Momentum: Michigan City 2040 Comprehensive Plan

Kendig Keast Collaborative

ADOPTED November 20, 2018

Acknowledgments

General thank you note to all other staff and residents that assisted in development of the Plan by attending public meetings, presentations, workshops, joining the conversation on social media, or participated in any other way in the development of this Plan.

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Momentum: Michigan City 2040 Comprehensive Plan

The Future City

Kendig Keast Collaborative **ADOPTED November 20, 2018**

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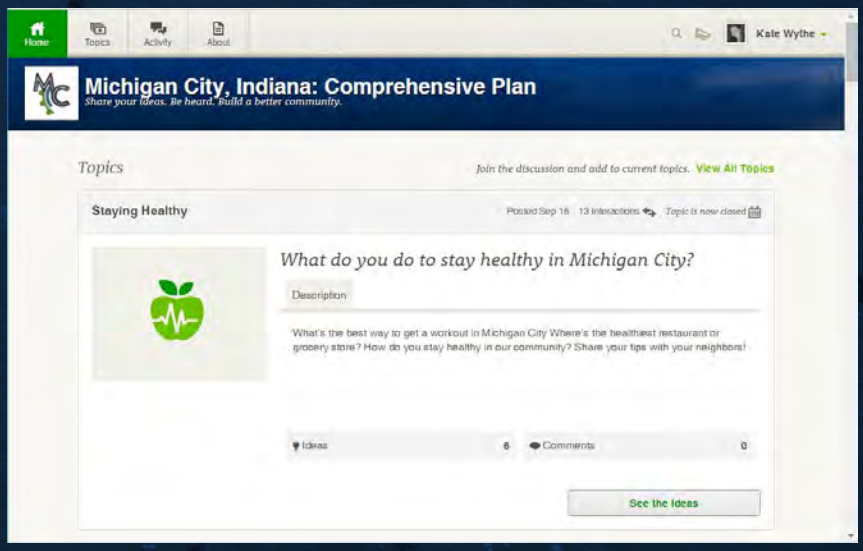
MindMixer Results

The Online Discussion Forum generated thoughtful responses that were integrated into the findings and recommendations of this Plan.

The Online Discussion Forum helped to identify community needs and innovative approaches to improve Michigan City's prosperity and quality of life. This ongoing, "24/7" dialogue helped to guide the plan's findings and recommendations by soliciting input from citizens that do not typically attend or voice opinions at traditional public meetings. This forum also complemented other engagement activities by providing an outlet to continue ongoing conversations. The website was organized as a series of question prompts introduced over five months of the planning process.



MindMixer Results

The lightbulb symbol displayed throughout this plan indicates the quote is from the Online Discussion Forum.

Michigan City: LEGACY CITY REBORN.

ENGAGEMENT AND BALANCE.

In the year 2040, Michigan City has become a thriving and robust, engaged community that has achieved a remarkable and enduring balance, focused on quality of life enhancements and improved economic well-being; preservation of small town, postindustrial character while fostering a flourishing subregional center; and promoting infill development / redevelopment along with annexation and outward expansion - all of which has made possible through building civic capacity and talent, and merging enlightened self-interest with public well-being.

QUALITY OF LIFE.

Michigan City is known throughout the state and region for its promotion of diverse local and regional cultural arts programs. Over the last two decades, with the support of municipal Government, the City has undergone a cultural and artistic renaissance. The City's focus on enhancing its residents' quality of life through implementing high-quality improvements within the public realm has promoted the desire for people to live within the Downtown Arts District, within walking distance of the lakeshore and a multitude of shopping, dining and entertainment venues, which have grown up around the 11th Street Train Station. Facilitating an hour's commute to Chicago for Michigan City residents, NICTD's South Shore Line has been catalytic in aligning the economic growth and development interests of northern Indiana communities

ENVIRONMENT.

Though it retains its status as a free-standing community, Michigan City is regarded as the eastern gateway to the Chicago metropolitan region. Municipal investments in active transportation – increased bike-ability and walkability, access to healthcare, and to locally grown, healthy food has greatly improved residents' health. While acknowledging and building upon its industrial origins, the City has turned to face Lake Michigan and has become a resilient, meta-industrial city – an environmentally sustainable extension of the diverse lakeshore ecosystem, balanced with developing clean, green industrial parks. Nature and natural processes are seamlessly connected with the built environment.

