July 20, 2020

Approved By The Iosco Township Planning Commission January 12, 2021

Approved By The losco Township Board Of Trustees January 21, 2021

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IOSCO TOWNSHIP LIVINGSTON COUNTY, MICHIGAN

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Statement of Approval

losco Township Board

This is to certify that this Master Plan dated July 20, 2020 is the losco Township Master Plan approved by the losco Township Board on January 21, 2021.

Julie Dailey, Clerk Iosco Township Board

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Dan Alderson, Chairperson
Iosco Township Planning Commission

TABLE OF CONTENTS

Chapter One OVERVIEW	1-1
Introduction	1-1
What is the Master Plan?	1-1
Elements of the Master Plan	1-2
Importance and Application of the Master Plan	1-2
How the Plan was Prepared	1-3
Overview of Planning Policies	1-4
Iosco Township Overview	1-4
Chapter Two	/F0 0.4
PLANNING ISSUES, GOALS and OBJECTIVE	
Introduction	2-1
Planning Issues, Goals, and Objectives	2-1
Growth Management and Public Services	
Community Character	
Natural Resources and the Environment	
Farmland	
Housing	
Commerce Services, Industry and Economic	Development
Circulation and Mobility	
 Regional Coordination 	
Chapter Three	
FUTURE LAND USE STRATEGY	3-1
Introduction	3-1
Planning Areas	3-1
Preservation of Natural Resources	3-7
Phased Zoning	3-7
Thassa Zermig	
Chapter Four	
COORDINATED SERVICES	4-1
Introduction	4-1
Circulation and "Complete Streets"	4-1
Sewage Disposal and Potable Water	4-2
Storm Water Management	4-3
Emergency Services	4-3
Recreation	4-4
Information and Technology Access	4-5
Chapter Five	
INDI EMENITATION OTDATEOUS	5-1
Introduction	5-1
Public Support, Communication and	5-1
Community Involvement	
Capital Improvements Programming	5-2
Objectives Action Plan	5-2
Development Codes and Programs	5-3
Maintaining a Current Master Plan	5-9

Appendix A		
CULTURAL FEATURES		A-1
Geography and Regional Context	A-1	
Access and Circulation	A-1	
Land Cover, Land Use and Development	A-3	
Community Facilities and Services	A-6	
Appendix B		
ENVIRONMENTAL FEATURES		B-1
Geology and Topography	B-1	
Drainage and Water Resources	B-1	
Groundwater	B-2	
Vegetation	B-3	
Soils	B-4	
Appendix C		
DEMOGRAPHIC FEATURES		C-1
Population Growth Trends	C-1	• .
Population Projections	C-2	
Social and Economic Characteristics	C-3	
Appendix D		
INVENTORY MAPS		D-1
Roads - Public Act 51 Classification	Hydric Soils	
Land Use by Tax Classification	Soil Limitations for Se	ptic Systems
Land Division Pattern	Prime Farmland	
Water Resources and Wetlands		

FIGURES and MAPS

		<u>page</u>
	Future Land Use	3-7
FIGURE C-1:	losco Township Growth	C-1
FIGURE C-2:	losco Township Age Profile, 2010	C-4
FIGURE C-3:	losco Township Household Type, 2010	C-5
FIGURE C-4:	Income Characteristics Comparison, 2017	C-8
FIGURE C-5:	Highest Level of Education Attainment, 2017, losco Township	C-9

The following inventory maps are contained in Appendix D:

Roads – Public Act 51 Classification Drains Land Use by Tax Classification Hydric Soils Land Division Pattern

Soil Limitations for Septic Systems

Water Resources and Wetlands Prime Farmland

TABLES

			<u>page</u>
TABLE	A-1:	Land Use Allocation According to Tax Classification, 2019	A-3
TABLE	A-2:	Approximate General Land Use Allocation, 2019	A-4
TABLE	A-3:	Selected Housing Characteristics, 2017	A-5
TABLE	C-1:	Population Trends & Growth Rates Comparison	C-2
TABLE	C-2:	Iosco Township Population Projections	C-3
TABLE	C-3:	Race Profile Comparison, 2010	C-3
TABLE	C-4:	Age Profile Comparison, 2010	C-5
TABLE	C-5:	Household Type and Size Comparison, 2010	C-6
TABLE	C-6:	Employment by Industry Comparison, 2015	C-7
TABLE	C-7:	Income Characteristics Comparison, 2017	C-8
TABLE	C-8:	Highest Level of Education Attainment Comparison, 2017	C-9

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Chapter One OVERVIEW

Introduction

This Chapter provides an overview of the losco Township Master Plan and the Master Plan's role, importance, preparation process, and principal policies. Understanding the fundamentals of the Master Plan will enable township residents and officials to appreciate the role it plays in ensuring the future welfare of the community, its residents and its resources. Embracing this Plan as a vital tool in preserving and enhancing the public health, safety and welfare of the township is essential if this Plan is to be effective.

What is the Master Plan?

Purpose / Enabling Authority

Just as individuals and families plan for their future well-being, so must municipalities. This Master Plan is a "plan" – it is a specific tangible document consisting of text, maps, and figures that establishes a plan for how growth and associated land development should be guided to enhance the long-term welfare of losco Township.

The following key words and phrases can generally describe the Master Plan:

FUTURE ORIENTED: The plan concerns itself with long-range planning to guide and manage future growth and development, and the manner in which the township should evolve over the next ten to twenty years in response to growth, development and preservation interests.

GENERAL: The plan establishes broad principles and policies to address future land use and public services.

COMPREHENSIVE: The Plan is comprehensive in that it addresses all principal types of land use and the practical geographic boundaries of each.

DYNAMIC: The Plan is intended to be continually evolving in light of the aspirations of local residents, changing conditions in the township, and new strategies to manage growth.

This Master Plan was prepared by the losco Township Planning Commission under the authority of the Michigan Planning Enabling Act, Public Act 33 of 2008, as amended.

Purpose of the Master Plan

Section 7(2) of the Michigan Planning Enabling Act (MCL 125.3807) provides:

The general purpose of a master plan is to guide and accomplish, in the planning jurisdiction and its environs, development that satisfies all of the following criteria:

- (a) Is coordinated, adjusted, harmonious, efficient, and economical.
- (b) Considers the character of the planning jurisdiction and its suitability for particular uses, judged in terms of such factors as trends in land and population development.
- (c) Will, in accordance with present and future needs, best promote public health, safety, morals, order, convenience, prosperity, and general welfare.
- (d) Includes, among other things, promotion of or adequate provision for 1 or more of the following:
- (i) A system of transportation to lessen congestion on streets.
- (ii) Safety from fire and other dangers.
- (iii) Light and air.
- (iv) Healthful and convenient distribution of population.
- (v) Good civic design and arrangement and wise and efficient expenditure of public funds.
- (vi) Public utilities such as sewage disposal and water supply and other public improvements.
- (vii) Recreation.
- (viii) The use of resources in accordance with their character and adaptability.

This Master Plan is not a law or regulatory document, but a "policy plan" to be implemented through, in part, zoning and other regulatory and non-regulatory tools. For example, though the Master Plan is not a zoning ordinance, the Master Plan's recommendations and policies serve as a basis for updating the current losco Township Zoning Ordinance.

Zoning Ordinance Must be Based on a Master Plan

The Michigan Zoning Enabling Act, which provides Michigan municipalities with the statutory authority to adopt zoning regulations, requires that a municipality's land development regulations "...shall be based upon a plan designed to promote the public health, safety, and general welfare, to encourage the use of lands in accordance with their character and adaptability, to limit the improper use of land, to conserve natural resources and energy..."

The losco Township Master Plan addresses this statutory requirement and ensures a strong legal foundation for the township's zoning regulations.

Elements of the Master Plan

This Master Plan consists of the following key components:

Chapter One (Introduction) presents an overview of the purpose and role of the Plan, the process followed in its preparation, key planning policies, and a summary of township conditions.

Chapter Two (Planning Issues, Goals and Objectives) presents important planning issues facing the township today, and associated goals and objectives that address these issues.

Chapter Three (Future Land Use Strategy) presents future land use policies including the planned geographic boundaries for principal land use types.

Chapter Four (Coordinated Public Services) presents policies addressing the coordination of public services with the planned future land use pattern and the township's overall welfare.

Chapter Five (Implementation) presents key measures to effectuate the policies of the Plan.

The Appendices present an overview of existing conditions and trends in the township, addressing cultural features such as roads, land use, and public

services (Appendix A); natural features such as soils, topography, and water resources (Appendix B); demographic features such as population growth, employment, and education (Appendix C); and maps illustrating township features (Appendix D).

Importance and Application of the Master Plan

The importance and application of the losco Township Master Plan are demonstrated in:

- the long-term interests of the township
- the day-to-day administration of the township's planning and zoning program

Long Term Interests

There are a number of interests shared by residents and officials today that can be expected to continue for years to come and be similarly shared by future residents and new officials. Some of these important interests include:

- protecting the township's rural character
- protecting the quality of life of residents
- protecting the township's natural resources including its surface and ground water, productive farmland, forest lands, wetlands, and wildlife
- minimizing tax burdens
- ensuring appropriate land use and adequate services to protect the public health, safety, and welfare of residents and visitors
- ensuring compatibility with the use and development of neighboring properties

This Plan supports these long-term interests through a future-oriented strategy that seeks to further these interests. Chapter Two establishes goals and objectives, and Chapters Three and Four establishes future land use and public services strategies, to secure these and other long-term interests.

Balancing Development with Services and Natural Resources

Development without adequate public services to meet the demands of the development, as well as development which places excessive demands on the township's natural resources, can lead the township into a future of social and environmental risks that may threaten the public's health, safety, and welfare.

Day-To-Day Administration

In addition to furthering the long-term interests of the township, the Master Plan also plays an important role in the day-to-day planning and zoning efforts of the township:

- Advisory Policies: The Plan is an official advisory policy statement that should be readily shared with existing and prospective landowners and developers. The Plan informs all of the long term intentions of the township regarding land use and encourages development proposals more closely integrated with the official policies of the Plan.
- <u>Regulatory Programs</u>: The Plan establishes a practical basis for the township to revise, update, or otherwise prepare regulatory programs intended to ensure that the policies of the Plan are implemented including zoning and land division regulations.
- Review of Land Development Proposals: Chapter Two includes a list of township goals and objectives that should be reviewed when considering proposed rezoning requests, site plans, and related land use proposals, serving as criteria upon which the proposal can be evaluated. Chapter Three provides policies regarding the planned future land use pattern in the township valuable reference points upon which land use proposals should be evaluated.
- <u>Public Services Improvements</u>: The identification of a planned future land use pattern enables the township to prioritize areas in need of current or future public services improvements and plan accordingly. Chapters Four and Five provide important guidance in this area.
- Intergovernmental Coordination: This Plan provides the basis for township officials to communicate effectively with neighboring communities regarding both the impact of their planning and zoning actions and opportunities for mutual gain through coordinated land use and public services efforts.
- <u>Factual Reference</u>: This Plan includes a factual overview of trends and conditions in the township. This factual profile can educate local officials and residents and aid in the review of development proposals, encourage constructive discussion of planning issues and policies, and serve as a base line for future studies.

How The Plan Was Prepared

The township adopted an updated master plan in 2016. Shortly after its adoption and in association with efforts to develop a new Zoning Ordinance, it became apparent that the 2016 Plan had substantive deficiencies including the lack of information about the purpose and role of the Plan and how it should be used by the township, limited data about township conditions and trends, the inclusion of goals and policies that were not an accurate reflection of the township, an incomplete future land use map, the lack of coordination between the future land use map and the Plan's narrative, the absence of policies addressing such matters as higher density residential development and industry, and the lack of the statutory required "zone plan." As a result of the concerns about aspects of the 2016 Plan, the township embarked on the development of a wholly new plan in the winter of 2018.

With the assistance of a professional planning consultant, an initial draft of a new Master Plan was prepared. The initial draft was based on several key elements including the general theme of the 2016 Plan and the extended deliberations on planning issues that surfaced during the preparation of the new Zoning Ordinance — an endeavor that overlapped in timing with the preparation of the new Master Plan.

The Planning Commission assembled a complete initial draft of the new Plan and refined the draft to arrive at a document suitable for presentation to the community. The Planning Commission held a public hearing on the draft Plan and subsequently finalized the Plan for adoption.

Throughout the development of the Plan, the township followed the procedural requirements of the Planning Enabling Act including notification of neighboring communities of its intent to prepare a plan and the township's subsequent solicitation for comment on the draft plan.

Important Themes of the Master Plan

Encourage the preservation of natural features

Encourage the preservation of farmland

Manage commercial and industrial expansion

Manage growth and development

Encourage the preservation of rural character

Overview of Planning Policies

This Plan presents a coordinated strategy that addresses growth, development and preservation. The Plan supports the continuation of losco Township as a predominantly rural community characterized by farm operations; woodlands, wetlands and other open spaces; and low density residential development with densities generally not exceeding one dwelling per two acres.

The most significant exceptions to the planned agricultural and rural residential landscape are the planned higher density residential areas near Parkers Corners and the northeast periphery of the Township. These areas are intended to provide opportunities for more suburban and urban living arrangements provided adequate measures are available for potable water and sewage disposal.

Planned commercial areas are limited to the Parkers Corners area and along Mason Road along the northeast periphery of the township. Light industry is also directed to this portion of Mason Road.

Public services improvements are to be focused in those areas of the community where heighted growth and development are anticipated, as described above.

Iosco Township Overview

The following is a brief overview of Iosco Township. A more detailed review of township trends and conditions can be found in Appendix A, B, C, and D.

losco Township is a rural community located in the southwest quarter of Livingston County in the southeastern region of Michigan's Lower Peninsula. The township occupies a total area of 35.44 square miles (22,682 acres), being approximately six miles by six miles. There are no cities or village's immediately adjacent to losco Township but there are multiple comparatively small urban centers within 15 miles including Howell and Fowlerville. The regional landscape within fifty miles of the township is dominated by agriculture, woodlands, wetlands and other open spaces, and scattered residential development, along with periodic small villages and larger cities such as Brighton and Lansing.

Regional access to losco Township is very good. I-96 travels within two miles of the township and includes multiple nearby interchanges. Exit 122 provides direct access to M-52, which passes within three miles of the township's western edge.

The township's local road network does not exhibit the one-mile square grid system that is so dominant in most southern Michigan townships. All roads in the township are under the jurisdiction of the Livingston County Road Commission except for several private roads owned and maintained by the property owners they serve. Approximately two-thirds of the road miles in the township are of a gravel surface.

The dominant land cover in losco Township is of an "open space" character including farmland, woodlands, wetlands, meadows and similar environments. The most dominant active land use is farming. Together, agricultural operations and other open spaces account for approximately 90% of the land area of the township.

Nearly the entire balance of the township is devoted to residential use. The 2010 Census recorded 1,352 dwelling units in the township. Based on an average of 1.5 acres of maintained lawn area per dwelling residential development comprises approximately 8.9% (2,028 acres) of the township's total acreage. Residential development is comprised nearly entirely of incremental land splits of two acres and greater in area, with only several unified platted subdivision neighborhoods. condominium Approximately 97% of the township's dwellings are single- family dwellings.

There are no commercial sites of a retail/service/office nature except for a convenience store along Mason Road. There was no active industry in the township in 2019,

The topography of losco Township can be described as generally level to gently rolling. Drainage is facilitated by the West and Middle Branches of the Red Cedar River along with an abundance of wetlands that also collect and store runoff. Approximately one-quarter of the township is comprised of wetlands and are most prominent along or in the immediate proximity of its water courses. The vast majority of the township is characterized by loam and sandy loam soils.

There is no public sewer or water service in the township. Township residents receive fire protection services from the Fowlerville Area Fire Department, with the primary fire station located in Fowlerville approximately seven road miles north of the township's north boundary (Mason Road), and a fire substation located about one mile north of Mason Road on Fowlerville Road. The Fowlerville Area Fire Department is assisted by other neighboring fire departments on an as-needed basis. Police protection services are provided by the Livingston County Sheriff's Department. The State Police provide services on an as-needed basis. Ambulance service is provided to township residents by Livingston County EMS, which maintains ambulance deployment locations in Howell and the townships of Genoa, Hartland, Brighton and Hamburg.

A five member Township Board governs losco Township. Township offices are located in the Township Hall on the west side of Bradley Road just south of losco Road.

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Chapter One: Introduction

Chapter Two PLANNING ISSUES, GOALS & OBJECTIVES

Introduction

The primary goal of this Plan is to establish a basis for and present future land use and public services policies, and means to implement the policies. To effectively plan for the township's well-being with regard to future land use and public services, it is beneficial to:

- identify important planning issues facing the community
- clarify the township's long term planning goals and objectives.
- establish a basis for more specific land use and public services policies

This chapter discusses important planning issues facing the losco Township community and presents associated goals and objectives.

Planning Issues, Goals & Objectives

A number of key planning issues are apparent today in the losco community. These issues vary in scope and are clearly inter-related. The future quality of life and character of the township will be largely shaped by the township's strategy to address these issues.

Each issue presented in this Chapter is followed by a set of goal and objective statements. Planning goals are statements that express the township's long range desires. Each goal has accompanying objectives that are general strategies that the township will pursue to attain the specified goal.

The planning issues and goals/objectives are divided into the following major categories:

- Growth Management and Public Services
- Community Character
- Natural Resources and the Environment
- Farmland Protection
- Housing
- · Commerce, Industry and Economic Development
- Circulation
- Regional Coordination

The Importance of Goals and Objectives

- losco Township Vision: The goals and objectives provide current and future residents with an overview of the intended future character of the community.
- Shape Policies: The goals and objectives identify and outline the basic parameters that should be used in guiding land use and public services policies and decisions.
- Evaluate Development Proposals: The goals and objectives serve as references upon which future rezoning and land development decisions can be evaluated.

The planning issues presented in the following pages are not intended to be all inclusive. Rather, they are presented as the primary issues that losco Township must address as it shapes a future for itself. These issues will evolve over time and should be reexamined periodically and the appropriate modifications made.

POLICIES identify the strategy for future land use and public services. **GOALS and OBJECTIVES** shape the Plan's POLICIES. **Objectives** Goals are ways are losco Township losco Township's can reach a long range desires. goal.

