adjacent neighborhoods, both present and anticipated.

Residential development that occurs within the Moline mixed-use area should not be isolated from service uses with excessive setbacks. Rather, service uses will be designed to mitigate the impacts of typical strip malls with parking to the side or the rear. A compact neighborhood with compatible land uses is expected.

Adjacent to and north of the Leighton Township Library a new street is proposed to connect Division to 12^{th} Street southeast of the current intersection. Along with this new section of street, a cul-de-sac will be constructed at 12^{th} Street to prevent through traffic and to preclude motorists from driving the road segment, which is likely to become increasingly dangerous as traffic volumes increase. This street improvement is an important element of the Moline Town Center for several reasons. The improvement would eliminate anticipated safety concerns of the current Division and 12^{th} intersection. Secondly, the realignment will likely improve the value of the adjacent existing homes by lessening traffic noise and other negative aspects attributed to high traffic volumes. Thirdly, the realignment will facilitate the town center



An example of residential architecture desired in the Town Center. Note the rearfacing garage, modest setbacks, and large front porch.

concept by providing improved interior street access to the library and

other currently vacant but developable land.

Green Lake Town Center

To meet the needs of residents, a small-scale, walkable, and village-like mixed-use town center is contemplated north of the discussed by-pass to connect 7th and 144th, southwest of Green Lake. The Green Lake Town Center would serve several purposes. It will offer a residential alternative for senior citizens and young families. It will anchor the Green Lake area and provide convenient services and other low volume destinations to serve the growing population and visitors. Finally, it will provide an attractive entry and will help to define sense of place for the Green Lake community.

As represented by the example in Figure 13 on page 76, the concept of the Green Lake Town Center consists of single and two-story buildings including small-scale neighborhood commercial uses, single



An example of undesired strip commercial uses.

family detached dwellings, and modest-density owneroccupied multiple-family uses to accommodate senior citizens in the area, all formed into a compact and walkable community. Two story buildings would be encouraged and could incorporate retail and service uses such as a local pharmacy, fresh produce farm market, a community bank, a day care, and small restaurants on the first story and owner occupied residential dwellings above. Drive-through restaurants will not be encouraged. Of course, proposed commercial uses must be compatible with existing, established residences, so it is likely that the Town Center will emerge slowly as properties change hands over time.

Given the proximity of the Town Center to the lake, a public swimming beach or overlook space may be appropriate as a longterm feature of the area. An additional boat launch in this area is not now viewed as a desirable component due to additional needs for parking and trailer storage and to the concerns over the lake's carrying capacity for additional watercraft. Green Lake Town Center would have walking and bicycling connections to existing and planned residential areas nearby, thus facilitating a pedestrian friendly motif for the town center and a healthier, more



An example of pedestrian scale lighting and signage.

for the town center and a healthier, more pleasant lifestyle for residents of adjacent neighborhoods. Should the area develop piece-by-piece, developments will be designed and coordinated so that pedestrian connection among them is possible. In addition, due to floodplain issues, a nature trail is encouraged along Green Lake Creek to buffer development from the water feature and to provide an amenity to area residents.

The development of less than desirable commercial strip uses with parking lots dominating the front yard area will be discouraged. Front and side yard setbacks will be shallow and parking will be in the rear of commercial buildings. Buildings will be oriented toward 145th, Kalamazoo, and an

internal street network provided by a developer and approved by the Township; strip development with multiple access points off the proposed by-pass will be discouraged because it would diminish the market for Town Center businesses and reduce the capacity of the bypass road.



Development within the Green Lake Town Center area will be guided by zoning, architectural, and landscaping standards that will assure an aesthetic and function desired by the community.

The existing non-residential and non-institutional uses in the vicinity are good examples of the types of local business that will continue to be encouraged. For example, a church is located on 145th east of the existing commercial enterprises. The church generally fits in with the town center concept and includes a ball field. A restaurant, small-scale gas station and convenience store also exist, primarily serving local needs. These types of businesses are consistent with the vision of the town center to be formed along a new internal street network.