RESILIENCE.

The City's renewed focus on urban infill development and Brownfields remediation and cleanup has stimulated the redevelopment of multiple neighborhoods and former industrial areas, while preserving historically significant buildings, structures and landscapes. New housing types, from tiny homes to variations of compact, high-quality, multi-family developments, clustered around sensitive ecological areas and open space, accommodate a diverse, informed and caring citizenry of all ages. Neighborhoods are oriented around public amenities, including schools and parks; and flanked with small commercial establishments around their perimeter; which further engenders neighborhood identity, walkability, and the sense of living within a community.

STRATEGIES FOR SUCCESS.

Indeed, the community has achieved significant results by remaining engaged, embracing innovation, seeking balance, accomplishing goals,and realizing a shared vision for developing an authentic sense of place and sustainable future.

Michigan City: CREATE. PLAY. REPEAT.

Introduction

The *Michigan City Momentum 2040* Comprehensive Plan is intended to guide future development, redevelopment, and community enhancement efforts over the next 20 years through 2040. This plan serves as a policy framework to stimulate and guide thoughtful community discussion on the current real and perceived challenges and opportunities facing Michigan City that will ultimately shape its future. Through long-range planning efforts, the community can accommodate its projected growth in a manner that preserves and enhances its history, culture, and overall quality of life for current and future residents.

The *Michigan City Momentum 2040* Comprehensive Plan is the result of an 16-month planning and citizen engagement process. The plan's findings and recommendations focus on the physical and economic aspects of the community's projected growth and development in the coming years. The plan provides guiding principles, goals, objectives, strategies, and courses of action that will help City officials and staff in determining the location, financing, and sequencing of public improvements; administering development regulations; and guiding reinvestment efforts. The plan also provides a basis for coordinating the actions of many different functions and interests within and outside of municipal government.

PURPOSE

A comprehensive plan is usually the most important policy document a municipal government prepares and maintains. This is because the plan:

- Lays out a "big picture" vision regarding the future growth and enhancement of the community.
- Considers at once the entire geographic area of the community, including areas where new development and redevelopment may occur.
- Assesses near- and longer-term needs and desires across a variety of inter-related topics that represent the key "building blocks" of a community (e.g., land use, transportation, urban design, economic development, redevelopment, housing, neighborhoods, parks and recreation, utility infrastructure, public facilities and services, cultural facilities, etc.).

Through a comprehensive plan, a community determines how best to accommodate and manage its projected growth, as well as the redevelopment of older neighborhoods, commercial and industrial areas. The *Michigan City Momentum 2040* Comprehensive Plan is aimed at ensuring that ongoing development and redevelopment will proceed in an orderly, well-planned manner so that public facilities and services can keep pace and residents' quality of life will be enhanced. Significantly, by clarifying and stating the City's intentions regarding the area's physical development and infrastructure investment, the plan also creates a greater level of predictability for residents, land owners, developers, and potential investors.

USE OF THIS PLAN

A comprehensive plan, if embraced by the community and its leadership, has the potential to take a community to a whole new level in terms of livability and tangible accomplishments. The plan is ultimately a guidance document for City officials and staff, who must make decisions on a daily basis that will determine the future direction, financial health, and "look and feel" of the community. These decisions are carried out through:

- targeted programs and expenditures prioritized through the City's annual budget process, including routine but essential functions such as code compliance;
- major public improvements and land acquisitions financed through the City's annual budgeting program and related bond initiatives;
- new and amended City ordinances and regulations closely linked to comprehensive plan objectives (and associated review and approval procedures in the case of subdivision and land development activities);
- departmental work plans and resources in key areas;
- support for ongoing planning and studies that will further clarify needs, costs, benefits, and strategies;
- pursuit of external grant funding to supplement local budgets and/or expedite certain projects; and
- initiatives pursued in conjunction with other public and private partners to leverage resources and achieve successes neither could accomplish on their own.