Goals, Objectives, and Policies of the Plan

The objectives listed on the following pages should not be interpreted as limitations on the township's efforts to reach its goals. The township's commitment to the following objectives does not preclude it pursuing other objectives that it finds are beneficial. In addition, the objectives are not time specific. The township may choose to act on some objectives in a shorter time frame than others.

GROWTH MANAGEMENT and PUBLIC SERVICES

losco Township is a very desirable place to live for many, with abundant natural resources and open spaces, an overall rural character, and within 10 to 30 miles of multiple urban centers and shopping opportunities. It is reasonable to expect that as the regional and state's economic rebound continues, township growth will follow though perhaps at a comparably slow rate.

Individual properties and land uses exist within a network of adjoining and nearby properties and land uses. This weave of uses helps to establish the character of the township. Effective growth management extends well beyond parcel-to-parcel relationships to township-wide issues. Growth and development has the potential to impact all residents' quality of life.

Successful growth management includes:

- minimizing unnecessary loss or degradation of natural resources including farmland, woodlands and water resources
- the provision of public services consistent with the character of the township and coordinating the amount and rate of new development with adequate services and facilities
- accommodating growth and development in a manner that preserves the desired character of the community and its environmental integrity
- encouraging economic development compatible with the character of the township
- encouraging orderly development including compatibility between adjacent land uses and minimizing traffic hazards and nuisances
- encouraging the wise use of township funds

Tax revenues dictate, in part, the extent and quality of public services. Public services in the community are comparatively limited at this time, including the lack of public sewer or water. The comparatively limited public services has not been identified as an issue of general concern, but a way of life. Although development will increase the township's tax base,

the same development will place additional demands on public services.

Contrary to traditional planning wisdom and thought, research has shown that development does not necessarily "pay its way," particularly as it applies to traditional single family residential development. Maintaining the current quality of public services, let alone the pursuit of improvements, can be very difficult in the face of unmanaged growth and development.

The township's character and quality of life will be impacted by the way the township chooses to manage growth and development.

GROWTH MANAGEMENT GOAL: Guide growth in a manner that encourages compatibility between land uses, land use patterns compatible with public facilities and services and the cost-effective use of tax dollars, and the preservation of natural resources, property values, and rural character.

- Document and monitor the township's natural and cultural features that impact growth management efforts, such as public services, existing land use patterns, road infrastructure, and sensitive environmental resources.
- 2) Develop a rational land use strategy that provides an appropriately balanced scope of uses, including agricultural, residential, and nonresidential uses, and which considers the constraints and opportunities presented by the township's natural features and public services and facilities.
- 3) Guide development into areas where public facilities and services have adequate capacity to accommodate the growth and increased development intensities, and where the provision or expansion of public facilities is cost-effective.
- Separate incompatible land uses by distance, natural features, or man-made landscape buffers that adequately screen or mitigate adverse impacts.
- 5) Where legally authorized, require that new development pay for the additional direct and indirect public services costs associated with that development. These costs should not be imposed on existing residents except where public interests or benefits may be at stake.

- 6) Discourage public services improvements that will have the effect of encouraging development at a rate beyond the township's ability to ensure adequate public health, safety, and welfare, or in areas not designated for such development.
- 7) Periodically evaluate the quality and quality of public services and facilities and pursue improvements as needs may be identified, including emergency services, parks and recreation, cemeteries, and access to library facilities.
- 8) Encourage the preservation of the township's natural resources including farmland resources, wetlands and woodlands.
- 9) Provide regular opportunities for substantive public input on growth and development issues facing the township, continually monitor local attitudes about public facilities and services, and pursue options to address identified public service and/or facility needs.
- 10) Update zoning and other tools to implement the Plan's policies, goals and objectives, and evaluate rezoning petitions, site plans, and other development decisions according to the Plan's policies, goals and objectives.

COMMUNITY CHARACTER

losco Township as a "rural" community – an important factor for many who reside in the community. "Rural" is a subjective quality but is often associated with an overall perception of limited development, open spaces comprised of farmland, woodlands, wetlands, meadows and/or similar landscapes, and a way of life often linked to the outdoors and past pioneer settlers.

Effective protection of rural character does not require the prohibition of growth and development. Managed growth and development encourages the continuation of the township's overall rural character, including reliance on appropriate site design standards regarding lot area, lot width, building and parking setbacks, screening, exterior lighting, signage and other site development features. Limitations on the extent to which suburban and urban development patterns are permitted to encroach into more rural areas is also an important part of the equation.

Recognition of the more suburban and urban areas of the township is equally important, such as its scattered residential neighborhoods. These and other settlement areas contribute to the overall fabric of the township and its character, diversity and historical evolution. The manner in which these areas are maintained and/or expanded will impact the perception of these areas, their contributions to the community, and the extent to which they are a valued component of the community.

Community character preservation can protect property values, minimize negative impacts between adjacent land uses, and enhance the overall quality of life.

<u>COMMUNITY</u> CHARACTER GOAL: Protect and enhance the dominant rural character of the township and the township's more suburbanized pockets, in a manner that encourages a sense of identity and an atmosphere that defines the community as a desirable place to live.

- Encourage development designed in scale with the immediate surroundings and the dominant rural character of the community, through reasonable standards addressing density, building size and height, setbacks, and other development features.
- Introduce appropriately designed and landscaped signage along key entrances into the township that highlight the township's identity and place within the region.
- Encourage the placement of signs or markers at historic sites, buildings and areas, to highlight the historic resources of the losco community.
- 4) Work with other local communities to emphasize the unique character of the region and the assets that each community offers in shaping the desirability of the area as a place to live and do business.
- Consider rural character preservation interests as one of the relevant factors in determining appropriate development densities throughout the township.
- Encourage the maintenance of historically significant structures.
- Encourage a structurally sound housing stock and the rehabilitation or removal of dilapidated and/or blighted structures and yard areas.
- 8) Encourage development that actively strives to preserve natural areas, such as woodlands and wetlands, as part of the development plan.
- 9) Encourage the preservation of the township's natural resources including their visual character, environmental integrity, and recreational value.
- Encourage the preservation of the rural character of road corridors including the preservation of trees and pastoral vistas, and reliance on underground utilities.

See also "Natural Resources and the Environment" for additional objectives addressing community character.

NATURAL RESOURCES and the ENVIRONMENT

cannot speak of community character preservation in losco Township without acknowledging the tremendous impact its natural resources play in defining the community's character. These resources include its farmland; underground and surface water features including the Middle and West Branches of the Red Cedar River and their tributaries; forested lands of both an upland and lowland character; and wetlands. These resources are important in shaping the character of losco Township and also provide vital environmental roles including wildlife habitats, flood control, water purification, groundwater recharge, and air quality enhancement. These same resources play a fundamental role in recreation in the community including hunting, fishing, and hiking.

Preservation of natural resources can be very difficult because the process of encroachment and degradation can occur incrementally and very slowly. Increased environmental knowledge, awareness, and education, when incorporated into a comprehensive planning strategy, can minimize the potential for environmental degradation.

The township's woodland, wetlands, and other natural resources are important in shaping the community's rural character and also provide vital environmental roles including wildlife habitats, flood control, water purification, groundwater recharge, and air quality.

Of particular concern is the preservation of the environmental integrity of the township's water resources due to their impact on animal and public health, safety and welfare. Proactive site development practices are critical in this regard. Related to the preservation of water resources is the importance of the preservation of floodplain environments due to their unique contribution wildlife habitats, flood control and property protection.

NATURAL RESOURCES and ENVIRONMENT GOAL: Preserve the integrity of the township's natural resources including its land resources, underground and surface water resources, wetlands, woodlands, and farmland, and the varied and interconnected environmental systems that foster native flora and fauna.

- Document and periodically update natural resources inventory for use in planning studies and land use and development decisions.
- Encourage the preservation of the quantity and quality of local natural resources including wetlands, woodlands, surface waters and shoreline environments, and ground water.
- 3) Encourage land development that actively strives to preserve the quantity and quality of natural resources as part of the development plan, and recognize the importance of preserving environmental corridors across multiple parcels and the community as a whole.
- 4) Ensure that new development does not unreasonably create increases in air, noise, land, and water pollution.
- 5) Discourage the expansion of public utilities into areas dedicated to resource protection.
- 6) Guide more intensive land uses away from environmentally sensitive areas and important natural features.
- 7) Ensure that all development is in compliance with applicable local, county, state, and federal environmental regulations.
- Review proposed development in light of its potential impact upon on-site and regional natural resource areas including woodland and wetland corridors crossing parcels.
- 9) Maintain an MDNR-approved 5-year recreation plan that qualifies the township to apply for recreation grants and the acquisition of important open space resources for recreation and preservation purposes.
- Encourage the use of conservation easements to preserve environmental resource areas including as part of development projects.
- 11) Encourage the use of native vegetation in association with new development projects, redevelopment efforts, stream corridor preservation, and reforestation.
- 12) Educate the public about measures that help to protect the environmental integrity and recreation value of water resources including management of yard waste and fertilizer use, minimizing impervious surfaces, maintenance of stream bank vegetation, avoidance of erosion, and properly operating septic systems.
- 13) Educate the public about waste management and the township's reliance on groundwater resources for potable water supplies and the potential detrimental effects of irresponsible land use and development practices including improperly

- functioning septic systems and the introduction of contaminants into private well zones.
- 14) Explore the development of a greenway plan that encourages the preservation of natural drainage systems and patterns ("green infrastructure") and establishes a township-wide strategy to preserve natural resource corridors across multiple parcels and in coordination with regional greenway efforts.

FARMLAND

Approximately 64% of losco Township is devoted to agricultural use. Farming continues to play a dominant role in the community. Farmland resources provide important food and fiber to both local and regional populations, are an important source of income, and contribute to the economic stability of the local economy. Farmland has been found to typically generate more municipal revenues than the costs associated with the municipal services it requires. The abundant farmland also shapes the rural character of the community.

Persons yearning for a rural lifestyle seek farming communities and incrementally consume farmland for home sites – the very farmland that contributes to the rural lifestyle they seek. Farm acreage in losco Township has declined over the years and dwellings have appeared in their place. Of course, these home sites would not be available if it were not for the farmer opting to make available the residential lots. Other factors that can encourage the decline and/or abandonment of farming include changing economic conditions, encroachment by other uses that interfere with day-to-day farm operations, the personal circumstances of the land owner, and the fewer young persons interested in continuing in their parents' footsteps.

To substantially limit the farmer's ability to provide home sites can undermine the farm operation during difficult economic times, or otherwise burden the farmer when the continuation of the farm operation is no longer practical, economical, or otherwise desirable.

Effective farmland preservation is dependent upon the management of both the number and size of new non-farm lots. Ten-acre divisions, by example, accelerate the loss of farmland and are an inefficient use of the township's land resources. On the other hand, one-acre zoning across the township, by example, sets the stage for a township build-out population approaching 30,000 persons.

State law illustrates the importance and need for farmland preservation. Most notably is Public Act 116 of 1974, the Farmland and Open Space Preservation

Act (now part of the Michigan Natural Resources and Environmental Protection Act). The Act enables a landowner to enroll property in a tax relief program provided the property is maintained in an agricultural/open space status. Approximately 1,000 acres of the township are enrolled in the program.

losco Township recognizes the economic and other challenges facing the local farming community. The township also recognizes the economic benefits of local farming not only for its productive capacity and contribution to the local economy, but for its limited demand on public services, infrastructure, and township revenues. The challenge before the township is to encourage farmland preservation while, at the same time, accommodate the conversion of farmland to alternative uses in a manner supportive of growth management interests.

FARMLAND GOAL: Encourage the continuation of local farming operations and the long-term protection of farmland resources.

- Advise prospective builders and home owners in planned agricultural areas that they should expect the normal smells, odors, noises, dust, and use of chemicals as a part of daily farm life in the area.
- 2) Establish limits on the amount of non-farm residential development permitted in designated agricultural areas, in a manner that strives to balance farmland preservation interests with private property interests.
- To the extent that residential development occurs in farm areas, encourage comparatively low development densities and the use of less productive farmland.
- 4) Encourage buffer areas between new settlement areas and abutting agricultural areas.
- Support and maintain P.A. 116 farmland preservation agreements and other preservation programs.
- 6) Discourage the extension of enhanced public services such as sewer, water and paved roads, into designated agricultural areas.
- 7) Encourage the continuation of farm operations through complementary zoning provisions.
- 8) Provide opportunities for "value-added" income sources as part of local farm operations such as agri-tourism, farm markets, and corn mazes, where such activities and specific proposals will not cause unreasonable impacts on surrounding properties and the community as a whole.

HOUSING

As previously noted, losco Township is an attractive place to live for many prospective residents. Residential development will likely be the major land use change in the coming ten to twenty years and it will have the greatest long-term impact on the township's natural resources, farming, demand for public services, and overall community character.

Important questions facing the township with respect to residential growth are

- what type?
- how much?
- where?

losco Township is interested in providing reasonable options for varied housing opportunities. Opportunities for rural and suburban residential lifestyles are plentiful as soil conditions generally support home sites of one to two acres in size. The lack of public sewer and water service significantly restricts opportunities for more varied and affordable housing. However, private community sewer systems may be a reasonable alternative in some instances.

Providing suburban and urban residential development opportunities can be important as part of the township's efforts to address the varied housing needs of all people, including all age groups, and limit the extent of residential encroachment into farmland and natural resource areas.

Public studies during the past 30 years have consistently documented that as residential development increases in density to a more urban character, it is more likely to generate more municipal revenue than the cost to provide it with services. Forms of higher density development can also address the varied housing needs of existing and future residents and the life stages that they are in.

Projected growth in the near future suggests that only limited portions of the township be set aside for more suburban and urban development patterns at this However, the more growth that accommodated in higher density development patterns - the greater farmland and natural resource preservation interests may be advanced. For example, the accommodation of 200 new dwellings could occupy as little as 50 acres in a strategic location where private water/sewer systems may be considered reasonable. The same 200 dwellings could occupy 2,000 acres of farmland and other natural resources (approximately 9% of the township) based on an average lot size of 10 acres. This less

efficient development pattern can dramatically accelerate the rate at which farmland and other natural resource areas are converted to residential use or otherwise substantially disturbed.

However, it must also be recognized that small acreage zoning across the township without any density limitations, such as one acre zoning, provides for a build-out population (the population resulting from all land being developed at a density of 1 dwelling per acre, exclusive of wetlands and future road rights-of way) approaching 30,000 persons or more. Such a growth pattern would have dramatic effects on farming, community character, taxes, and public services demands.

Much of the residential development in the township today is of a strip pattern – residences are "stripped" along the existing county road frontages. This pattern of lot splits has become an increasing source of concern in the planning/transportation fields. This condition leads to an excessive number of driveways directly accessing the county roads and thereby increasing the level of congestion, traffic hazards, and travel times, and incrementally replacing rural road corridor view sheds with images of driveways, cars, and garages.

HOUSING GOAL: Provide a healthy residential environment in which persons and families can grow and flourish, accommodating residential growth in a manner that recognizes the opportunities and constraints of the township's public services, infrastructure, and natural features; preserves the overall rural character of the township and its natural resources; and accommodates an appropriate balance and range of densities and lifestyles.

- 1) Encourage the continued dominance of low density housing as the principal housing option.
- 2) While maintaining low density housing as the primary housing option, provide opportunities for alternative options to meet the varying housing preferences of current and future residents, such as small lot single and two-family dwellings, apartments, and assisted living facilities.
- 3) Identify limited areas where higher density housing can be adequately accommodated, with priority directed to locations that have greater access to improved roads and necessary public services, within walking distance of existing and/or planned commercial areas, and where important environmental resources are less threatened.
- 4) Encourage alternatives to strip residential development along the frontage of existing county roads.

- 5) Encourage innovative residential development that incorporates the preservation of natural resource systems, open spaces, and the township's rural character, including the conversion of only a portion of a development parcel with clustered small lots and placing the balance of the parcel in a permanent open space status.
- 6) Encourage a housing stock that ensures affordable housing, including starter homes and special housing opportunities for senior citizens.
- Assure adequate barriers and/or buffering where residential neighborhoods interface with commercial/industrial development.
- 8) Discourage uses and structures in residential areas that undermine the residential character and peacefulness of such areas, such as commercial encroachment and accessory buildings that are of excessive size or in inappropriate location.
- 9) Encourage dwellings that are of appropriate design to complement nearby conditions and the community as a whole, and the rehabilitation of blighted and dilapidated dwellings and properties.

COMMERCIAL SERVICES, INDUSTRY and ECONOMIC DEVELOPMENT

Commercial and industrial development in losco Township is comparatively limited. A convenience store along Mason Rd. near Bull Run Rd. is the only "brick and mortar" commercial endeavor of a retail/office/service character and there is no active industry. There are comparatively inconspicuous businesses operated as home-based occupations.

Addressing commercial and industrial expansion includes considerations of need, location and character.

The limited extent of commercial and industrial uses is not surprising. The township exhibits conditions that do not support such activity including the lack of public sewer and water, a limited local population base, the absence of highways in the community and the distance to interstate thoroughfares, and the presence of regional urban centers where many such uses commonly prefer.

There are no universal land use ratio standards that identify the appropriate amount of commercial development for a particular community. Each community is unique, with its own set of circumstances including infrastructure, existing land use pattern, conditions in surrounding communities, growth, and public perceptions. The proximity of varied consumer opportunities within 10 to 30 miles of the township and along daily commuter patterns,

including I-96 and Fowlerville and Mason Rds., must also be acknowledged.

The township's current two acres (approximately) of conventional commercial uses (office, retail and service) serving the township's 4,000 residents (approximately) is proportionally low compared to the commonly recommended five to ten acres for a community of 3,000 to 4,000 persons. Further, it should be recognized that commercial and industrial development can improve the community's overall economic stability and provide additional local employment opportunities.

Commercial and industrial development that complements the township's rural character should be encouraged, including development characterized by appropriate landscaping and screening; limitations on signage, building heights and sizes, and lighting; and the avoidance of excessive curb cuts and conflicting turning patterns that undermine public safety.

Commercial uses can vary significantly in character as can industrial uses. The existing and desired long-term character of losco Township does not support facilities such as "big box" stores and heavy manufacturing that require services not currently available. Development of a more local character, which does not contribute to excessive traffic levels and public services demands, can be more easily accommodated into the fabric of the community.