Natural building materials such as brick, stone, and wood should be used. Signage and exterior lighting will be low-impact and at a pedestrian scale. The Green Lake Town Center Concept Plan illustrates a potential development pattern and mix of land use. It is based on the assumption that eventually north-south traffic through the area will be carried along a new bypass roadway. This will create an opportunity for higher density residential uses south and west of the existing rights of way. In addition, if the existing 145th right of way could be shifted slightly to the southwest, the few garages located on the opposite side of the street could be relocated to the same side of the street as the residents on the lake. This would increase safety in the area, enhance property values and create a small redevelopment opportunity when the garages are relocated.

Insert concept drawing

Back of concept drawing

NEIGHBORHOOD COMMERCIAL

Neighborhood Commercial uses are small-scale, automobile oriented service land uses intended to serve the local population, and possibly



This photo illustrates an example of a neighborhood commercial use.

even passers-by. Commercial facilities will generally be larger than the buildings in the Mixed Use/Town Center area, and may include restaurants, offices, and small grocery and retail stores. Facilities greater than 10,000 square feet are not desired. Landscaping should be used to screen parking areas and to create a pleasing aesthetic. Uses should not compete with regional facilities located in adjacent It is anticipated that communities. Neighborhood Commercial areas will be presently zoned for commercial use and will be served with utilities.

GENERAL COMMERCIAL

This planned use will serve the needs of motorists traveling along Division Avenue.

Developments are not expected to be of a regional scale, though stores will generally be larger than Neighborhood Commercial uses and should provide for efficient ingress and egress. Commercial uses such as restaurants, grocery stores, retail developments, and even wholesaling, warehousing, and minor repair shops are anticipated, though facilities greater than 15,000 square feet are not desired.

Access points in the General Commercial designation will be coordinated with neighboring uses to minimize traffic conflicts and increase safety for motorists and driveways will be located as far from street intersections as possible. Landscaping and trees will be planted in the parking areas and around the perimeter of the site to help visually buffer the use from neighboring uses. Utilities will serve these uses.

LIGHT INDUSTRIAL/OFFICE

This designation is intended to accommodate more compatible industrial uses, such as warehousing, automobile repair, storage, office facilities, and similar establishments. Light Industrial/Office areas are positioned for easy access to US 131 and for proximity to utilities. It is

anticipated that light industrial and office growth will occur in planned developments, and building design and site improvement is to be analogous to high-quality office developments.

Wherever possible, natural features in these areas are to be preserved, especially when such preservation buffers industry from neighboring uses and mitigates industrial effects. Site design criteria shall include signage, landscaping, lighting, access control, and building design. Pedestrian walkways to residential areas in Moline are desired where practical, to provide for alternative modes of transportation to and from work.

Loading areas should be located in the rear of buildings. Outdoor storage should be minimized and where permitted, buffering techniques should be implemented. Sides and front facades of the buildings should be designed with high quality building materials such as stone, brick, and other natural materials. Landscaping should be used to augment the natural impression found in Leighton Township.

INDUSTRIAL

Similar to Light Industrial/Office, this designation is intended for somewhat heavier industrial and office uses, and may include uses described in the aforementioned classification and light manufacturing and processing.

Industrial areas are positioned for proximity to US 131 and utilities will serve these uses. Growth will occur in planned industrial developments, and building design and site improvement will have an appearance of an office park. Site design criteria will be similar to that described in Light Industrial/Office and includes signage, landscaping, environmental implications, lighting, access control, drainage, site improvement, and building design. Landscaping and other mechanisms will buffer these uses from neighboring land uses.

Emissions into the environment should not be perceptible at any lot line. Loading areas should be positioned in the rear of buildings. Sides and front facades of the facilities should be designed with standard durable building materials such as stone and brick.