Despite these many avenues for action, a comprehensive plan should not be considered a "cure all" for every tough problem a community faces. These plans focus primarily on the responsibilities of City government in the physical planning arena, where municipalities normally have a more direct and extensive role than in other areas that residents value, such as education and social services. Of necessity, comprehensive plans, as vision and policy documents, also must remain relatively general. The resulting plan may not touch on every challenge before the community, but it is meant to set a tone and motivate concerted efforts to move the community forward in coming years.

Comprehensive Plan Focus Areas

- GROWTH CAPACITY AND ECONOMIC PERFORMANCE
- ENVIRONMENT MANAGEMENT AND GREEN INFRASTRUCTURE
- UTILITIES INFRASTRUCTURE AND PUBLIC SERVICES
- TRANSPORTATION INFRASTRUCTURE
- DOWNTOWN
- HOUSING AND NEIGHBORHOODS
- SUSTAINABILITY, RESILIENCE, AND COMMUNITY WELLNESS
- LAND USE AND COMMUNITY CHARACTER

Why Plan?

Local planning allows the City of Michigan City to have a greater measure of control over its future rather than simply reacting to change. Planning enables the City to manage future growth and development actively as opposed to reacting to development and redevelopment proposals on a case-by-case basis without adequate and necessary consideration of community-wide issues. The process for developing or updating a comprehensive plan involves major community decisions about where development and redevelopment will occur, the nature and extent of future development, and the community's capability to provide the necessary public services and facilities to support this development. This leads to pivotal discussions about what is "best" for the community and how everything from taxes to quality of life will be affected.

Long-range planning also provides an opportunity for the City's elected and appointed officials to step back from pressing, day-to-day issues and clarify their ideas regarding the kind of community they are trying to create and maintain. Through the plan development process, they can look broadly at programs for neighborhoods, housing, economic development, and provision of public infrastructure and facilities and how these efforts may relate to one another. The comprehensive plan ultimately represents a "big picture" of the community and its near-term and longer-range future. Bottom line, the essential reasons for long-range planning include:

- **Providing a balance of land uses and services throughout the community to meet the needs and desires of the population.**
- **Ensuring adequate public facilities to meet the demands of future development and redevelopment.**
- **Achieving and maintaining a development pattern that reflects the values of the community, and which ensures a balanced tax base between residential and nonresidential development.**
- **Ensuring the long-term protection and enhancement of the image and visual appearance of the community.**
- **Involving local citizens in the decision-making process and reach consensus on the future vision for Michigan City and its ongoing development.**
- **Enhancing the quality of life of Michigan City residents.**

PLANNING AUTHORITY

According to Indiana Code 36-7-4-502, a comprehensive plan must contain at least the following elements:

1. A statement of objectives for the future development of the jurisdiction.
2. A statement of policy for the land use development of the jurisdiction.
3. A statement of policy for the development of public ways, public places, public lands, public structures, and public utilities.

Further, state law defines the purpose for planning in Indiana as follows:

1. Highway systems be carefully planned;
2. New communities grow only with adequate public way, utility, health, educational, and recreation facilities;
3. Needs of agriculture, forestry, industry, and business be recognized in future growth;
4. Residential areas provide healthful surroundings for family life;
5. Growth of the community is commensurate with and promotive of the efficient and economical use of public funds.

THE FUTURE CITY

While *The Existing City* report provides background and insights about Michigan City as it is today, *The Future City* portion of the Comprehensive Plan focuses on Michigan City as it intends to be in the years ahead. These aspirations are presented in topic areas that are central to Michigan City's physical growth and development as listed on this page. Each topical section highlights key issues and considerations followed by a framework for action portion. A final section on plan implementation considerations, priorities, and procedures rounds out *The Future City* report.

FIRM IN INTENT, YET FLEXIBLE IN ITS APPLICATION

The Comprehensive Plan is not cast in stone. Revisions will be made when warranted and the plan will be formally updated periodically. The plan will be continually monitored to track the extent to which the plan has been implemented and to determine if plan implementation causes the desired results. This process will protect the plan from misuse, keep the plan a living document, protect the will of the citizens, and allow change to the plan where the proposed amendment meets the intent of the plan.