The viability of and/or suitability of commercial and industrial growth areas are commonly linked to:

- Proximity to fire protection
- Improved road infrastructure
- Avoidance of environmentally sensitive areas
- Compatible adjacent land use conditions
- Proximity to existing and planned growth areas (commercial only)
- Visibility by the general public (commercial only)

<u>COMMERCIAL</u> <u>SERVICES</u>, <u>INDUSTRY</u> <u>AND</u> <u>ECONOMIC DEVELOPMENT GOAL</u>: Enhance the economic stability of the township through commercial and industrial development that is of a scale, intensity, and character supportive of the predominant character of the community.

Objectives

 Identify limited locations where commerce and industry are most appropriate, and which have direct access to paved thoroughfares and minimize disturbances to residential areas.

- 2) Encourage commercial and industrial development that is in character and scale with the township's rural character and surrounding land uses, considering such features as building size and height, architectural design, setbacks, signage, lighting, noise, landscaping and screening, and open spaces.
- Encourage business centers that exhibit an attractive appearance, foster an inviting character, and respect the historic structures and other aspects of the community.
- 4) Encourage commercial uses that cater to local consumer needs and local travelers, or are otherwise of a character that do not generate excessive traffic levels through the township or create excessive demands for public services.
- 5) Limit industrial uses to those predominantly characterized by assembly activities, information and communication technologies, research facilities, and similar "light" operations that do not require added levels of public services, do not entail the processing of raw materials, and do not negatively impact surrounding land uses or the community as a whole.
- Encourage industrial uses to locate within industrial park settings, characterized by interior road systems, ample open spaces, landscaping, and buffering.
- 7) Encourage economic development through the marketing of the special assets of the losco Township area including the township's rural character and opportunities for recreation tourism, agri-tourism, and other tourism opportunities.
- 8) Encourage economic stability in a manner that balances development with the preservation of the township's natural resources and rural character.
- 9) Discourage commercial and industrial encroachment into residential areas.
- Maintain reasonable controls on commercial and industrial uses such as noise, odors, glare, vibration, and similar operational features.
- 11) Provide opportunities for home-based occupations under conditions that will support the desired character, appearance, and quality of life for surrounding properties and neighborhoods.

CIRCULATION and MOBILITY

As new residential and non-residential land uses are introduced into the township, demands on the roadway network will increase. Even low density residential development can significantly increase local traffic levels, and unpaved roads can accommodate only limited levels before they necessitate constant maintenance. Conversely, it

must be recognized that road improvements may attract new development that, in turn, will place additional demands on the network. Increased traffic demands can be minimized through the coordination of road improvements with the planned future land use pattern and designated growth and development areas. The extent to which higher intensity land uses, including commercial and industrial uses, are in comparatively close proximity to improved thoroughfares will minimize future maintenance costs and traffic levels along other roads of lesser infrastructure.

Maintaining adequate vehicular circulation is not solely dependent on the road system itself. The future pattern of residential lot splits and subdivisions will have a significant impact upon the functioning of the township's roads. Residences "stripped" along the existing county road frontages can be debilitating:

- the increased number of driveways directly accessing the county roads increases the level of congestion and safety hazards
- travel times are increased
- the township's rich rural panoramic views of woodlands, fields, and other open spaces, as experienced from the road viewsheds, may be reduced to images of driveways, cars, and garages

Community circulation extends far beyond just accommodating vehicular traffic. More and more attention is being focused on ensuring road systems take into consideration all potential user needs including pedestrians, bicyclists, and persons of all ages and physical conditions.

The value of circulation systems between communities that facilitate non-motorized travel have also been recognized as an important part of long range planning. Well planned and designed community and intercommunity circulation systems can limit the reliance on the automobile and resulting environmental impacts, improve the health of local residents, and improve the quality of leisure time. The importance of safe and comprehensive pedestrian and non-motorized travel led the Michigan Legislature to amend the Planning Enabling Act in 2010 to require a "complete streets" element in a master plan.

<u>CIRCULATION AND MOBILITY GOAL</u>: Maintain a circulation network throughout the township that encourages efficient and safe travel, by vehicular, pedestrian, and other non-motorized modes, consistent with the rural character of the community and coordinated with the planned future land use pattern.

Objectives

- Identify priority road segments for systematic maintenance and improvement, based on the planned future land use pattern and existing and projected traffic patterns.
- Discourage high-traffic generating land uses and development patterns along the township's secondary roads.
- Pursue access management measures to minimize the potential for traffic congestion and safety hazards, including limitations on the number, size, and shape of new land divisions and limitations on curb cuts.
- 4) Work with the Livingston County Road Commission to discourage road improvements that will increase growth and development pressures in areas of the township not specified for growth.
- 5) Encourage the inclusion of pedestrian/bicycle ways as part of new residential subdivisions and non-residential development to facilitate safe and convenient non-motorized travel.
- Encourage the linking of residential and commercial centers through non-motorized trails or similar linkages.
- 7) Promote transportation services for senior citizens and persons with limited mobility.
- Promote alternative forms of transportation and work with the Livingston County Road Commission to improve opportunities for safe nonmotorized travel.

REGIONAL COORDINATION

losco Township exists within a regional network of communities, none of which are islands unto themselves. Iosco Township principally abuts the townships of Handy, Marion, Unadilla and White Oak, and is within 10 miles of Fowlerville. Iosco Township and nearby municipalities may greatly benefit by cooperatively pursuing common goals in the areas of land use and public services where mutually beneficial. Planned land uses, public services and preservation efforts should take into consideration conditions in these abutting and nearby communities. Land use planning efforts should seek to establish a land use pattern compatible with surrounding conditions provided the goals of losco Township are not undermined.

REGIONAL COORDINATION GOAL: Guide future development and public services in a manner that recognizes the position of losco Township within the larger region and the mutual impacts of local planning efforts.

- 1) Where practical, identify a planned future land use pattern that seeks to ensure compatibility among land uses along municipal borders.
- 2) Maintain a meaningful communication program with area municipalities and county agencies to discuss local and area-wide public facilities and services needs, land use conditions and trends, preservation goals and objectives, planning issues including vehicular and non-motorized modes of travel and recreation, and mutually beneficial strategies to address short and long-term needs.

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Chapter Three FUTURE LAND USE STRATEGY

Introduction

losco Township's principal planning components are contained in the Future Land Use Strategy, as discussed in this Chapter Three, and the Coordinated Public Services presented in Chapter Four. The Future Land Use Strategy identifies the desired pattern of land use, development and preservation throughout the township. Chapter Four presents guidelines regarding public services to help ensure that public services are coordinated with the planned land use pattern and the achievement of the Plan's goals and objectives.

Implementation of the policies of this Chapter and Plan rests with regulatory and non-regulatory tools – most importantly the losco Township Zoning Ordinance. The Zoning Ordinance generally regulates the type, location, bulk, and intensity of land development. The Future Land Use Strategy establishes policy for future land use – it does not change the manner in which property is zoned under the Zoning Ordinance. However, the Future Land Use Strategy does serve as a basis for evaluating future rezoning requests and development proposals.

The township may also utilize regulatory and non-regulatory tools, in addition to zoning regulations, to further the implementation of the Master Plan. Chapter Five discusses implementation strategies.

The foundation on which the Future Land Use Strategy is rooted is the goals and objectives in Chapter Two including:

- encourage the preservation of farmland, natural resources and rural character
- guide future development in a manner that ensures land use patterns compatible with public facilities and services
- encourage compact growth and development areas
- encourage the cost-effective use of tax dollars

The Future Land Use Strategy is based on an analysis of the township's natural and cultural features such as existing land use, road network, and public services and infrastructure, and environmental features including wetlands. Also considered were conditions in neighboring municipalities. The opportunities and constraints presented by these conditions were evaluated in the context of the goals and objectives in Chapter Two to arrive at a planned land use pattern.

Planning Areas

The Future Land Use Strategy divides the township into planning areas and identifies the predominant land use pattern planned for each. These areas collectively formulate the planned land use pattern. These planning areas are as follows:

- Resource Conservation Area
- · Agricultural / Rural Residential Area
- Suburban Residential Area
 - Northeast Suburban Residential Area
 - Parkers Corners Suburban Residential Area
- Commercial and Industrial Areas
 - o Parkers Corners Commercial Area
 - o Mason Rd. Commercial / Industrial Area

It is not the intent of this Plan to identify the specific land uses that should be permitted in each of these planning areas. This Plan presents broad-based policies regarding the dominant land use(s) to be in each. Specific permitted land uses will be determined by the Zoning Ordinance based on considerations of compatibility.

There may be certain existing properties that do not "fit" with the planned future land use pattern. This should not be necessarily interpreted as a lack of township support for the continuation of the existing use of such properties. Zoning regulations will clarify this matter.

Boundaries: The approximate boundaries of the planning areas are illustrated on the Future Land Use Map at the end of this chapter. The boundaries are described as approximate. There is frequently room for discretion at the exact interface between the boundaries of two planning areas and appropriate uses at these points of interface. However, the approximate boundaries presented in this Plan have been considered carefully. The described and illustrated boundaries of the planning areas are purposeful. These areas are not intended to incrementally evolve into extended strip corridors or other expanded development zones contrary to this theme. Significant departures are discouraged except in unique circumstances and only when the public health, safety and welfare will not be undermined.

It is important to recognize that neither the Future Land Use Map nor the explanatory policies of this chapter are intended to stand on its own. Both the policy discussions and map are inseparable and must be viewed together.

Context-Sensitive Site Development: Irrespective of the particular planning area, all nonresidential development should be of such character and design so as to encourage compatibility with adjacent and nearby land uses and the desired rural character of the township including site layout, principal buildings and accessory facilities. Such compatibility should be based on, in part, appropriate signage; building height, size, and bulk; setbacks; and landscaping and screening. Special care must be exercised during all phases of the review and approval of specific development proposals to ensure that proposed uses, buildings and other site modifications, and their interface with surrounding properties, enhances their compatibility.

The establishment of private "community sewer systems" serving new neighborhoods is not a valid basis for development densities contrary to the policies presented in this chapter.

Site development should incorporate the inclusion of nonmotorized travel and measures to enhance the safety and comfort of nonmotorized travel along road corridors and elsewhere.

Resource Conservation Area

The Resource Conservation Area includes those portions of the township comprised of wetlands and river and stream corridors. These resources provide important environmental benefits including habitats for wildlife, flood control, groundwater recharge and discharge, and surface water purification. In addition, they provide special opportunities for recreation, contribute to the township's overall rural character and desirability as a place of residence, and present severe obstacles to development. The Resource Conservation Area is intended to encourage the preservation of important natural resource areas.

In light of the critical role these natural resources play, uses within the Resource Conservation Area should be predominantly limited to open-space and natural resource based conservation endeavors. Residential development is discouraged to minimize encroachment into and the disturbance of these important resource areas and the environmental systems contained within.

Key policies of the Resource Conservation Area are:

- The primary use of land should be resource conservation and other open space areas including dedicated game refuges and hunting facilities.
- 2. Secondary uses of land should be low-density home sites, where no prudent option exists elsewhere on the property.
- 3. Maximum development densities should be limited, not to exceed one dwelling per two acres.
- 4. Where only a portion of a parcel is located in the Resource Conservation Area, development on the site should be guided to those portions outside of the Resource Conservation Area, most typically the Agricultural/Rural Residential Area (as described on the following page).
- 5. The alteration of wetlands to accommodate home sites and other construction in the Resource Conservation area should occur only where no other practical alternatives are available and only after the issuance of all necessary local, county and state approvals including as may be required by the Michigan Department of Environment, Great Lakes and Energy.

Agricultural / Rural Residential Area

Farming plays an important role in the history and character of losco Township, contributes important food and fiber to local and regional populations, encourages economic stability, and is an important source of income.

The Agricultural/Rural Residential Area covers the largest portion of the township. The Area is principally comprised of farmland and farming operations, scattered residential properties typically ranging from two to 80 acres in area, and open space areas including meadows and woodlands. The intent of the Agricultural/Rural Residential Area is to provide opportunities for farming and encourage the preservation of farmland resources, while also providing opportunities for rural residential home sites. Agriculture, single-family and two-family residences are intended to be the primary use of the land in this Area.

Lands in the Agricultural/Rural Residential Area are generally characterized by conditions that enhance their suitability for commercial agricultural endeavors including:

- the presence of active farm operations including farm parcels adjacent to other farm parcels
- acreage contained within parcels commonly approaching 20 acres or more
- limited encroachment by residential subdivisions and similar neighborhood developments
- enrollment of some parcels in the P.A. 116
 Farmland and Open Space Protection Program

It is intended that development densities in the Agricultural/Rural Residential Area be low. Limited densities are supported by a number of factors including, in part:

- the township's commitment to protecting its farming industry and minimizing land use conflicts between farm operations and neighboring land uses
- the township's commitment to managing growth, providing cost effective public services, and limiting suburban and urban development densities to specific and compact portions of the community
- > the township's commitment to protecting its natural resources and rural character
- the presence of a market for low-density rural lifestyles

Key policies of the Agricultural/Rural Residential Area are:

- 1. The primary use of land should be agriculture, resource conservation and other open space areas, and home sites.
- Secondary uses should typically be limited to those that are uniquely compatible with the environmental and/or rural character of the Area such as kennels, stables, golf courses, and bed and breakfasts.
- 3. Minimum lot sizes should generally be restricted to two acres provided adequate measures are available for potable water and sewage disposal.
- 4. Exceptions to the lot size limitations in (3) may be appropriate in the case of "open space preservation communities," where smaller than normal home sites are permitted provided substantial portions of the development tract is set aside in a permanent open space status. This development option is further described in Chapter Five.

Prospective residents in the new Agricultural/Rural Residential Area should recognize that the noises. smells and agricultural operations associated with responsible farm operations are a significant component of the Area and will continue on a long term basis. losco Township does not consider such activities and operations as nuisances. The township supports the long continuation and protection responsible farm operations and the local farming industry. Developers and real estate agents should disclose this information to their clients.

The Agricultural/Rural Residential Area encourages the continuation of all current farming activities as well as the introduction of new agricultural operations. All farming activities are encouraged including the raising of crops and livestock and the erection of associated structures, provided that they meet Department of Agriculture and Rural Development requirements for "generally accepted agricultural management practices" and any requirements of applicable township ordinances.

In light of the township's interest in maintaining the quality of life for existing households, reasonable care should be exercised in accommodating specialized agricultural operations that may have heightened impacts on surrounding land uses such as large concentrated livestock operations.

Suburban Residential Area

The Suburban Residential Area provides for residential development of a more suburban and urban character than planned elsewhere in the township. There are two planned Suburban Residential Areas.

The Northeast Suburban Residential Area is in the northeast corner of the township extending south of Mason Road for approximately one-half mile, from Gregory Road east to Truhn Road, but excluding those areas contained in the Resource Conservation Area and that area comprising the Mason Road Commercial Area.

The <u>Parkers Corners Suburban Residential Area</u> extends radially approximately ¾-miles from losco Road between Elliot and Bradley Roads, excluding areas part of the Resource Conservation Area and that area comprising the Parkers Corners Commercial Area.

These Areas are characterized by one or more conditions that are more supportive of higher-density residential growth including

- improved access via paved primary roads and closer proximity to I-96
- closer proximity to fire protection services
- soils conditions more supportive of suburban and/or urban densities
- closer proximity to planned commercial services

Key policies of the Suburban Residential Area are:

- The primary use of land should be single and two-family residences, including opportunities for comparatively higher density small-lot subdivisions where adequate provisions are made for potable water and sewage disposal.
- 2) Secondary uses should be principally limited to alternative living arrangements such as townhouses, apartments, retirement centers, and similar housing options, along with uses that directly support and enhance desirable residential areas such as schools, religious institutions, and recreation facilities.
- All living arrangements should ensure healthy environments including sufficient open space and safe motorized and non-motorized circulation.
- 4) Maximum development densities should typically not exceed one dwelling per approximately onehalf acre, provided adequate measures are in place for sewage disposal and potable water.

- 5) Development densities approaching three or more dwellings per acre may be reasonable but only after special review proceedings to determine if such higher densities are appropriate on the proposed property. Minimum guidelines that should be considered are:
 - adequate infrastructure and public services including sewage disposal and potable water
 - on-site environmental limitations
 - anticipated impacts on existing neighborhoods and opportunities for minimizing negative impacts through appropriate design measures
 - developments involving densities of four or more dwellings per acre should be of limited size, or be subject to phasing, to ensure that the desired character of the community is preserved and public welfare maintained

Commercial and Industrial Areas

The Future Land Use Strategy establishes one planned commercial area and one mixed-use commercial/industrial area.

The <u>Parkers Corners Commercial Area</u> extends along losco Road between Elliot and Bradley Roads, extending approximately 500' to the north and south and extending approximately 500' to the east of the losco/Elliot Roads intersection and 500' west of the losco/Bradley Roads intersection. Future principal uses planned for this Area are to be commercial endeavors catering to the local population and the motoring public.

The Mason Road Commercial / Industrial Area extends along Mason Road from Bull Run Road east to about 1,000' west of Kern Road, for a depth of approximately 500'. Future principal uses planned for this Area are to be commercial endeavors catering to the local population and the motoring public, and light industry.

These areas are considered preferred locations for non-residential growth and are characterized by one or more conditions that support commercial and/or industrial activity including:

- improved access via paved primary roads and closer proximity to I-96
- closer proximity to fire protection services
- reduced environmental limitations
- existing and/or past commercial/industrial uses in the immediate area, including in neighboring Handy Township to the north.

Key policies of the Commercial / Industrial Areas are:

- Primary commercial uses should be locallyoriented commercial services including convenience and other retail sales, restaurants, offices and service providers, and should be of a comparatively small scale and sensitive to the desired rural character of the township.
- Secondary commercial uses should be principally limited to those that provide additional benefits but which may not cater to the local population or highway traveler, or otherwise rely on a more regional market and may generate heightened traffic levels.
- 3. Primary industrial uses should be of a comparatively "light" character that generate minimal impacts on neighboring uses and limited demands on the township's limited public services. Uses may include, by example, small-scale product testing, technology research, calibration services, and the assembly of electrical components and other pre-manufactured items.
- 4. Secondary industrial uses should be principally limited to those that may result in more visible external impacts but which incorporate adequate measures to substantially limit nuisance conditions and have comparatively limited public services demands.
- 5. Dwellings above commercial storefronts are recommended as a means to provide varied housing opportunities, evening security, and nearby consumers.