PARK/RECREATION

This designation includes a school, government facilities, parks, and anticipated parkland; all are intended for use by the public. Development on land designated as Park/Recreation will be limited to uses that are non-profit and municipal in nature and include playfields, ball fields, sports facilities, forest preserves, and play equipment. Lighting and nighttime noise should be managed to preclude undesirable effects on nearby uses.

An area in Section 10 north of 144th Avenue has been suggested as potential parkland. The Township Hall is presently located in the vicinity and acquisition of nearby property would be a logical extension of municipally owned land. A recreational facility would serve the growing population in the Green Lake area.

Lands in Section 31 near and adjacent to the Rabbit River have also been suggested as potential parkland. The development of a recreational facility in this area will require cooperation with Allegan County and the City of Wayland. These properties have been acknowledged as Park/Recreation for the following reasons:

- The land is generally unsuitable for farmland or development due to wet soils and low ground.
- This land is a logical place for a park since a pedestrian trail following the old interurban rail line is proposed. The park could serve as a regional resting point, destination, or a trailhead.
- The Rabbit River runs through the land and a park would protect homes from flooding and would protect the river from encroaching development.

UPPER RABBIT RIVER WATERSHED OVERLAY

The Upper Rabbit River Watershed Overlay boundaries are intended to protect critical watercourses in the Township, and are part of a regional effort to protect the river and surface water quality in general. These natural waterways are significant in many ways, including their vital role in carrying storm water runoff, as a recreational resource, and for their intrinsic natural ecological and biological value. The long-term goal of focusing land use policies on the watershed is to improve surface water quality. Two of the objectives that must be met to achieve that goal include reducing non-point source pollution, and the preservation and enhancement of natural vegetation adjacent to watercourses.

The mapped overlay is meant to designate the land closest to the watercourses as the area that is best used as a buffer between disruptive development or harmful development practices and the watercourse. If implemented, this simple approach can be highly effective in achieving the stated water quality objectives. Within the buffer, extensive removal of natural ground cover and trees adjacent to watercourses is discouraged. Structures and development and intensive agricultural activities such as animal grazing and cultivation, will be encouraged to be setback a minimum of fifty feet from any waterway. Implementation measures may range from educational efforts that encourage farmers to employ best management practices near the watercourses to new zoning regulations that establish minimum building setbacks and other "no disturb" controls on land developers.

CHAPTER 11. ACTION PLAN

The following strategies are established to implement the goals and objectives and land use recommendations of this Plan. It is recognized that many strategies will be long-term in nature and that many entities in addition to Leighton Township will need to cooperate in order to fully implement this Plan.

Primary responsibility for implementing the Plan rests with the Leighton Township Board, the Planning Commission, and the Township staff. The Planning Commission is also responsible for prioritizing the strategies set forth in this Action Plan. In order for the Future Land Use Plan to serve as an effective guide for continued preservation/growth in Leighton, it must be implemented. This is done through a number of methods. These include ordinances, programs, and administrative procedures which are described in this chapter. Some of the implementation strategies require significant public and private investment. Some are modest enough to be implemented immediately. Others will take time. All are important, as they contribute individual elements that will help build the overall vision expressed by the planning participants.

1. NATURAL FEATURES AND TRAILS

Inventory. A key aspect of the Township's Master Plan is the ideal of preserving natural beauty and significant natural features within the community. The key component of the strategy for doing so is the preparation of an inventory of important natural features and the identification of the likely trends or conditions that may threaten them. Significant natural features and valuable open spaces should be documented to help identify preservation priorities that may arise for private conservation and possible land acquisition. Utilizing mapping techniques, the Township should develop a series of mapped exhibits to serve as a guide for future land use decisions or to encourage private protection of natural features. The Michigan Natural Features Inventory will serve as a solid foundation with field confirmation work to be conducted on a sequential basis as the inventory develops. The Township may also partner with various environmental agencies and volunteers to assist in research, funding, and feature delineation. In some areas it may be appropriate to develop zoning overlay provisions or other preservation mechanisms.