Planning Framework

A planning framework defines the basic planning process structure. The guiding principles, goals and objectives presented provide guidance for an appropriate pattern and pace of development. The goals indicate how development should relate to the existing and future community. They also provide a logical framework for land-use decision-making at a conceptual level as well as on an area-wide and site-specific basis. Uniform application of these goals, objectives and subsequent strategies and actions should result in a balanced and harmonious community where a high quality of life and economic wellbeing can be maintained. This typically includes the following components:

- **Guiding Principles** – A basic rule or concept used for decision-making.
- **Vision** – A general description of the desired result of the planning process.
- **Problem** – An undesirable condition to be mitigated (solved, reduced or compensated).
- **Goals** – A general desirable condition to be achieved, usually too general to be quantified, such as wealth, health, equity and freedom.
- **Objectives** – Specific, potentially quantifiable ways to achieve goals, such as increased income and economic activity, reduced vehicular crashes, and improved accessibility for non-drivers.
- **Targets or standards** – Quantitative levels of objectives to be achieved, such as a particular increase in income or reduction in crash rates. Standards are sometimes required by law or regulation, such as minimum parking requirements in zoning codes.
- **Performance Indicators and Metrics** – Practical ways to measure progress toward objectives, such as specific definitions of income, crash rates, and accessibility.
- **Plans** – A scheme or set of actions. This may be a strategic (general and broad) or an action (specific and narrow) plan.
- **Options** – Possible ways to achieve an objective or solutions to a problem.
- **Policies and Strategies** – A specific thing to be accomplished.
- **Programs** – A specific set of objectives, responsibilities and tasks within an organization.
- **Actions and Initiatives** – A course of action implemented by a jurisdiction or organization.
- **Evaluation criteria** – The impacts (costs and benefits) considered in an analysis.[1]

1 2013, Litman, Todd. Planning Principles and Practices. Victoria Transport Policy Institute.

Demographic Projections

As depicted in TFC Figure 1, *2040 Population Projections*, several data sources were used to develop the demographic projections for Horizon Year 2040. In the final analysis, the NIRPC "DT Enhanced" model was used to estimate the 2040 projected population increase of 10,347; which utilized a Compound Annual Growth Rate (CAGR[1]) of 1.2 percent. Michigan City's projected population in Horizon Year 2040 is estimated to be 41,504 persons. As discussed within *The Existing City* report, it is presumed that the double-tracking of the South Shore Commuter Rail line, the construction of the Franciscan Health Michigan City South Campus, the Michigan City Municipal Airport runway extension, recognition of the evolving quality of the Michigan City Area School (MCAS) system, and several other factors, will lead to significant growth within the Planning Area.

The projected population for Michigan City will serve as an important determinant in future decisions. The information will be used to:

- Quantify the demands on public facilities and services, such as fire and police protection, water and wastewater facilities, transportation and drainage infrastructure, parks and open space, and municipal buildings and staff, among other development impacts.
- Determine estimated area calculations for future land uses, to accommodate projected population growth. Guide advanced planning for new development, coordinate timely provision of adequate infrastructure, and appropriately direct available resources.
- Create an economic development strategy to seize opportunities and overcome foreseen challenges.
- Inform regional agencies of changes and demands to local- and region-wide networks.

SOURCES OF DATA

The projections were derived from fives sources of data.