There are existing residences in the planned Commercial Areas. The Plan supports the continued presence of these residences while, at the same time, supports the incremental conversion of such residential properties to commercial use should there be interest by the respective land owner. See (6) below.

6. To the extent that residential properties in the Commercial and Industrial Areas remain in residential use, special provisions are to be employed where nonresidential uses are introduced, to ensure that adequate site layout, including buffer yards and screening, minimize negative impacts on existing home sites. Prospective residents to the area should recognize that nearby properties may transition into nonresidential uses, subject to township review and approval.

7. Site layout, principal buildings and accessory facilities should be of a character and design that encourages compatibility with adjacent and nearby land uses and the desired rural character of the area. Compatibility should be based on, in part, appropriate signage; building height, size, and bulk; signage and lighting; and landscaping and screening.

Preservation of Natural Resources

losco Township includes abundant areas of woodlands, wetlands and water courses. In light of the importance of these resources, the Plan supports their protection including the establishment of the Conservation Resource Area as previously described. Preservation should take precedence over the unnecessary disturbance and/or destruction of these resources. These resources are vital parts of the township's environment, provide important environmental benefits including habitats for wildlife, flood control, groundwater recharge and discharge, and surface water purification. In addition, they provide special opportunities for recreation and contribute to the township's overall rural character and desirability as a place of residence and business.

Not all important natural resource areas may fall within the Resource Conservation Area described earlier in this Chapter or as otherwise delineated on the Future Land Use Map. The presence of such resources in areas designated for development should be recognized in the deliberation of rezoning, site plan, and similar proposals. Land uses requiring state and/or federal permits (especially for wetland or floodplain alterations) should not receive final township approval until satisfactory evidence has been submitted verifying the acquisition of all necessary permits. Where a portion of a parcel environmentally sensitive areas. development should be directed elsewhere on the site where practical alternatives exist.

Phased Zoning

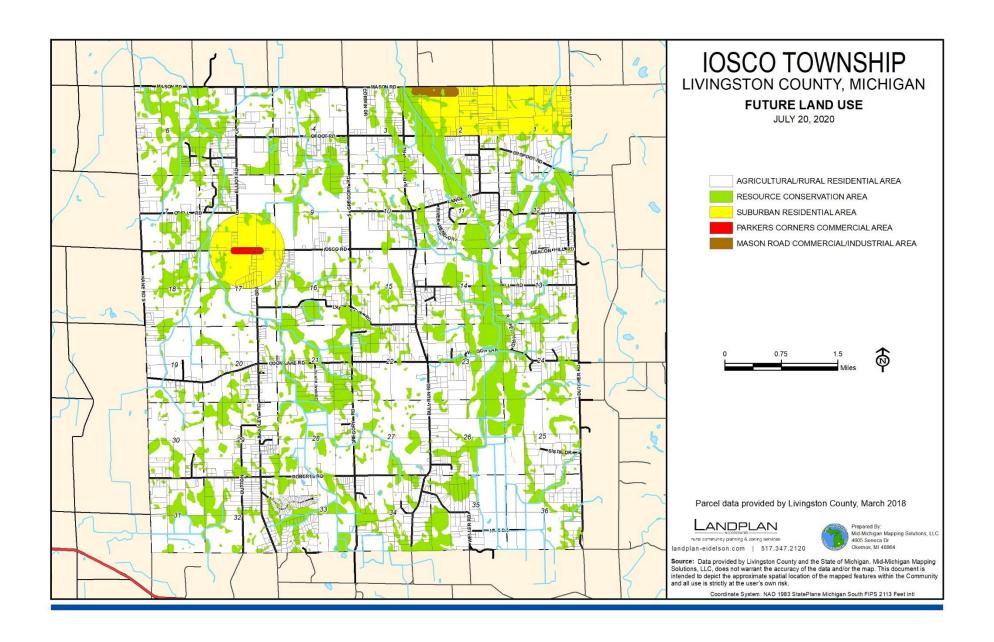
This Plan recommends that the rezoning of land to a more intensive zoning district be done in a phased or incremental manner. For example, while this Plan may identify locations that are appropriate to accommodate suburban residential development, the Plan does not recommend "across the board" or immediate rezonings of such land. The Plan recommends that rezonings to more intensive districts occur incrementally over time.

This incremental approach to rezonings to more intensive districts more effectively ensures:

- · adequate public services
- managed growth and development
- proper review of rezoning requests as they pertain to specific sites
- rezonings are in response to a demonstrated need
- no unnecessary hardships upon a landowner as a result of property assessments and/or the unintended creation of nonconforming uses and structures

This Plan does not generally support rezonings to higher intensity districts except where initiated by the landowner and upon a finding that such rezoning is supported by this Plan and other pertinent considerations.

Chapter Three: Future Land Use Strategy



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Chapter Three: Future Land Use Strategy

Chapter Four COORDINATED PUBLIC SERVICES

Introduction

Chapter Three describes the planned pattern of land use throughout the township. Chapter Four discusses the public services strategy to be coordinated with the planned pattern of land use. The character and feasibility of land use and development is influenced by the extent to which public services are available. In addition, the character of public services can directly impact the perceived quality of life among residents in the community.

An important principle of the Chapter Three Future Land Use Strategy is that no new development should occur in the township unless public services are adequate to meet the needs of that new development.

On the other hand, public service improvements and the increased development that may result from such improvements should not jeopardize the township's preservation interests and commitment to managed growth and development. Thus, it is important that future public service improvements be coordinated with the planned pattern of future land use as described in Chapter Three.

Circulation and "Complete Streets"

As growth and development occurs, demands on the road network will increase. The growth anticipated in this Plan will result in higher traffic levels. This increased traffic may lessen the level of service along some of the township's road segments. Conversely, it must be recognized that road improvements may well attract new development which, in turn, will place additional demands on the road network.

The township's road infrastructure currently fulfills its function reasonably well for vehicular traffic. This is due, in large part, to the existing low development density throughout most of the township and important paved thoroughfares such as Mason, Elliot, Bradley, losco and Bull Run Rds.

However, opportunities for safe pedestrian and nonmotorized travel are comparatively limited. Safe pedestrian and non-motorized travel has received greater and greater focus within the planning arena, on local, regional, state and federal levels. The provision of opportunities for safe and comprehensive pedestrian and non-motorized travel has been found to encourage a more healthy population, provide alternative means of recreation, and lessen congestion, air pollution, and the consumption of fossil fuels. The importance of safe and comprehensive pedestrian and non-motorized travel led to the Michigan Legislature to amend the Planning Enabling Act in 2010 to require a "complete streets" element in a master plan. The automobile as the sole design factor for roads is no longer the "norm."

"Complete streets" generally refers to the design of roads that takes into account the circulation needs of all potential users including pedestrians, bicyclists, motorists, and public transportation users. The "complete streets" program emphasizes safety along roads for all users of all age groups. While recognizing that there is no single "complete streets" design solution that applies to all roads in all communities, the program emphasizes the need for new roads to be designed, and existing roads be improved, to facilitate their safe and efficient use by all prospective users within the context of the particular community's needs and character.

As a rural community, implementation of a "complete streets" program in losco Township is different than that of an urban center such as in the case of Fowlerville, Pinckney and Howell. While an urban community may pursue sidewalks, bike lanes or paved shoulders, bus lanes, convenient public transportation stops, median islands, frequent and well-marked cross-walks, and other measures, rural communities typically have fewer options and frequently focus on paved shoulders. However, even in rural communities, the feasibility of implementing a wider scope of "complete streets" measures increases in the community's planned residential and commercial growth areas.

The Livingston County Road Commission has jurisdiction over local public roads. Still, the township has the opportunity to provide input regarding road maintenance, design and improvements.

<u>Circulation and Complete Streets Policies:</u>

- Greatest priority for road improvements will be assigned to those road segments whose current conditions present imminent danger to the public health, safety and welfare, such as in the case of road and bridge impasses and flooding.
- 2. Functional classification of roads will dictate the priority of improvements when all other conditions are generally equal. The functional importance of the roads in the township, from highest to lowest, is: a) county primary roads, particularly those segments servicing the Future Land Use Strategy's Suburban Residential, Commercial and Industrial Areas; b) county local roads, particularly those segments servicing the Future Land Use Strategy's Suburban Residential, Commercial and Industrial Areas, but excluding roads in a platted subdivisions and similar neighborhood developments; and 3) minor roads, such as local subdivision roads and similar neighborhood development roads.
- 3. No new roads or road extensions should be undertaken except upon a clear finding of need to ensure public safety and welfare or to provide access to new development projects, such as the provision of access to lots in new subdivisions.
- 4. All public roads will be designed and constructed to County Road Commission standards.
- 5. All private roads will be designed and constructed to County Road Commission standards except upon a finding that, by general rule or in specific instances, such standards do not justify the impact on the natural environment and rural character of the community or are otherwise unnecessary, and lesser standards will not undermine public safety and welfare including the long term stability of the road infrastructure.
- 6. All proposed future road construction will be evaluated for local and regional impacts on traffic flow, congestion, public safety and land use. New road construction will be coordinated with other local and regional road improvements to address traffic movement in a unified, regional and comprehensive manner.
- 7. The township will explore the development of a non-motorized circulation plan to encourage the provision of trails and linkages between neighborhoods, commercial areas, and other activity centers in the community including in association with new residential developments. (See also "Recreation" section in this Chapter.)

- 8. The township will work with the County Road Commission to incorporate "complete streets" measures in road construction, maintenance and improvements.
- 9. The township will evaluate proposed developments within the context of "complete streets" to ensure all users of a development are afforded opportunities for safe and efficient travel within and between development sites including neighborhoods and commercial/industrial areas.

Sewage Disposal and Potable Water

There is no public water or sewer service in Iosco Township. Township residents rely on private wells and septic systems for potable water and sewage disposal. As development densities increase, so does the need for public sewer and water. Industrial, and commercial, higher density residential development frequently have greater sewage disposal and potable water needs than can be met by traditional on-site facilities. Reliance on on-site facilities in such cases increases the risk of health and environmental problems, while the premature provision of public water and sewer services can lead accelerated and unmanaged growth development.

Many of the township soils present severe limitations to on-site sewage disposal. Improperly operating septic systems can contaminate potable groundwater resources and surface water resources, and this poses a public health threat. This condition highlights the critical relationship between land use, development intensities, and adequate sewage disposal and potable water facilities.

Sewage Disposal and Potable Water Policies:

- All on-site sewage disposal and potable water facilities will be constructed and maintained in accordance with the requirements and standards of the County Health Department, Michigan Department of Health and Human Services, and other applicable public agencies.
- The township will support the introduction and extension of public sewer and water in the planned Suburban Residential Areas, where initiated and funded by private sector interests and in coordination with the policies of the Suburban Residential Area.
- Public sewer and water services will not be introduced into planned conservation and agricultural areas except in response to a significant public health threat and where no other

practical means of addressing the threat is available.

- 4. Any introduction or expansion of public sewer and/or water service, and associated infrastructure, will occur in a phased and incremental manner to ensure effective growth management.
- 5. The introduction or expansion of public sewer and/or water will be based upon sound engineering principles and infrastructure design that will facilitate incremental increases in demand on the system while, at the same time, will not create excessive capacity that will encourage expansion into planned conservation, agricultural and rural residential areas.

Storm Water Management

As buildings, parking lots and other impermeable surfaces associated with new development cover more of the township's land surface, the quantity of storm water runoff increases. The vegetated landscape that previously absorbed and slowed much of the water associated with storms is replaced by impervious surfaces. Unless specific preventive measures are taken, this condition encourages flooding and property damage, as well as the pollution of local water resources due to soil erosion, sedimentation and other runoff impurities. The township's water resources including the Middle and West Branches of the Red Cedar River, and their tributaries and associated wetlands, are vulnerable to degradation.

Storm water management is not a development issue only. While development can pose increased flood potential, improper maintenance of county drains and roadside ditches, and filling of wetlands, can increase flood conditions in agricultural and rural areas as well.

Though flooding, soil erosion, sedimentation and pollution may originate from site-specific circumstances, their impact can extend to adjacent properties and more regional areas including other downstream communities. Storm water management aims to minimize flood conditions and control the quality and quantity of runoff that is discharged into the watershed system (streams, rivers, wetlands, lakes, etc.) from a development site.

Storm Water Management Policies:

- Increased runoff that may occur as a result of property development will be appropriately managed to ensure that the quality of the water runoff discharged does not undermine the integrity of the township's surface and ground water resources.
- 2) Development will not be permitted if the level of service currently provided by existing storm water management infrastructure and/or existing drainage patterns will be decreased, unless necessary improvements to such infrastructure or natural drainage courses are first made.
- 3) New and existing land uses shall comply with all local, county, state, and federal regulations regarding storm water management and soil erosion, including the regulations of the Livingston County Drain Commissioner, except where local officials determine less stringent standards in site-specific instances are appropriate, the standards will not undermine the public health, safety and welfare, and the application of the standards are within the jurisdiction of the township.
- 4) Storm water management measures will emphasize "green infrastructure" planned networks of natural lands, functioning landscapes and other open spaces that minimize alterations to the natural landscape and lessen the reliance on storm sewer and similar "grey" infrastructure.
- 5) All development will be reviewed within the context of its impact on drainage corridors and surface and groundwater resources, including wetlands, to ensure discharge practices do not undermine the environmental integrity of these resources.
- 6) The Township will maintain regular communication with the County Drain Commissioner and Road Commission regarding drains and roadside ditches in disrepair.

Emergency Services

losco Township receives fire protection services from the Fowlerville Area Fire Department, with the fire station located in Fowlerville approximately seven road miles north of the township's north boundary. The Fowlerville Area Fire Department is assisted by other neighboring fire departments on an as-needed basis. Police protection services are provided by the Livingston County Sheriff's Department. The State Police provide services on an as-needed basis. Ambulance service is provided to township residents by Livingston County EMS. EMS ambulance deployment locations are in Howell and the townships of Genoa, Hartland, Brighton and Hamburg. The nearest ambulance station, being in Howell, is

approximately five road miles northeast of the township's northeast corner.

As community growth and land development increases, so does the demand for emergency services. It is important that the township ensure that adequate fire and police protection services are available to existing and future residents and property.

Common industry standards regarding fire protection suggest a maximum service radius from a fire station in low density residential areas of approximately 3 miles, and an approximately 3/4 to 2 mile service radius in commercial, industrial, and high density residential areas. No part of losco Township is within these recommended ranges, with the central southern periphery of the township being closest to a fire station (in Gregory).

There are no widely accepted standards for police protection levels and is frequently measured as a function of public satisfaction.

Police and Fire Protection Policies:

- The township will require the provision of fire protection infrastructure (wells, water lines, etc.) for all new developments which are of such size and density that on-site infrastructure is considered critical. On-site fire protection infrastructure will generally be considered necessary for residential developments that concentrate building sites on lots of approximately one-half acre or smaller.
- 2. The township will continually monitor police and fire protection needs and services to minimize and/or prevent emergency services deficiencies, and explore improving service levels. Considerations for expansion of services will include both the expansion of joint services with neighboring municipalities and the establishment of independent operations.

Recreation

losco Township operates a single recreation site, comprised of a portion of the township hall property on Bradley Rd. Recreation facilities include a pavilion with grills and picnic tables. Township residents also have available to them recreational facilities and services of other public entities including the Livingston Conservation District Nature Center, the facilities and programs of the surrounding school districts, and the parks and recreation programs of nearby municipalities. Both the Dansville and Gregory State Game Areas are within ten miles of the township and the Brighton State Recreation Area is about 15 miles to the east. There are numerous other county and state facilities within the more regional area.

The well-being of the township's residents is affected by the availability of recreation opportunities, and the type and ease of accessibility to nearby opportunities are important.

Demands for recreation opportunities increase with population growth. Available land for recreational purposes decreases as housing and other land uses consume more of what was open space and potential outdoor recreation land. Recreation lands should be appropriately located within the community if ease of access is to be enhanced. The township's interest in ensuring adequate recreation opportunities for its residents is reflected in the recent recreation improvements at the Township Hall and its efforts to maintain a current "recreation plan" that enables the township to compete for recreation grant money from the state.

Recreation Policies:

- The township will periodically monitor the extent to which area residents are satisfied with the scope and accessibility of recreation opportunities in the local area.
- The township will continue to maintain a current state-approved five year recreation action plan that provides a specific action plan aimed at providing needed township facilities and enable the township to compete for state recreation grants to provide such opportunities.
- Where there is a demonstrated demand for recreation improvements, as financial resources may become available, the township will strive to provide recreation facilities in a manner that recognizes the particular needs of its residents.
- 4. The township will encourage the provision of open space and recreation areas within future residential development projects such as platted and condominium subdivisions, to facilitate close-tohome recreation opportunities.
- The township will make the short and long-term maintenance of recreation facilities a priority including adequate funding to support such efforts.
- 6. The township will ensure that all recreation facilities are accessible by all persons, including encouraging recreation sites in planned residential growth areas and facilitating access within each park site for all persons, irrespective of physical abilities of prospective users.

Information and Technology Access

Society has been dramatically molded by advanced technology including wireless communications, the internet and computer programs and applications. Availability of reliable cellular phone service and highspeed internet access (broadband) is now commonly linked to quality of life measures. Local, regional and global economies rely heavily on these tools including persons and entrepreneurs who work from their home. Emergency services are greatly enhanced when access to such technology is readily available including the generation of and analysis of data to improve efficiency and levels of service. Personal communications and leisure time are significantly linked to internet surfing. Personal and business research and consumer purchasing through the internet is a regular practice in many households. Today, access to information and technology services is a priority among entrepreneurs, businesses and job-seekers.

Rural areas frequently experience a reduced level of access to reliable cellular service and high-speed internet access. Iosco Township is no different in this regard.

Technology and Information Access Policies:

- The township will communicate with local broadband providers and government agencies to explore impediments to enhanced services and options to improve services.
- 2. The township will communicate with local municipalities to explore joint efforts to attract broadband providers and improve services on a regional level and in a coordinated manner.
- The township will periodically evaluate zoning provisions to minimize impediments to cellular service while, as the same time, ensuring potential negative impacts of cellular towers are minimized.

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Chapter Five IMPLEMENTATION

Introduction

This Master Plan establishes a strategy for growth, development and preservation in losco Township. The Plan is comprised of graphic and narrative policies intended to provide basic guidelines for making reasonable, realistic community decisions. It establishes policies and recommendations for the proper use of land and the provision of public services and facilities. The Plan is intended to be used by local officials, by those considering private sector developments, and by all residents interested in the future of the township.