A key aspect of the Township's Master Plan is the ideal of preserving natural beauty and significant natural features within the community. Additional inventory can also occur as private property owners submit site plans for review and consideration. Independent or professionally prepared natural features cataloging can be made a required component of site plan submittals and the information derived can be considered for incorporation into this inventory.

Trails. Quality of life and recreational opportunities may also be enhanced by creation of a trail network that links certain open spaces and natural features. A trail right-of-way network protecting and exhibiting significant features within new and existing population centers is anticipated as a result of this strategy.

The Township may develop standards for the effective preservation of significant features while respecting a reasonable use of private properties. Standards should be comprehensive and flexible to permit proposed structures and buildings to be shifted and site plans slightly modified to protect identified features.

Green Lake. Any new development near Green Lake will comply with the recommendations of the carrying capacity analysis, including on sustainable motorized activity levels suggestions and environmental aspects. The Township may develop a lakefront zoning overlay district to regulate development along the lake and to address the magnitude of nonconformities in the vicinity. In addition, the Township may craft regulations intended to minimize fertilizer runoff and sedimentation impacts on Green Lake and surrounding features to be incorporated into general law ordinances. The Township may also adopt anti-keyholing policies to preserve the quality of Green Lake. This element will be based on the lake carrying capacity study with regards to residential density and motorized equipment usage.

Responsibilities. This activity should primarily be the responsibility of the Planning Commission with support from Township staff, planning consultants, and possibly environmental consultants.

Related Goals and Objectives. The strategy supports the following goals and objectives: Goal A1, Objectives a, c; Goal A2, Objectives a, b; Goal A4, Objective b.

2. Revise the Zoning Ordinance and Map

The Township Zoning Ordinance is the primary regulatory mechanism for carrying out the Goals and Objectives of this Plan. To bring the Ordinance into conformance with this update of the Master Plan, a significant number of changes in that Ordinance and its supplementary map are necessary.

A Township-wide trail network could augment quality of life and exhibit the Township's features. The following paragraphs describe many of the changes that will be needed in the Zoning Ordinance and Map.

- a. Modify existing commercial and industrial districts or create new zoning districts that reflect the goals and Future Land Use designations in the Master Plan, including a zoning designation that would permit and encourage office uses, and zoning designations that authorize the two Town Centers (see "c" below).
- b. Develop regulations for residential districts geared toward the creation of pedestrian friendly transportation networks, including sidewalks and trails. Develop regulations for trail facilities to be integrated with natural features and new developments.
- c. The Planning Commission will undertake a sub area planning activity with property owners in the vicinity of Green Lake to garner consensus with regards to the Green Lake Town Center area. Area residents should generally accept the overall concept plan prior to the Township convening with developers to refine the concept. Develop dimensional requirements, architectural standards, and regulations pertaining to building material, building color, signage, repetition of residential home fronts, garage and parking lot placement, site utilization and development, and landscaping for the Town Centers at Moline and Green Lake.
- d. Develop improved access management standards to protect the flow of traffic and the safety of motorists for Division Avenue and 142nd Avenue. This activity should include Dorr Township with respect to Division Avenue.
- e. Improve the current parking and landscaping standards to provide a more specific and thorough guide regarding the amount, placement, and type of landscaping and impervious surfaces within new developments.
- f. As needed, modify elements of the Zoning Ordinance, including definitions, site plan requirements, minimum square footage, and dimensional requirements, to make housing standards more clear and to permit a broader range of housing types within the Township.
- g. Revise zoning regulations to permit a broader range of agricultural enterprises where agricultural uses are allowed, and adjust zoning provisions in commercial areas to encourage agricultural support businesses (such as farm market stands).

Repetition of residential home fronts could be regulated to avoid cookie-cutter subdivisions. h. Map, and draft strengthened provisions, for Planned Unit Development zoning districts to enable more innovative commercial areas and residential neighborhoods. This element may involve developing regulations which permit conservation subdivisions by right, while considering conventional subdivisions as a special conditional use.

Responsibilities. These activities should primarily be the responsibility of the Planning Commission with support from Township staff and planning consultants.