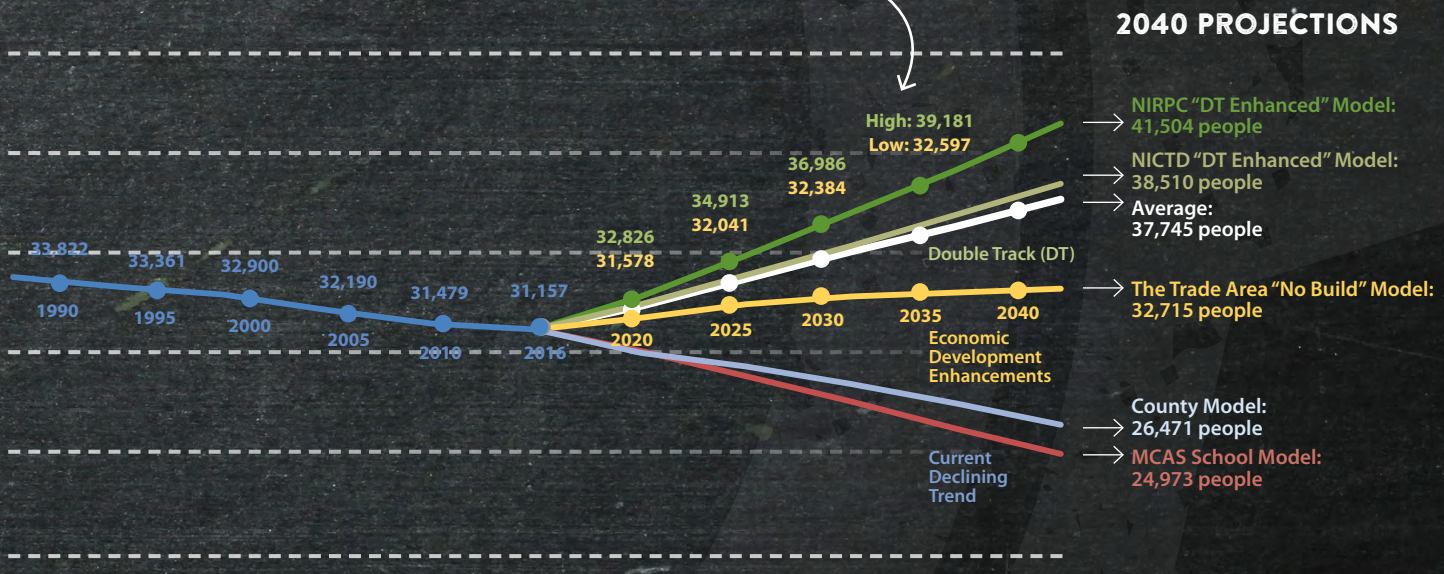
- **NIRPC MODEL:** The baseline Northwestern Indiana Regional Planning Committee (NIRPC) model was originally developed independent of the DT-NWI project as part of the regional growth projections. With the addition of project enhancements, it shows the most dramatic growth at 1.20 percent CAGR[1], resulting in an increase of 10,347 residents by 2040. This upward trend is predicated on regional prosperity compounded by enhanced transportation connectivity.
- **NICTD MODEL:** The baseline Northern Indiana Commuter Transportation District (NICTD) model reflects the anticipated increase in ridership independent of the DT-NWI project. The District has the best tools for tracking year-over-year trends. The projections offer a middle-ground perspective, it shows 0.89 percent CAGR[1] between 2016 to 2040 with the addition of project enhancements
- **THE TRADE AREA MODEL:** This model is derived from Stats Indiana 2017, the statistical data utility for the State of Indiana developed and maintained by the Indiana Business Research Center at Indiana University's Kelley School of Business. The model applies the surrounding regional growth trends to Michigan City, incorporating the Indiana counties of Jasper County, Lake County, Newton County, Porter County, and LaPorte County. While only showing modest growth at 0.20 percent CAGR[1], it reflects relative stabilization over the next 24 years and does not include transportation enhancements ("No Build").
- **COUNTY MODEL:** This step-down model uses LaPorte County's population projections to determine Michigan City' growth rate. The method follows the historic trend of the City representing a decreasing percentage of the County population, declining from 28.3 percent in 2016 to 24.6 percent in 2040. Because this model shows a dramatic loss of 4,686 residents at a more rapid pace than the County's projections, this model was not factored into the average calculations.
- **SCHOOL MODEL:** This model is derived from the Michigan City Area Schools (MCAS) population projections developed in 2014. It shows a -0.92 percent CAGR[1], reflecting a significant decline in the overall population by 6,184 residents. This model has not been re-calibrated to reflect the transportation improvements that are expected to increase school enrollment, and as a result are not factored into the average calculations.

1 Compound Annual Growth Rate (CAGR) represents the annual rate at which the City, Planning Area, and/or County has grown or is projected to grow over a designated period. It is a useful metric for comparing across different jurisdictions and for short- and long-range growth periods.