This Plan is a policy document. As a policy document, the Plan's effectiveness is directly tied to the implementation of its goals, objectives, and policies through specific tools and actions.

The completion of the Plan is one part of the planning process. Realization or implementation of the goals, objectives and policies of the Plan can only be achieved by specific actions, over an extended period of time, and through the cooperative efforts of both the public and private sectors.

Implementation of the Plan may be realized by:

- encouraging knowledge, understanding, and support of the Plan by residents and the business community, and the continued communication with and involvement of the citizenry
- providing a program of capital improvements and adequate, economical public services to accommodate desirable development.
- pursuing an action plan to address the objectives presented in Chapter Two
- regulating the use and manner of development through up-to-date reasonable zoning controls and other regulatory and non-regulatory tools
- maintaining a current master plan

The purpose of this Chapter is to identify important implementation tools available to the township.

Public Support, Communication and Community Involvement

Citizen participation and understanding of the general planning process and the specific goals, objectives and policies of the Plan are important to the success of the township's planning program. Understanding and support of the Plan by local citizens can greatly enhance its implementation. This enhancement may be found in citizen support for bond proposals, special assessments, zoning decisions, and development proposals.

In order to organize public support most effectively, the township must emphasize the necessity of, and reasons for long-range planning and the development of the Master Plan.

Specific actions to be undertaken to encourage public understanding and support of the township's planning program, and the continued communication with and involvement of the citizenry, are as follows.

- 1. Ensure that copies of the Master Plan are available at the township hall and on the township web site.
- 2. Post the Future Land Use Map in the township hall where it is clearly visible.
- 3. Post a regularly updated listing of current events pertaining to planning and zoning matters at the township hall and on the township web site.
- 4. Through public notices, newsletters, township hall postings, web site postings, and other means, apprise residents of:
 - the planning efforts of the township
 - meetings that will address development and public service improvement proposals as the projects move through review
 - proposed developments and land use decisions under consideration, and where individuals may acquire additional information on such matters
- 5. Periodically hold special meetings for the specific purpose of discussing the township's planning efforts and providing residents with the opportunity to share concerns and suggestions.

- 6. Encourage "neighborhood watch" programs in each neighborhood to promote safety, cooperation and communication.
- 7. Maintain regular and continued communication with neighboring communities and encourage coordination of planning efforts.

Capital Improvements Programming

The use of capital improvements programming can be an effective tool for implementing the Master Plan and ensuring the orderly programming of public improvements. In its basic form, a Capital Improvements Program (CIP) is a complete list of all proposed public improvements planned for a six year period (time span may vary) including costs, anticipated funding sources, location, and relative priority. It is a schedule for implementing improvements that acknowledges current and anticipated demands, and recognizes present and potential financial resources available. The CIP is not intended to encourage the spending of additional public monies, but is simply a means by which an impartial evaluation of needs may be made.

The importance of CIPs is highlighted by the fact that Sec. 65 of the Planning Enabling Act strongly endorses capital improving planning for all communities, and mandates that a township prepare an annual six-year CIP if the township owns or operates a water supply or sewage disposal system.

The CIP outlines the projects that will replace or improve existing facilities, or that will be necessary to serve current and projected development in a community. Advanced planning for public works through the use of a CIP ensures more effective and economical capital expenditures, as well as the provision of public works in a timely manner. Few communities are fortunate enough to have available at any given time sufficient revenues to satisfy all demands for new or improved public facilities and services. Most communities are faced with the necessity of determining the relative priority of specific projects and establishing a program schedule for their initiation and completion.

This Master Plan does not recommend specific increases in services or infrastructure, and includes no specific recommendations for the introduction of public sewer or water, the acquisition of additional park sites, the construction of a community center or library, or the purchase of new fire equipment. Still, regularly prioritizing even "minor" community improvements is an important element of planning.

As the township grows and increased demands for public services and infrastructure improvements surface, the benefit of a comprehensive capital improvement program will grow.

Objectives Action Plan

The objectives presented in Chapter Two serve as strategies to reach the goals of this Master Plan, also presented in Chapter Two, and to put in place the policies of Chapter Three (Future Land Use Strategy) and Chapter Four (Public Services Strategy). Some of the objectives require comparatively short periods of focus for successful implementation (two years or less) while others may require a longer implementation period and continued maintenance as a regular annual effort each and every year.

The Chapter Two objectives are of limited value unless they are routinely and regularly reviewed and an annual action plan is developed to identify those objectives to pursue in the coming year and each subsequent year, and the recommended township entity that is best suited to take the lead in furthering the selected objective(s).

Undertaking the implementation of an excessive number of objectives during a single year is likely not realistic and may lead to little being accomplished. Identifying a realistic set of annual objectives to direct efforts toward may ultimately lead to a more successful long-term implementation program.

The Planning Commission and Township Board should meet annually:

- to prioritize objectives to be pursued in the coming several years and those that should take priority in the immediate year ahead
- to identify the entity to take charge in the respective objective's implementation
- to identify the steps to be taken for the objective's implementation
- to identify from where funding is to be provided (if funding is necessary)
- to report on the status of implementation efforts during the previous year

Prioritization of the objectives should be based on such factors as public safety, economic stability and growth, comparative impact community wide, and the number of residents and/or businesses that will benefit from any specific objective.

Development Codes and Programs

Zoning Ordinance

A zoning ordinance is the primary tool for implementing a Master Plan. A zoning ordinance regulates the use of land. The ordinance generally divides a community into districts and identifies the uses permitted in each district. Each district prescribes minimum standards that must be met such as minimum lot area, lot width, and building setbacks. Since 2006, zoning regulations for Michigan communities are adopted under the authority of the Michigan Zoning Enabling Act, P.A. 110 of 2006.

losco Township has had local zoning in place for approximately 30 years. Its current Zoning Ordinance was adopted in 2016. Any time a new Master Plan is adopted or an existing Master Plan is amended, a municipality's zoning ordinance should be carefully reviewed to identify ordinance amendments that may be beneficial to implement the policies of the Plan and facilitate efficient day-to-day zoning administration.

The purpose of zoning, according to the Michigan Zoning Enabling Act, is to (in part): "regulate the use of land and structures; to meet the needs of the state's citizens for food, fiber, energy, and other natural resources, places of residence, recreation, industry, trade, service, and other uses of land; to insure that use of the land shall be situated in appropriate locations and relationships; to limit the overcrowding of land and congestion of population, transportation systems, and other public facilities."

The ultimate effectiveness of a zoning ordinance is dependent on the overall quality of ordinance administration and enforcement. If administrative procedures are lax, or if enforcement is handled in an inconsistent, sporadic manner, the result will be unsatisfactory. The Planning Commission, Township Board, and staff are responsible for carrying out zoning/development related functions including the review and approval of development plans and site inspections. These functions can require special expertise and a substantial investment of time to ensure that these essential day-to-day functions are met and appropriate development is facilitated.

Iosco Township Zone Plan

The following pages present a Zone Plan. The Zone Plan establishes a foundation for the township's zoning regulations. The Zone Plan is comprised of three elements. The Michigan Planning Enabling Act requires that a Master Plan include a Zone Plan.

Zone Plan - Part One

Part One of the Zone Plan presents **guidelines for the presentation of zoning districts** in the Iosco Township Zoning Ordinance, to implement the Future Land Use Strategy presented in Chapter Three of the Master Plan including the Future Land Use Map.

Zone Plan – Part Two

Part Two of the Zone Plan presents **guidelines for basic site development standards** for the zoning districts to implement the Future Land Use Strategy presented in Chapter Three of the Master Plan including the Future Land Use Map.

Zone Plan - Part Three

Part Three of the Zone Plan identifies **important ordinance elements** that the losco Township Zoning Ordinance should include to ensure its ease of use and effectiveness in advancing the goals, objectives and policies of the Master Plan. The ordinance should be periodically reviewed within the context of these elements.

Zone Plan – Part One Table of Recommended Zoning Districts and Relation to Future Land Use Map

The following table presents <u>conceptual guidelines</u> for the presentation of zoning districts in the losco Township Zoning Ordinance, to implement the Master Plan's Future Land Use Strategy (including Future Land Use map). "Secondary District Uses" identified in the table, or others specified in the Zoning Ordinance, should typically be subject to comprehensive review to determine if the proposed use is appropriate on the subject site based on, in part, compatibility with surrounding land uses, environmental conditions, road infrastructure, and public services. The Zoning Ordinance may incorporate other districts to address specialized matters as they may arise.

There are some districts presented below, such as the R-1, R-2 and MF Districts, that may be delayed in their establishment in the losco Township Zoning Ordinance until such time that there is an identified need, demand and/or appropriate location for such districts.

Zoning District (example names)	Primary Relationship to Chapter Three Including Future Land Use Map	Primary Intended District Uses	Examples of Potential Secondary District Uses
<u>AR</u> Agricultural Residential	Agricultural/Rural Residential Area and Resource Conservation Area	Agriculture, wildlife management areas, conservation areas, and low-density single and two-family residences	Golf courses, veterinarian clinics, kennels, bed and breakfasts, shooting ranges, campgrounds, schools and religious institutions
<u>RR</u> Rural Residential	Agricultural/Rural Residential Area and Resource Conservation Area	Low-density single and two-family residences	Golf courses, bed and breakfasts, religious institutions, schools, libraries, child care facilities, and utility substations
R-1 Low Density Residential <u>R-2</u> Medium Density Residential	Suburban Residential Area	Single-family and two-family dwellings of incrementally greater density: 1 dwelling per approximately 1 acre. (R-1 Low Density Residential) 1 dwelling per approximately ½ acre. (R-2 Medium Density Residential)	Religious institutions, schools, libraries, child care facilities, and utility substations
R-MHC Manufactured Housing Community	Suburban Residential Area	Manufactured housing communities	Child care facilities, parks and other recreation facilities, and utility substations
<u>R-MF</u> Multiple Family Residential	Suburban Residential Area	Multiple family developments	Religious institutions, nursing homes, assisted living facilities, and utility substations
<u>C-1</u> Local Commercial	Commercial Area	Comparatively small retail, office and personal service uses, catering to local needs and commuters	Service stations, drive- through facilities, and uses that draw from a more regional market and may be comparatively large in scale
<u>l-1</u> Light Industrial	Industrial Area	"Light" industrial uses such as assembly of pre-made parts, tool and die, and laboratories	Junk yards, truck terminals, vehicle repair, and limited manufacturing

Zone Plan – Part Two Table of Zoning District Site Development Standards

The following table establishes <u>conceptual guidelines</u> for basic site development standards of the zoning districts intended to implement the Future Land Use Strategy in Chapter Three (including the Future Land Use Map). The table's standards establish a realistic concept for each district. All guidelines below are approximate and serve as a framework for more detailed Zoning Ordinance standards. Conditions may suggest divergences from the guidelines to address special issues such as height exceptions for communication towers, increased setbacks where commercial/industrial uses are adjacent to residential uses, and increased lot width standards as part of an access management program.

There are some districts presented below, such as the R-1, R-2 and MF Districts, that may be delayed in their establishment in the losco Township Zoning Ordinance until such time that there is an identified need and demand for such districts.

Zoning District	Minimum Lot Area	Minimum Lot Width	Maximum Building Height	Maximum Building Coverage	Minimum Yard Setback		:k
			Height	Coverage	Front	Each Side	Rear
AR Agricultural Residential	2.0 acres	LW: 200 ft.	35 ft. but not to exceed 2.5 stories	10%	75 ft.	20 ft.	30 ft.
<u>RR</u> Rural Residential	2.0 acres	LW: 200 ft.	35 ft. but not to exceed 2.5 stories	10%	75 ft.	20 ft.	30 ft.
R-1 Low Density Residential	1.0 acres	125 ft.	35 ft. but not to exceed 2.5 stories	15%	40 ft.	20 ft.	30 ft.
R-2 Medium Density Residential	0.5 acres	75 ft.	35 ft. but not to exceed 2.5 stories	20%	30 ft.	15 ft.	30 ft.
R-MHC Manufactured Housing Community			formance with Rule higan Manufacture			1	
<u>R-MF</u> Multiple Family	1 acre	200 ft.	35 ft.	35% – 40%	35 ft.	50 ft.	50 ft.
C-1 Local Commercial	1.0 acres	LW: 200 ft.	35 ft.	50%	40 ft.	15 ft.	30 ft.
<u>l-1</u> Light Industrial	2.0 acres	LW: 300 ft.	40 ft.	50%	50 ft.	30 ft.	40 ft.

Zone Plan, Part Three – Important Components of the Iosco Township Zoning Ordinance. The following identifies important general elements that the Iosco Township Zoning Ordinance should include to ensure its ease of use and effectiveness in advancing the goals, objectives and policies of the Master Plan. The ordinance should be reviewed within the context of the following:

1) Procedural Matters/Plan Review

The Zoning Ordinance should include clear and comprehensive step-by-step provisions addressing procedural matters such as the application process and approval standards for zoning permits, amendments, matters that come before the Zoning Board of Appeals, and enforcement efforts.

The zoning permit application procedures should include clear requirements for the submittal of necessary plans illustrating proposed modifications to a site, to enable officials to determine compliance with all standards of the Ordinance.

The provisions should ensure development plans include comprehensive information such as the delineation of existing natural features, the extent of alterations to such features, and the salient features of the development including buildings, parking, screening, lighting, grading and storm water management.

The Zoning Ordinance should include a comprehensive set of approval standards addressing such matters as access management and vehicular/pedestrian circulation, emergency vehicle access, natural resource protection, utilities, storm water management and compatibility with surrounding conditions.

2) <u>District Provisions/Special Land Uses</u>

The ordinance should include a clear and comprehensive presentation of zoning districts including the purpose, authorized uses, and development standards for each. To this end, the districts should differentiate between uses authorized "by right" versus as "special land uses."

Uses permitted by right are the primary uses and structures specified for which a particular district has been established. An example may be a dwelling in a residential district.

Special land uses are uses that are generally accepted as reasonably compatible with the primary uses and structures within a district but,

because of their particular character, may have an increased potential for injurious effects upon the primary uses in the district, or are otherwise unique in character and it may not be appropriate in certain situations or on certain parcels. An example may be a kennel in a residential district.

Special land uses require special consideration in relation to the welfare of adjacent properties and to the township as a whole, and may not be appropriate in all locations.

3) Site Development Standards

In addition to the standards presented in the Zoning Ordinance for each district, such as minimum lot area, width, and setbacks, the Ordinance should be reviewed to ensure it presents clear and comprehensive standards addressing more general fundamental site development issues such as:

- a. Proper access to ensure public safety and welfare including access management along thoroughfares, emergency vehicle access, and non-motorized circulation.
- b. Off-street parking and loading to ensure adequate facilities are provided on a development site and design features encourage safe and efficient circulation for all.
- c. Landscaping and screening provisions that ensure new development (commercial, industrial, institutional, etc.) is compatible with surrounding conditions and supportive of the desired character of the community.
- d. Sign regulations to ensure local signage does not contribute to traffic safety hazards, visual clutter, confusion for vehicle drivers, visual blight, and decreased property values.
- Environmental safeguard provisions to ensure new development minimizes disturbances to the township's natural resources including keyholing and storm water management.

4) Nonconformities

The Zoning Ordinance should address lots, uses and structures that are nonconforming due to changes to the zoning ordinance, and the extent to which such lots, uses and structures can be replaced, expanded, enlarged, or otherwise altered.

5) Site Condominium Regulations

The Zoning Ordinance should address site condominiums. Site condominiums come in many forms, but they typically involve developments that look identical or nearly identical to platted subdivisions. The principal differences between the two is that while privately owned lots comprise the entirety (or near entirety) of a platted subdivision, site condominiums are comprised of privately owned (or rented) building envelopes where there are no "lot lines" and greater portions of the development are commonly owned. Site condominiums are not comprised of "lots" in the traditional sense. Zoning regulations must clearly address this form of development and correlate condominium development with regulations to ensure such development is subject to the same review procedures and standards as applicable otherwise to other residential development of similar physical character (platted subdivisions).

6) Clustering / Open Space Developments

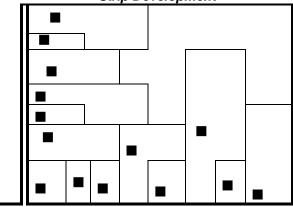
As a tool to facilitate the conservation of important natural resources and ecosystems, this Plan supports what are commonly referred to as "cluster developments" and "open space developments" in association with platted subdivisions, condominium subdivisions, and neighborhood developments. similar development option is a beneficial alternative to large lot "rural sprawl," which consumes open space and creates lots that are too small for farming or meaningful habitat protection.

"Clustering" provides for the grouping of smaller lots than what is normally permitted, on only a portion of the development tract, so that the balance of the tract can be retained as open space and for the preservation of important environmental resources. Clustering provisions must recognize the specific requirements of Sec. 506 of the Michigan Zoning Enabling Act.

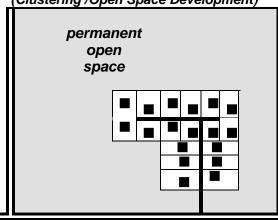
As much as 50% or more of a site, and preferably the most environmentally significant, may be preserved in its existing natural state, with individual house lots occupying the remaining acreage. These "open space" areas can be reserved by the use of conservation easements, deed restrictions, or similar tools. A critical component of clustering should be the inclusion of new interior roads to serve the new lots, rather than stripping new dwellings along existing road frontages.

More traditional strip residential development along the township's major roads is illustrated in Example A below. This is the easiest form of development but it impacts public safety due to the many driveways directly accessing the road and it can significantly undermine the rural character of the township. Example B, illustrating a clustering/open space development, improves public safety along the road and more effectively preserves the existing character of the community including its open spaces and environmental resources and habitats. Clustering can also save infrastructure costs by reducing the length of roads and utility lines.

Example A Strip Development



Example B (Clustering /Open Space Development)



One of the most effective means to encourage the open space development option is through more flexible development standards than otherwise available, such as standards pertaining to permissible densities, lot sizes, and setbacks. This Plan supports appropriate incentives to facilitate this preferred form of development provided such incentives are not contrary to the principal policies of the Plan. Accordingly, moderate increases in

recommended maximum development densities presented in Chapter Three may be reasonable.