Related Goals and Objectives. The strategy supports the following goals and objectives: Goal A1, Objectives a, c; Goal A2, Objective b; Goal A3, Objectives b, c; Goal A4, Objectives a-c; Goal B1, Objectives c, d; Goal C1, Objective c; Goal C2, Objectives a, d; Goal D3, Objective a; Goal F1, Objectives a-d.

3. STRENGTHEN PUBLIC LANDS AND INFRASTRUCTURE POLICIES

Policies that direct the location of public water and sanitary sewer services are an important growth control mechanism. By encouraging new development located in proximity to existing or proposed sewer and water lines, the Township will be in the strongest position to guide and direct growth in accord with the Plan. For this technique to be effective, the Township must continually review and as appropriate, modify existing mechanisms to manage the placement of utilities and infrastructure in the community. Additionally, this Master Plan promotes the installation of sidewalks, improved recreational facilities, and an expanded cemetery.

Wastewater. An element of this implementation strategy will be to review and strengthen standards that require developers to extend sanitary sewer and water with developments. This will accomplish the purpose of providing services for future residents and may reduce the excessive proliferation of septic systems. As growth occurs, the Township may require utilities to be concomitantly extended and improved proportionate with the estimated demand and impact of proposed development. Such standards may better manage resources and encourage efficient development patterns.

Water. The private water system will be incrementally expanded in the Moline area. This strategy also anticipates comprehensive longterm planning around Green Lake, which may ultimately be served with public water, should current growth trends continue. It is anticipated that such facilities will be, in part, supported by private investment, if large-scale development ensues. Tasks will include an

By encouraging new development located in proximity to existing or proposed sewer and water lines, the Township will be in the strongest position to guide and direct growth in accord with the Plan. evaluation of future water needs, implementation of current infrastructure needs studies, and an assessment of potential well field sites near the lake to identify and acquire wellhead areas prior to their development.

Transportation. Transportation policies may need to be modified to accommodate certain goals of this Plan. For example, in order for the two Town Center areas to be realized as envisioned, road width requirements for those areas may need to be reduced to provide for a more walkable, neighborhood-scale environment.

To further other objectives of this Plan, the Township should work with the Road Commission to develop a Transportation Plan. Such a plan would include research and analysis and serve as a guide to the modification of existing road policies. Such revisions would facilitate connectivity of roads in subdivisions for accessibility and walkability. The plan would analyze the impact of private roads, and expand the role of the Planning Commission in recommending transportation improvements. Further, the Transportation Plan would identify anticipated future growth areas and would prioritize road improvements as well as identify emerging connectivity needs.

Several projects are anticipated over the life of this Master Plan, including the construction and improvement of roadway linkages between Sections 10 and 11; and two bypasses to accommodate safer, more efficient traffic flow near the Leighton Township Library at 12th and Division, and near Green and Round Lakes at 145th south of Round Lake.

The Township must work with Dorr Township and the Allegan County Road Commission on some of these matters, including the improvement of Division Avenue. In addition, the Township should revise access management standards for development along Division Avenue, and may develop zoning overlay provisions to regulate access along the proposed bypasses.

Walkways. Amenities such as sidewalks can add recreational value and can provide a safe harbor for the young, elderly, or those of lower income. The Township should revise existing sidewalk policies and standards to require non-motorized connections within and between developments in the denser residential zoning districts.

Cemetery. It is anticipated that the Township-owned cemetery on Kalamazoo Avenue will be enlarged to accommodate future growth. A first step is for the Township to evaluate demand for burial space to properly determine future need. The Township should also identify adjacent property for acquisition, as well as develop a capital improvement plan to finance the expansion.

An important element of this Plan is cooperation, including working with the Allegan County Road Commission. **Parkland.** A goal of this Plan is to establish connected open spaces, passive and active recreation, and a Township-wide bicycle trailway network. The Township should, as capital improvements plans are completed and as funding is made available, look to expand recreational opportunities in population centers and construct playgrounds and other facilities designed for active and passive recreation. Also, as mentioned throughout this Action Plan, policies and stipulations should be adopted to eventually link together a Township-wide trail system, which would accommodate bicycles.