7) Planned Unit Developments (PUDs)

"Planned unit development" provisions in a Zoning Ordinance typically permit a more flexible form of development that normally permitted by the district in which a development site is located or the other districts established in the Ordinance. PUDs are expressly authorized by the Zoning Enabling Act with the intent to facilitate development that, in part, encourages innovation in land use and variety in design, layout, and type of structures constructed; achieves economy and efficiency in the use of land, natural resources, energy, and the provision of public services and utilities; encourages useful open space; and provides better housing, employment, and consumer opportunities. PUDs are sometimes used as a means to facilitate residential cluster development discussed in (6) above, but are frequently used to facilitate development that provides a mix of housing units and nonresidential uses in one unified site design. The specific PUD provisions of an ordinance dictate the character and scope of development that may occur under such a development option.

8) Special Issues

A very beneficial part of a zoning ordinance, commonly referred to as "supplemental provisions", can be used to address a host of special issues that have relevance to the particular community. The particular scope of issues addressed should be tailored to the particular community. However, common issues addressed under include, but are not limited to, some of the following:

- conditional approvals
- moving buildings
- essential services
- single family dwelling standards
- temporary dwellings
- accessory uses, buildings, and structures
- outdoor furnaces
- home occupations
- keeping of livestock (dwelling related)
- swimming pools
- outdoor display, sales, and storage
- outdoor recreational vehicle storage
- temporary non-residential buildings/uses
- building height exceptions
- · setback exceptions

9) Clarity

The clarity of a zoning ordinance's wording and organization will greatly impact the ability of officials to administer the ordinance in a consistent manner, validly enforce the ordinance's provisions, and facilitate a user-friendly document for officials, applicants and the general public. This clarity must be reflected in the wording of individual provisions as well as linkages between chapters including the avoidance of conflicting provisions.

10) Compliance with Current Law

The Zoning Ordinance's provisions must comply with current law to ensure its validity and the ability of officials to enforce the Ordinance. The Township Zoning Act, under which losco Township adopted its first zoning regulations, was repealed in 2006 and replaced by the Zoning Enabling Act (Public Act 110). The township's zoning regulations should be coordinated with the Zoning Enabling Act and periodically updated to address any subsequent changes to the law.

Subdivision and Land Divisions Ordinances

When a landowner/developer proposes to subdivide land, the person is, in effect, planning a portion of the township. To ensure that such a development is in harmony with the Master Plan, the subdivision or resubdivision of residential and nonresidential land must be adequately reviewed. A subdivision ordinance establishes requirements and design standards for the development of plats including streets, blocks, lots, curbs, sidewalks, open spaces, easements, public utilities, and other associated subdivision improvements. The Land Division Act, P.A. 288 of 1967, as amended, provides the authority for municipalities to adopt local ordinances to administer the provisions of the Land Division Act including the platting of subdivisions.

With the implementation of a subdivision ordinance, there is added insurance that development will occur in an orderly manner and the public health, safety and welfare will be maintained. For example, subdivision regulations can help ensure developments are provided with adequate utilities and streets, and appropriately sized and shaped lots. Adopting a local ordinance addressing the creation of subdivisions can encourage a more orderly and comprehensive manner for the review and approval of subdivision plats.

Of equal importance is a "land division ordinance." While a subdivision ordinance addresses unified residential developments of multiple units (plats), most of the residential development in losco Township is in association with incremental land divisions for the purpose of establishing individual home sites. A land division ordinance assures that these incremental divisions meet certain minimum zoning ordinance standards such as lot area and width. The Land Division Act referenced above also provides municipalities with the authority to adopt a land division ordinance. Land division ordinances can ensure consistency in review and approval practices.

Other Special Purpose Ordinances

While zoning and land split regulations are the most frequently used tools for the regulation of land use and development, the control of land use activities can extend beyond their respective scopes. Special purpose rules and regulations can complement zoning and land split regulations and further the implementation of the Master Plan. Such ordinances may address matters pertaining to noise, public nuisances, outdoor assemblies, blight, junk, weeds, and other activities. Township officials should evaluate the scope of the township's current special purpose ordinances and determine what new ordinances. and/or amendments to current ordinances, may be beneficial to further implement the Master Plan.

Maintaining a Current Master Plan

Successful planning requires maintaining a current Master Plan. The Master Plan should be updated periodically. The Plan must be responsive to community changes if it is to be an effective community tool and relied upon for guidance. Periodic review of the Plan should be undertaken by the Planning Commission, Township Board, and other officials to determine whether the Plan continues to be sensitive to the needs of the community and continues to chart a realistic and desirable future.

Community changes that may suggest updates to the Plan include, but need not be limited to, changing conditions involving available infrastructure and public services, growth trends, unanticipated and large-scale development, and changing community aspirations. The following page outlines important considerations for the periodic evaluation of the Master Plan.

The importance of maintaining a current Plan is reflected in the Planning Enabling Act's requirement that a Planning Commission review its Master Plan at intervals not greater than five years and document the Commission's findings.

Amendments to the Plan, or the preparation of a wholly new Plan, must follow the minimum procedures delineated in the Planning Enabling Act in addition to measures the township believes will enhance the planning process.

Important questions to be asked during a review of this Master Plan should include, at a minimum:

- Does the Plan present valid and current inventory data (Appendices and elsewhere)?
- Does the discussion of planning issues and specific goals/objectives continue to be appropriate today?
- Do the future land use and public services policies of the Plan continue to reflect preferred strategies to address development, preservation and public services?
- Have there been any new and/or significant development projects that have raised concerns about the township's future, or the future of a particular area of the township, that may suggest changes to the Master Plan's goals, objectives and/or policies regarding development, preservation and public services?
- Have there been any other major changes in the township that were not anticipated under the current Master Plan?
- Have any specific development decisions been made (such as rezonings and site plan approvals) that may have appeared contrary to the Master Plan and, if so, do such decisions suggest the need to revise the Plan to be more responsive to local conditions?
- Have any text amendments been made to the Zoning Ordinance that suggest Master Plan revisions to maintain coordination between the two documents?
- Is the character of local growth and development (residential, commercial and other) since the Plan was adopted (or last updated) in keeping with Plan's vision (goals, objectives, and policies)?
- Are there significant discrepancies between the Future Land Use Map and Zoning Map, recognizing that the Zoning Map is current law and the Future Land Use Map portrays the future vision?
- Are there conditions and/or trends in nearby communities, particularly along the township's borders, which suggest modifications to the Plan's policies addressing future land use and public services?
- · Does the Master Plan comply with current law?

Appendix A CULTURAL FEATURES

Geography and Regional Context

losco Township is a rural community located in the southwest quarter of Livingston County in the southeastern region of Michigan's Lower Peninsula. The township occupies a total area of 35.44 square miles (22,682 acres), being approximately six miles by six miles and having the nearly square congressional township boundary characteristic of the majority of townships in southern Michigan (based on the U.S. Public Land Survey System). The township's northeast corner is about seven miles west of Howell and about three miles south of Fowlerville. Howell, with a population of about 9,500 persons, is the closest urban center with a population approaching or greater than 10,000 persons. There are no cities or villages immediately adjacent to losco Township. The four principal surrounding townships are Handy to the north, Marion to the east, Unadilla to the south, and White Oak to the west (Ingham County). Interstate 96 approaches within two miles of the township's northern border.

losco Township is located within the central area of the region formed by the cities of Lansing, Flint, Ann Arbor and Jackson, all within approximately 30 to 50 road miles away and all with a population of around 100,000 persons except Jackson (33,534 persons).

Lansing: 114,297 persons, 38 road miles northwest Ann Arbor: 113,934 persons, 33 road miles southeast Jackson: 33,534 persons, 45 road miles southwest Flint: 102,434 persons, 50 road miles northeast

The regional landscape within fifty miles of losco Township is dominated by agriculture, woodlands, wetlands and other open spaces, scattered residential development along with comparatively small villages and cities such as Dansville, Stockbridge, Pinckney, Webberville and Fowlerville, and larger urbanized pockets limited principally to those listed above.

Access and Circulation

Regional Access

Regional access to losco Township is excellent. Interstate 96 (I-96) travels southeast from Muskegon on Lake Michigan to Detroit and passes within two miles of the township. I-96 includes multiple interchanges providing comparatively easy access to the township. Exit 122 provides direct access to M-52, which travels north-south from the Saginaw area to Ohio to the south, and passes within three miles of the township's western edge. M-36, accessible from M-52, travels within one mile of the township's southeast corner. The nearest regional public airport, the Livingston County Spencer J. Hardy Airport, is approximately 13 road miles to the northeast near Howell and can accommodate comparatively small airplanes. The nearest international airport is the Capital City International Airport near Lansing, about 40 road miles to the northwest.

Local Road Network

losco Township's local road network does not exhibit the strong one-mile square grid system that is so dominant in most southern Michigan townships. This is a result of a number of factors including wetland areas and the West and Middle Branches of the Red Cedar River. All roads in the township are under the jurisdiction of the Livingston County Road Commission (LCRC) except for several private roads owned and maintained by the property owners they serve. The LCRC maintains jurisdiction over approximately 59.5 miles of road in the township.

Public Act 51 Road Classifications: In compliance with the requirements of Public Act 51 of 1951, the LCRC classifies all roads under its jurisdiction as either "primary" or "local" (See Public Road Network – Public Act 51 Map, Appendix D). Primary roads are considered the most critical in providing regional circulation throughout the county. The classification of roads by the LCRC has important financial implications with regard to maintenance and improvements. Under Michigan law, townships have no responsibility for funding road improvements and maintenance. The LCRC is responsible for local road maintenance. On the other hand, while the LCRC must maintain and improve primary roads at its own expense, state law limits the participation of road commissions and departments to no more than 50% of the cost for improvements to local roads. Requests by local townships for local road maintenance levels beyond those considered adequate or feasible by the LCRC frequently require local funding. In reality, there are very few counties in Michigan where local townships are not actively involved in funding road improvements.

All roads in losco Township that the LCRC classifies as "primary" under Act 51 are paved and include:

- Bradley Rd.
- Bull Run Rd.
- Elliot Rd.
- losco Rd.
- Mason Rd.
- Kane Rd. between losco Rd. and Dansville Rd. (in Ingham County)

All other road segments in the township under the jurisdiction of the LCRC, being about 42.5 miles, are classified as "local" and nearly all segements are of a gravel surface.

National Functional Classifications (NFC): Also of importance is the national functional classification (NFC) of roads as established by the Federal Highway Administration (FHA). The FHA classifies road segments according to their function – the extent to which the road is intended to facilitate traffic movement over long distances versus over shorter distances and for access to abutting property (see Public Road Network – National Functional Classification Map, Appendix D). The relative hierarchy of the NFC and its applicability to losco Township follows:

<u>Interstates, Freeways and Principal Arterials</u> are thoroughfares intended to move large volumes of traffic over long distances. Facilitating circulation on a regional level, including between cities and states, is the primary role of these thoroughfares. There are no road segments in the township that fall under this classification, the closest being M-52 to the west.

<u>Minor Arterials</u> serve to accommodate through traffic while also providing access to abutting properties and minor intersecting streets. Minor arterials in losco Township are limited to the full length of Mason Rd.

<u>Major Collectors</u> serve to funnel traffic from local and minor **collector** roads to arterials. Major collectors in losco Township are:

- Bradlev Rd.
- Bull Run Rd.
- Elliot Rd.
- Iosco Rd., between Elliot and Bull Run Rds.

<u>Minor Collectors</u> serve to collect traffic from local streets and to provide a means of access to local destinations and minor arterial/major collector roads. There are no road segments in losco Township classified as "minor collectors."

<u>Local Streets</u> serve primarily to provide access to adjacent properties and minor collectors. The public roads in losco Township not otherwise identified above are classified as "local streets."

Federal aid for road projects is limited to roads classified as major collectors or higher. Roads classified as minor collectors have only limited eligibility. Roads classified as local are not eligible for federal funding.

Land Cover, Land Use and Development

The dominant land cover in losco Township is of an "open space" character including farmland, woodlands, wetlands, meadows and similar environments. The most dominant active land use is farming. Together, agricultural operations and other open spaces account for approximately 90% of the land area of losco Township. The more urbanized areas of the Township, including those developed for commercial, industrial, and suburban residential uses, are somewhat scattered and not concentrated in any one or several locations.

Table A-1 provides a breakdown of land use based solely on tax classification for county assessing purposes. Table A-2 provides a breakdown of general land use/land cover, based solely on actual use and vegetative cover. An examination of the two tables quickly reveals how actual land use/land cover can differ considerably from the classification of land resources for taxation purposes. For example, the acreage devoted to home sites and immediate yard areas, based on an average of 1.5 acres per dwelling, accounts for approximately 2,028 acres or about one-tenth of the community. On the other hand, the county's residential tax classification accounts for 10,271 acres of the township – approaching half of the entire community. This condition is a result of a single tax classification being applied to an entire parcel for taxation purposes even though the actual active use of a parcel may be limited to only a small portion of the parcel. Similarly, while the county's agricultural tax classification accounts for 11,945 acres of the township – slightly more than half of the entire community, the actual acreage under agricultural use is noticeably higher at approximately 14,500 acres.

Tables A-1 and A-2 are followed by a review of some of the more significant characteristics of land use and development in the township. See Land Use by Tax Classification map, Appendix D.

Table A-1
Land Use Allocation According to Tax Classification, 2019

Tax Classification	Acreage	Percent of Township
Agriculture	11,945 ac.	52.7%
Residential	10,271 ac.	45.3%
Exempt	295 ac.	1.3%
Unclassified	74 ac.	0.3%
Industrial	63 ac.	0.3%
Commercial	34 ac.	0.1%

Source: Livingston County

Table A-2
Approximate General Land Use/Land Cover Allocation, 2019

Land Use-Land Cover	Approximate Acreage (ac.)	Approximate Portion (%) of Township
Agriculture	14,500 ac.	64.0%
Open Space, comprised of wooded areas, wetlands, and meadows.	5,700 ac.	25.2%
Residential, comprised of an average area of 1.5 acres per dwelling and manicured lawns or other immediate yard areas.	2,028 ac.	8.9%
Transportation, comprised of public road right-of-ways.	409 ac.	1.8%
Commercial, comprised of a single convenience store.	2 ac.	-
Other, comprised of cemeteries and township hall.	8 ac.	
Industrial.	0 ac.	

Table is based on aerial imagery, township records and "windshield" survey.

"-—" denotes less than 0.1%

Agriculture

Farming operations occupy approximately 64% (approximately 14,500 acres) of losco Township and are present in all areas of the community. The most commonly harvested crops are corn and soybeans. The majority of the farmland is dedicated to crop production, and there are a some comparatively small livestock farms.

In an effort to better protect Michigan's farming interests, the state passed Public Act 116 of 1974 – the Farmland and Open Space Preservation Act. The Act has since been amended and ultimately repealed, and made part of Public Act 451 of 1994 – the Natural Resources and Environmental Protection Act. The program continues to be commonly referred to as the "PA 116 Program." The Act establishes a program whereby farmers can enroll their properties to gain property tax relief provided the farmland is maintained in an agricultural and/or other open space status. Minimum and maximum program enrollment periods are 10 and 90 years respectively, with renewal enrollment periods of a minimum of seven years. Except in certain instances, termination from the program requires the landowner to repay the tax credits received for the enrolled property during the previous seven years.

There were approximately 1,000 acres enrolled in the Farmland and Open Space Preservation Program in 2019, comprised of 11 parcels and being approximately 4.4% of the township's area. The enrolled parcels are scattered throughout the township, range from approximately 33 to 200 acres in size, and have enrollment termination dates ranging from 2019 to 2032. The enrolled 1,000 acres in losco Township is comparatively low, with a state-wide average township enrollment of approximately 2,700 acres. Townships in low populated regions with high productivity farm operations have witnessed enrollments of more than 90% of the respective community's acreage.

Residential Development and Land Division

The 2010 Census recorded 1,352 dwelling units in Iosco Township, a 40.2% increase over the 964 dwellings in 2000. Based on an average of 1.5 acres of maintained lawn area per dwelling unit, residential development comprises approximately 8.9% (2,028 acres) of the township's total acreage. 5.5% of the dwelling units were not occupied in 2010, of which about one-third were for sale or rent. The balance of the unoccupied dwellings were recently sold but unoccupied, used for seasonal, recreational or occasional use only, or were unoccupied for some other reason. 94.4% of all occupied dwellings were owner-occupied and the balance were renter-occupied.

According to the 2017 Census Bureau's American Community Survey, approximately 97.0% of the township's dwellings were single-family dwellings, with the balance being part of two-unit buildings.

According to the 2017 Census Bureau's American Community Survey, 10.6% of the dwelling units were constructed prior to 1940, 19.2% were constructed between 1940 and 1979, and 70.2% were constructed since 1980. The township reflects a substantially younger housing stock than that of the county and state as a whole. The 70.2% of the township's housing stock constructed since 1980 is noticeably greater than that of the county (58.0%) and about twice that of the state (34.4%). The township's 2017 median value of the owner-occupied housing stock was \$198,200, noticeably less than the county (\$218,700) and substantially greater than that of the state (\$136,400). See Table A-3.

TABLE A-3
Selected Housing Characteristics Comparison, 2017
Source: U.S. Census Bureau, 2017 American Community Survey

DWELLINGS	IOSCO TOWNSHIP	LIVINGSTON COUNTY	STATE OF MICHIGAN
Year Built (%)			
Since 1980	70.2%	58.0%	34.4%
1940 to 1979	19.2%	34.4%	50.4%
Before 1940	10.6%	7.6%	15.1%
Median Value, Owner Occupied Dwellings	\$198,200	\$218,700	\$136,400
Monthly Owner Cost, With Mortgage	\$907	\$1,540	\$1,251
Monthly Owner Cost, Without Mortgage	\$272	\$527	\$471
Median Rent	\$1,210	\$966	824

Residential development in losco Township exhibits three development patterns. The first and original form is the farm homestead and other large land tracts. With the establishment of losco Township in 1838 and into the early 1900s, nearly all of the township's acreage was contained within parcels of 80 to 160 acres or more. The parcels were commonly occupied by farming families and those in the timber industry. Parcels as small as 40 acres or less were limited, with most square mile sections having no more than one such parcel if any at all.

By the 1960s, new dimensions in the township's land division pattern had begun to emerge and accounts for the second and most significant form of residential development and land division. Many of the larger parcels had begun to be split into smaller parcels, typically between two to 40 acres in size, with the new splits principally stripped along the existing road frontage. While the township's acreage in the 1960s continued to be primarily contained within parcels of 40 acres or more, small parcels were evident in most all areas of the community. The 1970s and 1980s saw this trend intensify and by 2000, land splits of two to ten acres in size occupied between one-quarter and one-half of the acreage in most of the township's 36 sections, stripped along the "section-line" roads. This

pattern of land splitting has continued since 2000 but at a somewhat slower pace. An example of this trend is the south side of Coon Lake Rd. in Section 21. The acreage adjacent to the road in 1915 was part of a 100-acre and 480-acre parcel. In 2019, nearly the entire frontage is stripped with about 15 parcels of primarily two to ten acres in area. These incremental land splits and strip development pattern is evident in nearly all areas of the township.

This pattern of land splitting along the township's section-line roads is the primary manner in which residential development has evolved in losco Township to date. Commonly referred to as *strip development*, this form of development has been the source of increasing concern in the transportation and land use planning arena due to its negative impacts on traffic safety, congestion, farmland preservation, and rural character preservation.

A third principal form of residential development common in more suburban and urban communities are platted and condominium subdivision. Unlike the incremental partitioning of land along section-line roads that dominates the losco Township landscape, platted and condominium subdivisions represent multiple land divisions established as a unified development project pursuant to the requirements of the Land Division Act (formerly Subdivision Control Act) or the alternative provisions of the Condominium Act. losco Township has several comparatively small neighborhoods developed under these Acts including Arcadia Estates, Bonifield Meadows, Coventry Meadows, losco Ridge, and Oak Ridge. See Land Division map, Appendix D.

Commercial Development

The principal "brick and mortar" commercial site in losco Township is a convenience store (Mugg'N Bopps) along the south side of Mason Road at the Mason/Fowlerville Rds. intersection, and an expansion proposal for the introduction of retail gasoline sales and drive-through service is currently under review. There are also a number of other commercial enterprises scattered throughout the township in association with agricultural operations and occupations conducted from residences.

Industry

There is no industry in losco Township today. A metal fabricator previously operated in the southeast corner of the township on Weller Road but has since closed operations.

Community Facilities & Services

Government Administration

An elected five-member Township Board governs losco Township. Township offices are located in the losco Township Hall on the west side of Bradley Rd. just south of W. losco Rd. The Hall includes office space, restrooms, and a large meeting room. The hall, constructed around 1970 and substantially expanded around 2008, covers approximately 3,600 sq. ft. on a 2.3-acre parcel. Government administration and services are funded through a millage.

Cemeteries

losco Township operates and maintains two cemeteries:

- Wright Cemetery is located on the northeast corner of the Roberts/Dutton Rds. intersection.
- Munsell Cemetery is located on the northeast corner of the Munsell/Bull Run Rds. intersection.

In addition to the cemeteries above, St. Agnes Catholic Church in Fowlerville operates the Eisele Cemetery across from the Munsell Cemetery.

Education

losco Township is served by three public school districts:

- Fowlerville Public Schools serves nearly the entire township except for its eastern periphery and southwest corner.
- Howell Public Schools serves portions of the east periphery of the township.
- Stockbridge Public Schools serves portions of the southwest corner of the township.

There are no public school facilities located in losco Township.

Public Sewer and Water

There is no public sewer or water service in losco Township. All occupied lots rely on on-site or other alternative measures for sewage disposal and potable water.

Emergency Services

losco Township receives fire protection services from the Fowlerville Area Fire Department, with the fire station located in Fowlerville approximately seven road miles north of the township's north boundary. The Fowlerville Area Fire Department is assisted by other neighboring fire departments on an as-needed basis. Police protection services are provided by the Livingston County Sheriffs Department. The State Police provide services on an as-needed basis. Ambulance service is provided to township residents by Livingston County EMS. EMS administrative offices are located in Howell with ambulance deployment locations in Howell and the townships of Genoa, Hartland, Brighton and Hamburg. The nearest ambulance station, being in Howell, is approximately five road miles northeast of the township's northeast corner.

Public Recreation

losco Township operates a single recreation site, comprised of a portion of the township hall property on Bradley Rd. Recreation facilities include a pavilion with grills and picnic tables. Township residents also have available to them recreational facilities and services of other public entities including the Livingston Conservation District Nature Center, and the facilities and programs of the surrounding schools districts and the parks and recreation programs of nearby municipalities. Both the Dansville and Gregory State Game Areas are within ten miles of the township and the Brighton State Recreation Area is about 15 miles to the east. There are numerous other county and state facilities within the more regional area.

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Appendix B ENVIRONMENTAL FEATURES

Geology & Topography

During the Paleozoic era of geological history, Livingston County and the state as a whole was inundated by successive warm, shallow seas during which large amounts of sediment were deposited. These deposits subsequently lithified to form bedrock and a profile of the bedrock reflects varying layers including sandstone, limestone and shale. The Ice Age brought four successive continental glaciers across the Great Lakes area. As these ice sheets moved southward from Canada, they scoured and abraded the surface of the land leaving behind deeper valleys and more rounded hilltops. The advancing glaciers carried large quantities of rock materials scraped and gouged from the land's surface. These materials were then deposited during the melting of the ice to form drift materials covering the bedrock below. While the depth to bedrock exceeds 800 feet in some parts of Michigan, the depth of the drift layer in losco Township generally ranges from somewhat less than 50' to somewhat greater than 100', with depths generally increasing as one travels west to east across the township.

The topography of losco Township can be described as generally level to gently rolling, with isolated areas where the topographic relief is greater. Approximately 85% of the township reflects grades of 6% or less, and the vast majority of the balance of the township reflects grades of 6% to 12%. Approximately 4% of the township reflects grades of 18% or greater. The township's elevation ranges from approximately 885' to 1,000' above sea level, with the majority of the township being 900' to 940' above sea level. The lower elevations are generally limited to the northern half, most notably along the Middle and West Branches of the Red Cedar River. The higher elevations tend to be in the township's southern half with its highest elevation, 1,000 feet above sea level, located approximately ¼-mile northeast of the Gregory/Roberts Roads intersection in Section 27.

The character of an area's geology and topography has bearing on development and land use planning. As surface grades increase, significant challenges arise for septic systems and there is an increased potential for soil erosion and sedimentation of water courses and wetlands. Construction costs frequently increase as well. Slopes exceeding 7% present special challenges in this regard. It is generally recommended that development be restricted in intensity where grades exceed approximately 12%, and be strongly discouraged where grades exceed 18%.

Drainage and Water Courses

Drainage in losco Township is facilitated by two principal water courses, the West and Middle Branches of the Red Cedar River. The West Branch begins in the township's southwest corner and flows northward through the west third of the township. The West Branch crosses the township's north edge to the west of the Mason/Cedar Roads intersection and continues to flow northward, emptying into the Red Cedar River northeast of Webberville. The Middle Branch starts in the southeast quarter of the township and flows north through the east third of the township. The Middle Branch crosses the township's north edge just east of Bull Run Road and continues to flow northward before emptying

into the Red Cedar River just south of Fowlerville. The Red Cedar River flows northwest and west from the western Pinckney/Howell area and empties into the Grand River in Lansing, and the Grand River flows into Lake Michigan in Grand Haven. All runoff in losco Township ultimately finds its way to the Red Cedar River and on to Lake Michigan. Aside from the West and Middle Branches of the Red Cedar River, there are a number of smaller drains and tributaries, and extensive wetlands, that facilitate runoff collection, storage and discharge. The most significant of the smaller tributaries is the losco Drain #2 which begins near the township's south edge to the west of Gregory Road and flows northward through the west half of the township before it empties into the West Branch of the Red Cedar River to the northwest of the losco/Elliot Roads intersection.

Lamoreaux Lake is the only lake in losco Township in excess of 10 acres, covering approximately 30 acres and located in the south half of Section 16.

Lands abutting or in close proximity to drainage courses are subject to flood conditions where the drainage courses do not have the capacity to accommodate the rate of runoff from a single heavy rainfall or numerous lighter rainfalls over a relatively short period of time. Serious flooding has not been a common occurrence in losco Township. This is due in large part to the comparatively limited development (impervious surfaces) in the township, the ability of local soils to absorb significant rainfall, and the network of drainage courses and wetlands that carry and store runoff. The Federal Emergency Management Agency (FEMA) completed a floodplain study for the local area in 2008. The study identifies those areas of the township that are subject to a flood event that has a 1% chance of happening in any single year, commonly referred to as the 100-year flood. The areas of the township that would be subject to such flood conditions are limited to the West Branch of the Red Cedar River, north of Coon Lake Road. Flood waters associated with such a storm event are projected to typically be within 500' to 750' of the river's banks.

Although losco Township may be relatively free of any regular threat of flooding, improperly managed land development practices can impact flood conditions both in the township and in communities downstream.

Groundwater

As runoff flows across land surfaces and travels through drainage courses, a portion of the runoff seeps into the ground through gravitational forces and collects in great quantities in the underlying soils (drift) and deeper bedrock. *Groundwater* is a term that is generally used to describe this subsurface water below the water table in soils and bedrock.

The reservoirs of groundwater are referred to as *aquifers and* serve as the principal source of potable water for nearly all residents of losco Township. Aquifers are geological formations that are capable of yielding a significant amount of water to a well or spring. The majority of the wells in losco Township draw from the Saginaw or Marshall bedrock formations, comprised largely of sandstone and are considered to be of very good in both water quality and flow capabilities. Wells drawing from limestone bedrock are considered to be of lesser sources of potable water. Shale bedrock typically provides a higher quality of water but significantly restricts the rate at which the water can be drawn due to its comparatively limited permeability. Aside from the potential for high-iron content that is common throughout Michigan, the quality of losco Township's groundwater resources is generally considered to be satisfactory.

Aquifers can also be present in the glacial drift that extends from the surface of the ground to the bedrock.

Aquifers can be "confined" or "unconfined" systems. Confined systems have an impermeable soil layer (typically clay) above them which acts to confine the aquifer and protect the aquifer from contaminants seeping into the subsurface above the confining soil layer, such as petroleum products, fertilizers, and improperly disposed household liquids. Unconfined systems do not have this protective layer of clay soil and are much more prone to contamination. Even confined systems can be contaminated due to hazardous material entering the groundwater as a result of groundwater flows from nearby and/or more distant non-confined aquifers and improperly constructed and/or abandoned wells.

A random survey of well records for losco Township suggests that the vast majority of wells in the township extend to the bedrock below, typically between 75' to 175' in depth. Local well logs suggest there is no continuous confining layer of clay across the township, thereby increasing the potential for groundwater contamination, and the sandy and graveling soil conditions, in instances, encourage comparatively fast seepage of contaminants to the aquifers below. Some of the wells do not extend to the bedrock and draw from the glacial drift, further increasing the potential for potable water contaminants.

Contamination of ground water resources can originate from a number of sources including, but not necessarily limited to poorly operating septic drain fields, floor drains that discharge to the outdoors, the storage of hazardous and toxic substances without the necessary safeguards, the improper disposal of fuels and oils, excessive use of fertilizers, and improper disposal of wastes by industrial, commercial and residential activities.

Vegetation

Approximately 64% of the township is characterized by agricultural crop and pasture lands. An additional approximately 25% of the vegetative cover in losco Township is comprised of woodlands wetlands, meadows and similar naturally appearing open space areas. The balance of the vegetative cover is characterized principally by lawn areas associated with the township's residential lots and road right-of-ways.

There are approximately 5,500 acres of wetlands in losco Township, comprising nearly one-quarter (24.3%) of the township's entire area (see Water Resources map, Appendix D). Wetlands are generally characterized by the interface between water and land, where water depths are comparatively shallow and the soils are moist (perhaps seasonally only), dark, and high in organic content. Wetlands are located throughout the township and while some of the township's wetlands are just several acres in area, most of its wetland acreage is part of wetland systems that cover 20 acres or more. Clearly the most continuous wetland expanse is along the Middle Branch of the Red Cedar River where the wetland corridor extends more than four miles in length and covers more than 750 acres. Approximately two-thirds of the township's wetlands are comprised of lowland forested and shrub environments such as red and silver maples, cottonwood, cedar, willow, and dogwoods, and which are commonly referred to as swamps. The balance is comprised nearly entirely of emergent wetlands consisting of herbaceous non-woody plant material such as cattails, cranberry, fens and sedges. Emergent wetlands tend to be more open in character and are commonly referred to as marshes, where shallow waters are present throughout the year or for extended periods of the year.

Of particular significance is the network of interconnected wetlands. These networks are important because of the vital role these resources play in flood control, runoff purification, groundwater recharge, wildlife habitats, recreational opportunities, and supporting the rural character of the township.

Wetlands are environmentally sensitive resources and can experience degradation and destruction due to changes in water levels, erosion and sedimentation, filling, dredging, and draining. The degradation or pollution of a wetland area can have a destructive impact upon wetlands and related woodland resources distances away due to the frequent physical linkages between these resource areas. In addition to the environmental constraints wetlands pose for development, they present severe physical constraints for development due to flooding and soils instability.

Because of the important environmental role of wetlands, the majority of wetland acreage in the state, including losco Township, are protected by the Michigan Environmental and Natural Resources Protection Act, Part 303. Wetlands are regulated by the state if they meet any of the established criteria including, but not limited to, wetlands connected to one of the Great Lakes or located within 1,000 feet of one of the Great Lakes, wetlands located within 500 feet of an inland lake, pond, river or stream, and other wetlands of five acres or more in area. The law requires a permit be obtained from the state for depositing fill in a wetland, dredging or removing soil from a wetland, constructing or operating a use in a wetland, or draining surface water from a wetland. The Michigan Department of Environmental Quality will not issue a permit unless it finds, in part, that there would be no unacceptable disruption to aquatic resources and that the proposed activity is wetland dependent or no feasible and prudent alternative exists.

There are comparatively limited instances of upland woodlands in the Township and are most common along the fringe areas adjacent to wetland environments.

Soils

The U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), has prepared a soil survey for Livingston County. According to the survey, the vast majority of losco Township is characterized by loam and sandy loam soils. Soils classified as "loam" typically have near equal proportions of sand, silt and clay. Sandy loam soils have an increased sand content, typically between 50% and 75%. The primary exception to these two soil types are the "muck" soils that account for about 23% of the township's land area. Muck soils are commonly described as soil consisting of fairly well decomposed organic material that is relatively high in mineral content, fine in texture and dark in color, and are often hydric in nature. Hydric soils exhibit an especially high moisture content, are generally very low in oxygen (O₂) content, and are frequently associated with wetland and floodplain environments. See Hydric Soils map in Appendix D.

The character of soils can have a profound impact upon the suitability of future land uses with regard to groundwater contamination, buckling and shifting of foundations and roads, erosion, on-site sewage disposal, and agricultural productivity. The NRCS has identified specific individual soil units throughout the county based upon the characteristics of the upper soil layers (approximately five feet in depth) that provides a reliable basis for township planning purposes.

Septic Systems: According to the NRCS, more than three-quarters of the township's land area is covered by soils that present severe limitations to septic systems and the vast majority of the balance of the township is covered by soils that present moderate limitations. A primary concern is the soil's ability to absorb and break down the leachate from the septic drain fields before it reaches underground water supplies. Soil limitations to septic systems are typically a result of year-round or seasonally high water tables, ponding, and poor soil filtration characteristics including rapid and excessively slow permeability. Except in the case of wetlands and muck soils, limitations imposed by soil conditions can commonly be overcome by special septic field design measures. See Soil Limitations for Septic Systems map, Appendix D.

The Livingston County Public Health Department is responsible for issuing permits for on-site sewage disposal. A permit will not be issued unless all county requirements have been met. Under typical conditions, sites approaching one to two acres are typically adequate to meet the Health Department's requirements for effective septic systems, including a back-up area should the initial drain field fail. Sites of one acre or less must meet more stringent standards and may not be able to do so depending upon soil conditions.

It should be noted that while a site may be classified by the NRCS as presenting limitations to septic systems and building construction, on-site investigation may show the classification to be less than fully accurate and/or show that the deeper soils (more than five feet deep) present different characteristics from the upper layer soils and thus, varying limitations. Detailed on-site investigation is critical to determine opportunities and constraints the soils may present.

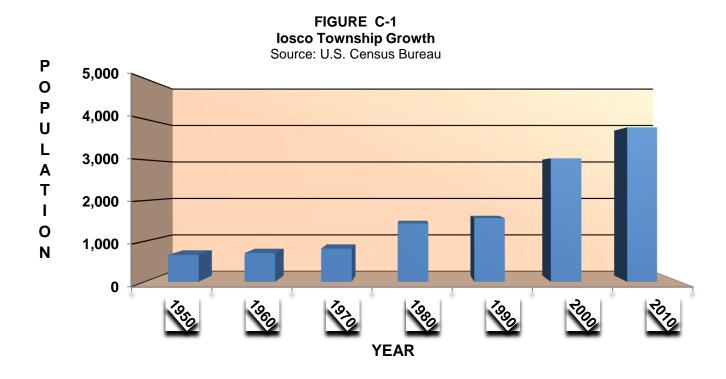
Prime Farmland: The NRCS classifies approximately one-third of losco Township as prime farmland. The NRCS generally defines *prime farmland* as land that is, under proper management, particularly well-suited for food, feed, forage, fiber, and oilseed crops and is capable of producing sustained high yields. Prime farmland soils are not substantially concentrated in any particular area of the township but are most dominant in the township's central third – within approximately one mile of Gregory Road. The majority of the balance of the soils, excluding wetland areas, are classified as *"farmland of local importance."* See Prime Farmland map, Appendix D.

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Appendix C DEMOGRAPHIC FEATURES

Population Growth Trends

The 2010 Census recorded an losco Township population of 3,801 persons, an increase of 25.1% over its 2000 population (3,039) and a 142.6% increase over its 1990 population (1,567 persons). The township has shown positive growth in each decade since 1950, with its strongest growth occurring in the 1990s (93.9%) and earlier in the 1970s (75.8%). The township's slowest growth occurred in the 1950s and 1980s when growth rates were between 6.5% and 9.1%.