An element of this strategy should be to establish a Parks and Recreation Board and to complete a Parks and Recreation Master Plan. The plan should identify future areas for playfields and other amenities, define and endorse a trail network and staging areas, and include a capital plan for funding and implementation. Such a plan will also enable the Township to compete for Michigan Natural Resources Trust Fund (MNRTF) funding.

Responsibilities. The Township Board, being the legislative body for the community, must undertake this strategy. The Planning Commission should advise the Township Board in the formation of a Parks and Recreation Board.

Related Goals and Objectives. This strategy supports the following goals and objectives: Goal A1, Objective b; Goal A3, Objective a; Goal C1, Objective a; Goal C2, Objective b; Goal D1, Objectives a-f, Goal D2, Objectives a, b; Goal D3, Objective b; Goal E1, Objective a, b; Goal E2, Objectives a-d; Goal E3, Objective a, b; Goal F1, Objective e.

4. COOPERATE WITH NEIGHBORING MUNICIPALITIES

Inter-jurisdictional cooperation on certain land use issues pays dividends to all involved. In an effort to manage growth properly, the Township seeks to establish consistent goals and regulations so that the immediate area develops in a compatibly efficient manner. Consequently, the Township seeks to minimize incompatible land uses across municipal boundaries. The implementation of any programs or policies resulting from this strategy will necessitate endorsement and support from all jurisdictions involved. This activity will be on-going and may include partnering with neighboring municipalities on corridor plans, watershed plans, regional health facilities, regional recreational facilities, and transportation and utilities improvement. A first step is for the Township to identify legislative and political obstacles to accomplishing partnership on any given issue.

The Parks Plan should identify future areas for playfields and other amenities, define and endorse a trail network and staging areas... **Rabbit River Watershed.** Several communities in the area that are interested in preserving the Rabbit River's significant features, including creeks, streams, wildlife, and wetlands, are engaged in materializing the Upper Rabbit River Watershed Land Use Action Plan. This Action Plan, once completed, will likely encourage the expansion of recreational opportunities, such as unobtrusive trails alongside waterways and scenic overlook areas. Leighton Township should remain active in this conversation and may develop additional stream corridor overlay provisions to protect critical streams.

Agriculture. In an effort to continually monitor agricultural trends and to support economically sustainable enterprises, the Township should collaborate with agricultural interests and neighboring communities to examine farmland preservation techniques. Of course, any preservation would be voluntary to preserve the rights of property owners, and may involve the purchase or transfer of development rights, as these mechanisms become feasible and authorized in the Township.

Moline. The Township should engage in discussions with Dorr Township concerning the development and future of the Moline community. Moline is a gateway into Leighton and a nucleus of the two Townships and is thus important insofar as regional planning. It is anticipated that Moline will continue to develop as a population and employment center, and the Town Center should develop in conjunction with similar policies and patterns in neighboring Dorr. Also, the Township should work with Dorr on the future development and zoning of the properties west of US 131 and east of the Dorr-Leighton boundary.

Emergency services. It may be appropriate at some point in the future for the Township to collaborate with neighboring communities to establish a regional fire and emergency response organization. It is often more efficient for municipalities to partner on this issue as they grow in population, rather than each having individual service agencies. This strategy will include improved communication among adjoining governments and research to identify opportunities to collaborate.

Responsibilities. The Planning Commission and Township Administration will be responsible for the effort of communicating with other boards and commissions serving adjacent and nearby municipalities.

Related Goals and Objectives. This strategy supports the following goals and objectives: Goal A4, Objective d; Goal C2, Objective e;

Moline is a gateway for Leighton and Dorr and is important insofar as regional planning. Goal B1, Objectives a, b; Goal G1, Objectives a, b; Goal G2, Objectives a-c.

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