The township's 25.1% population growth between 2001 and 2010, and the county's 15.3% growth during the same period, stands in contrast to Michigan's overall 0.5% decline in population – the only state to record a population loss and a reflection of the economic and housing market decline across the nation and particularly evident in Michigan. Like the township, Livingston County has experienced positive growth each decade during the past 60 years. Between 1950 and 1990, losco Township grew at a slower or nearly equal rate as Livingston County as a whole. However, the two decades since 1990 saw losco Township substantially exceed the county's and state's growth rates.

The township's 2010 population was nearly five times that of its 1950 population of 662 persons. During the same period, Livingston County's population increased nearly seven times, from its 1950 population of 26,725 to its 2010 population of 180,967 persons.

The varying growth rates of the township and county since 1950 have resulted in a decrease in the proportion of losco Township residents comprising the total county population. The township's population comprised 2.5% of the county population in 1950 and 2.1% of the county's population in 2010 – a 16% decrease in proportional share.

Both the township and county appear to be continuing to grow during this decade though at a noticeably slower rate. The U.S. Census Bureau (American Community Survey) estimates losco Township to have grown 1.5% between 2010 and 2017. The county's population in 2010 is estimated to have grown 4.8% during the same time period.

TABLE C-1 **Population Trends & Growth Rates Comparison**

(previous ten-year growth rate indicated by "%")

YEAR	IOSCO TOWNSHIP	LIVINGSTON COUNTY	STATE of MICHIGAN
1950	662	26,725	6,371,766
1960	705 6.5 %	38,233 43.1%	7,823,194 18.6%
1970	817 15.9%	58,967 <i>54.2%</i>	8,881,826 11.9%
1980	1,436 75.8%	100,289 70.1%	9,262,078 4.1%
1990	1,567 9.1%	115,645 15.3%	9,295,297 0.4%
2000	3,039 93.9%	156,951 35.7%	9,938,444 6.9%
2010	3,801 25.1%	180,967 15.3%	9,883,640 -0.5%
2017(Estimate)	3,859 1.5%	189,651 <i>4.8%</i>	9,962,311 0.8%

Source: U.S. Census Bureau

The township's overall rising population has increased population density. Its population density was 19 persons per square mile in 1950 and 107 persons per square mile in 2010, about one-third that of the county as a whole (320 persons per square mile). By comparison, the City of Brighton is one of the most densely populated communities in the county and had a 2010 population density of 2,093 persons per square mile.

POPULATION PROJECTIONS

Estimating future population growth can provide important insights into identifying future land use and public services needs. Projecting the growth of a community's population over a prescribed period of time is not an exact science. The many unpredictable factors that affect growth make population projections somewhat speculative. Because of the severity of the housing and financial market that surfaced in 2007, both in Michigan and nationally, projecting population growth at this particular time is uniquely challenging. By using several projection techniques, a range of growth estimates can be generated. These shed light on potential growth scenarios provided planning policies and land development regulations do not limit or encourage growth any more than in the past.

Table C-2 presents several population projections.

- The <u>SEMCOG</u> projection was prepared by SEMCOG for losco Township specifically, and provides for the township's population to fall by 14.2% when the year 2040 arrives the only projection that leads to a decreasing township population.
- The <u>County Population Share</u> projection assumes the township will comprise 1.9% of Livingston County's population, and relies on SEMCOG projections for the county as a whole.
- The <u>Current Trend</u> projection assumes township growth of 2.1% every ten years the current projected approximate rate of growth between 2010 and 2020 according to the U.S. Census.
- The <u>20-Year Historical Trend</u> projection assumes township growth of 13.6% every ten years the rate of growth between 2001 and 2010 (25.1%) averaged with the 2.1% projected approximate growth between 2000 and 2020.
- The <u>70-Year Historical Trend</u> projection assumes the township will grow 32.4% every ten years, which is equal to the same average 10-year growth rate between the years 1950 and 2010 and reflects the strongest projected rate of growth.

The lower projections may well be the most likely over the next 10 to 20 years given current (though improving) economic conditions. This is further supported by the U.S. Census Bureau's <u>estimated</u> 2017 losco Township population of 3,859 – only 1.5% greater than its 2010 population.

TABLE C-2 losco Township Population Projections

Projection Trend		Population In 2010	2020 Projection	2030 Projection	2040 Projection
SEMCOG		3,801	3,456	3,292	3,261
County Population Share	(1.9%)	3,801	3,873	3,947	4,022
Current Trend	(2.1%)	3,801	3,880	3,962	4,046
20-Year Historical Trend	(13.6%)	3,801	4,318	4,905	5,572
70-Year Historical Trend	(32.4%)	3,801	5,032	6,663	8,822

SOCIAL and ECONOMIC CHARACTERISTICS

RACE: The 2010 Census showed losco Township to have a racial composition nearly identical to that of the county as a whole and far more homogeneous than the state (See Table C-3). 97.4% of the township population was white, compared to 78.9% for the state. The township's homogeneity is typical of rural Michigan communities, as compared to larger and more urban areas such as Grand Rapids where non-white races account for approximately 35% of the population.

TABLE C-3
Race Profile Comparison, 2010 (By Percent)

Source: 2010 U.S. Census

RACE	IOSCO TOWNSHIP	LIVINGSTON COUNTY	STATE of MICHIGAN
White Only	97.4	96.7	78.9
Black/African American Only	0.1	0.4	14.2
American Indian, Alaska Native Only	0.5	0.4	0.6
Asian Only	0.2	0.8	2.4
Native Hawaiian/Other Pacific Islander Only	0.0	0.0	0.0
Some Other Single Race Only	0.2	0.4	1.5
Two or More Races	1.6	1.5	2.3

Appendix C: Demographic Features

AGE: The township's population in 2010 can be divided into near equal thirds according to the following age groups:

- 22 years of age and less
- 23 47 years of age
- 48 years of age and greater

losco Township's overall age composition in 2010 was generally similar to that of the county's as a whole but noticeably different than that of the state. The township's 28.1% of the population that was under 18 years of age was 35.1% greater than that of the state (20.8%). The township's 8.4% of the population that was 65 or more years of age was 39.1% lower than the state (13.8%).

The township's median age of 38.9 years in 2010 was two years less than that of the county (40.9) and equaled the state's. Like the balance of the state and nation, the township's residents are continuing to mature. The township's 2010 median age of 38.9 years reflects a 17.2% increase over its 2000 median age of 33.2 years, and a 41.5% increase over its 1980 median age of 27.5. The township's estimated 2017 median age of 41.4 (U.S. Census) reflects a continuation of the community's aging.

FIGURE C-2 losco Township Age Profile Source: 2010 U.S. Census

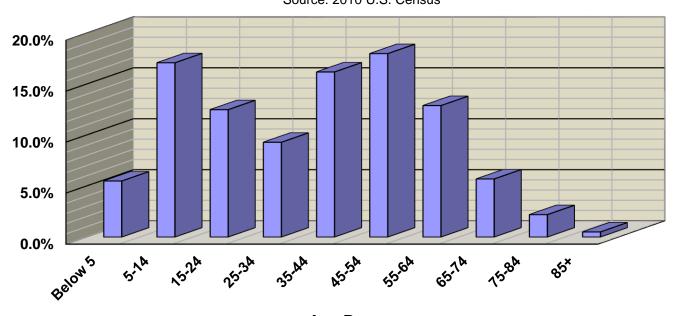


TABLE C-4
Age Profile Comparison (By Percent, except where noted)
Source: 2010 U.S. Census

IOSCO LIVINGSTON STATE of **AGE** COUNTY MICHIGAN **TOWNSHIP** Under 5 yrs. 6.0 5.5 5.5 5 – 14 yrs. 17.1 15.0 13.3 15 - 24 yrs. 12.5 12.0 14.3 25 - 34 yrs. 9.3 9.6 11.8 35 - 44 yrs.16.2 14.4 12.9 45 - 54 yrs. 18.0 18.1 15.2 55 - 64 yrs. 12.9 13.4 12.7 65 - 74 yrs. 5.7 7.2 7.3

3.4

1.4

25.5

12.0

40.9 yrs.

4.5

1.9

20.8

13.8

38.9 yrs.

2.2

0.5

28.1

8.4

38.9 yrs.

75 - 84 yrs.

85 yrs. or more

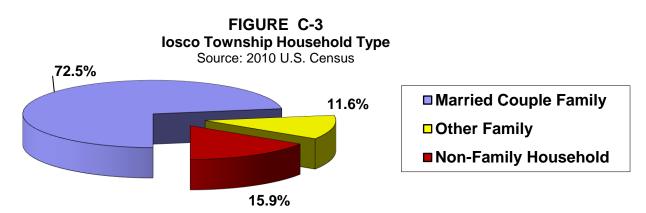
65 yrs and over

Under 18 yrs.

Median Age

HOUSEHOLDS: The 2010 Census recorded 1,278 households, 84.1% of which were family households. The 1,278 households reflected a 38.8% increase in households since the 2000 Census (921 households).

- The township's **average household size** of 3.0 persons was somewhat greater than the county (2.7 persons) and more noticeably greater than the state (2.5 persons). The township's 2010 average household size of 3.0 persons was somewhat lower than in 2000 (3.2 persons) reflective of the continuing national trend toward smaller households.
- The township's **average family size** of 3.2 persons in 2010 was slightly above both that of the county and state (3.1). Like its average household size, the township's average family household size also decreased during the previous ten years, dropping from 3.4 persons to 3.2 persons.



72.5% of the township households in 2010 included a married-couple. This proportion is 15.4% greater than that of the county (62.8%) and 51.0% greater than of the state (48.0%). With the township reflecting a comparatively high proportion of married-couple families, it is not surprising that the 15.9% of all households comprised of non-family households was 36.1% to 53.2% less than the

county (24.9%) and state (34.0%). Of the township's non-family households, 75.5% were comprised of the householder living alone. See Figure C-3 and Table C-5.

TABLE C-5 Household Type and Size Comparison (by percent, except where otherwise noted)

Source: 2010 U.S. Census

	IOSCO TOWNSHIP	LIVINGSTON COUNTY	STATE of MICHIGAN
HOUSEHOLD TYPE			
Married-couple family	72.5	62.8	48.0
Other family:	11.6	10.3	18.0
Male householder	5.1	4.1	4.8
Female householder	6.5	8.2	13.2
Non-family household	15.9	24.9	34.0
PERSONS Per HOUSEHOLD	3.0 persons	2.7 persons	2.5 persons
PERSONS Per FAMILY	3.2 persons	3.1 persons	3.1 persons

EMPLOYMENT and INCOME: Of the 2,979 township residents of age 16 years and over in 2017, 1,971 of the residents (66.2%) were in the labor force and all were in the civilian labor force. The three principal employment industries for employed losco Township residents were:

- manufacturing
- education, health, and social services
- professional, scientific, management, administrative, waste management, and other services, excluding public administration)

These three industries alone accounted for 57.3% of township workers' employment. These same industries also accounted for the majority of county and state workers' employment although the 24.2% of township workers employed in the manufacturing industry was substantially greater than that of the county (17.5%) and state (18.3%). The other most significant point of contrast between the township and the county and state as a whole is the 11.0% of township workers employed in the construction industry, substantially more than the county (6.7%) and state (5.6%).

While farming comprises about 64% of the township's land resources, only 0.6% of township workers are employed in the agriculture, forestry, fishing, hunting, and mining industry – a common contrast across the state and the nature of the industry itself.

2.6% of township's work force worked within their place of residence, a percentage noticeably less than the county (4.7%) and state (3.6%). For those township residents who commuted to work, the mean travel time was 36.8 minutes, somewhat higher than that of the county (31.4 minutes) and substantially higher than the state (24.0 minutes). This is a reflection of the comparatively limited employment opportunities in the township and immediately surrounding areas, and the township's lack of immediate interstate highway access.

TABLE C-6 Employment by Industry Comparison (employed persons 16 years and older, by percent)

Source: 2017 American Community Survey, U.S. Census Bureau

INDUSTRY	IOSCO TOWNSHIP	LIVINGSTON COUNTY	STATE of MICHIGAN
Manufacturing	24.2	17.5	18.3
Education, health, and social services	18.8	22.0	22.4
Professional, scientific, management, admini-			
strative, waste management, other services not	14.3	14.8	13.5
listed (excluding public administration)			
Retail trade	11.1	12.2	11.6
Construction	11.0	6.7	5.6
Finance, insurance, and real estate	5.3	6.4	5.7
Public administration	3.8	3.4	3.7
Transportation, warehousing, and utilities	3.5	3.3	4.2
Art, entertainment, recreation, accommodations, and food services	3.1	8.1	9.0
Wholesale trade	2.8	3.0	2.9
Information	1.6	1.7	1.9
Agriculture, forestry, fishing, hunting, mining	0.6	0.9	1.2

The prosperity of losco Township in 2017 was noticeably higher than the county as a whole and substantially stronger than that of the state.

- The township's 2017 **median household income** of \$78,304 was 8.2% higher than that of the county (\$72,359) and 60.8% higher than that of the state (\$48,700). A "household" is generally defined by the Census Bureau as all of the people who occupy a housing unit as their usual place of residence including related family members and all other unrelated people.
- The township's 2017 **median family income** of \$84,896 was slightly above that of the county (\$82,959) and was 40.0% higher than that of the state (\$60,635). A *"family"* is generally defined by the Census Bureau as a group of two or more people, one of whom is the householder, that are related by birth, marriage, or adoption and residing together.
- The township's 2017 **per capita income** of \$29,866 fell between that of the county (\$32,129) and state (\$25,172).
- In 2017, the 0.7% of township **persons below poverty level** paled in comparison to 6.2% for the county and 14.5% for the state.
- In 2017, the township had no **families below poverty level**, as compared to 4.3% for the county and 10.3% for the state.

See Figure C-4 and Table C-7.

FIGURE C-4 Income Characteristics Comparison, 2017

Source: 2017 American Community Survey, U.S. Census Bureau

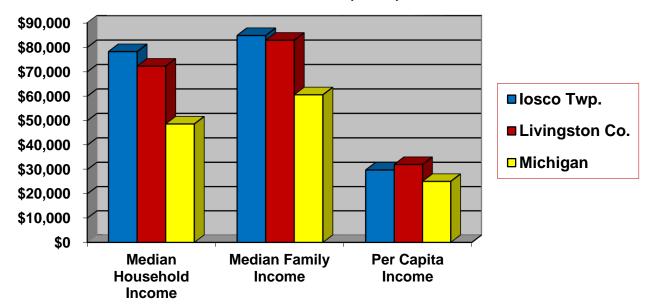


TABLE C-7
Income Characteristics Comparison

Source: 2017 American Community Survey, U.S. Census Bureau

INCOME CHARACTERISTIC	IOSCO TOWNSHIP	LIVINGSTON COUNTY	STATE of MICHIGAN
Median household income	\$78,304	\$72,359	\$48,700
Median family income	\$84,896	\$82,959	\$60,635
Per capita income	\$29,866	\$32,129	\$25,172
Families below poverty level	0.0%	4.3%	10.3%
Persons below poverty level	0.7%	6.2%	14.5%

EDUCATION: Formal education levels for losco Township residents in 2017 were somewhat to substantially lower than that of the county and state.

- The township's 30.1% of residents 25 years of age or older that ended their formal education after the attainment of a high school diploma (or equivalent) was somewhat less than that of the state (31.8%) and substantially higher than the county (26.4%).
- The township's 18.7% of residents 25 years of age or older that had attained a bachelor's degree or higher level of education was substantially less that of the state (24.5%) and county (32.9%).
- The 8.1% of township residents that acquired a graduate or professional degree after receiving a bachelor's degree was lower than that of the county (11.2%) and state (9.3%).

See Table C-8 and Figure C-5.

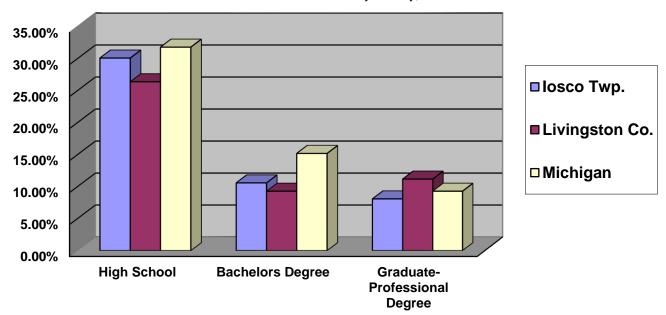
TABLE C-8
Highest Level of Education Attainment Comparison
(for persons 25 years of age or greater, by percent)

Source: 2017 American Community Survey, U.S. Census Bureau

HIGHEST EDUCATION ATTAINMENT	IOSCO TOWNSHIP	LIVINGSTON COUNTY	STATE of MICHIGAN
Less Than 9th Grade	1.8	1.2	3.7
9th to 12th, no diploma	3.4	4.4	8.9
High School Diploma	30.1	26.4	31.8
Some college, no degree	36.0	25.8	23.1
Associates Degree	10.0	9.3	8.0
Bachelor's Degree	10.6	21.7	15.2
Graduate/Professional Degree	8.1	11.2	9.3
High school graduate or higher	94.8	94.4	87.4
Bachelor's degree or higher	18.7	32.9	24.5

FIGURE C-5
Highest Level of Education Attainment Comparison
(for persons 25 years of age or greater)

Source: 2017 American Community Survey, U.S. Census Bureau



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Appendix D INVENTORY MAPS

Roads - Public Act 51 Classification

Public roads under the jurisdiction of the Livingston County Road Department and classified by the Department as "primary" or "local" pursuant to Public Act 51 of 1951.

Land Use by Tax Classification

Land use as classified for taxation purposes by Livingston County.

Land Division Pattern

Land division according to Livingston County.

Water Resources

Water courses and water bodies as identified by the State of Michigan, and wetlands as identified in the National Wetland Inventory prepared by the U.S. Fish and Wildlife Service.

Drains

Water courses and water bodies as identified by the State of Michigan, and wetlands as identified in the National Wetland Inventory prepared by the U.S. Fish and Wildlife Service.

Hydric Soils

Soils that are formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part, and are frequently in association with wetlands, according to Natural Resources Conservation Service.

Soil Limitations for Septic Tank Absorption Fields

The comparative extent of limitations for septic tank absorption fields according to soil conditions including topographic and drainage features, according to Natural Resources Conservation Service.

Prime Farmland

Land that is, under proper management, particularly well-suited for food, feed, forage, fiber, and oilseed crops and is capable of producing sustained high yields, according to Natural Resources Conservation Service.