TFC Figure 1, 2040 Population Projections

Year	City Historical Population Growth	NIRPC "DT Enhanced" Model	NICTD "DT Enhanced" Model	The Trade Area "No Build" Model	Average of NIRPC, NICTD and The Trade Area Models	County Model	MCAS School Model
CAGR[2]		1.20%	0.89%	0.20%	0.80%	-0.68%	-0.92%
1990	33,822						
1995	33,361						
2000	32,900						
2005	32,190						
2010	31,479						
2016	31,157						
2020		32,826	32,416	31,578	32,343	30,012	30,151
2025		34,913	33,945	32,041	33,759	29,321	28,898
2030		36,986	35,404	32,384	35,064	28,476	27,590
2035		39,181	36,925	32,597	36,388	27,502	26,281
2040		41,504	38,510	32,715	37,745	26,471	24,973
Absolute Growth/Loss (2016)		10,347	7,353	1,558	6,588	(4,686)	(6,184)

Investment in the Double Track (DT) will change the trajectory of Michigan City's population trend over the past 26 years.

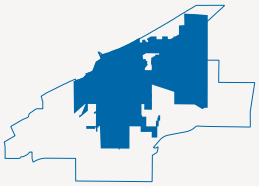
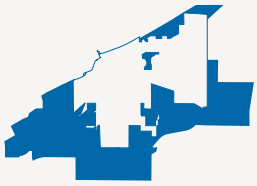
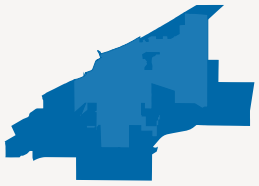


2 Compound Annual Growth Rate (CAGR) represents the annual rate at which the City, Planning Area, and/or County has grown or is projected to grow over a designated period. It is a useful metric for comparing across different jurisdictions and for short- and long-range growth periods.

As depicted in TFC Figure 2, *Land Use Area: Existing and Projected*, the area (in acres) of existing residential, commercial, parkland, and industrial land uses was calculated for the lands within the City Limits, the lands within the Planning Area minus the area within the City Limits, and the area within the entire Planning Area. Land use areas were then divided by the exiting population (31,157) to determine a per capita land use area. The per capita land use areas were then multiplied with the projected 2040 population to determine estimated land use areas required to accommodate the horizon year population. Two scenarios were developed. 2040-A represents the estimated land use area requirements for an average population growth of 6,588 persons; and 2040-B represents the estimated land use area requirements for the NIRPC "DT Enhanced" population growth of 10,347 persons. The land use area calculations for 2040-B were used to determine land use areas for TFC Map 22, *Future Land Use* (*Future Land Use Map*). As per Note 9 below, a 25 percent contingency is added to the "Additional Acres" area (see Assumption 8) to account for market variability over the next 20 years, the resulting number is highlighted in bold red.

TFC Figure 2, Land Use Area: Existing and Projected

2016 - Existing

Population	31,157 people					
	 City Limits (Acres)	%	 Land within Planning Area, outside the City Limits (Acres)	%	 Planning Area (Acres)	%
Residential Land *'Residential Land' Acres / Population* [1]	3,242.8 *0.10*	25.7%	3,999.7 *0.13*	20.5%	7,242.5 *0.23*	22.5%
Commercial Land *'Commercial Land' Acres / Population* [1]	1,072.5 *0.03*	8.5%	411.8 *0.01*	2.1%	1,484.4 *0.05*	4.6%
Park Land *'Park Land' Acres / Population* [1]	818.0 *0.03*	6.5%	366.9 *0.01*	1.9%	1,184.9 *0.04*	3.7%
Industrial Land *'Industrial Land' Acres / Population* [1]	1,385.9 *0.04*	11.0%	173.2 *0.01*	0.9%	1,559.0 *0.05*	4.9%
Land Use Subtotal [3]	6,519.2	51.6%	4,951.5	25.4%	11,470.8	35.7%
Undeveloped Land	2,975.8	23.6%	10,558.2	54.2%	13,534.0	42.1%
Indiana Dunes National Lakeshore (NL) [4]	248.3	2.0%	1,730.4	8.9%	1,978.7	6.2%
Water Bodies	177.1	1.4%	490.9	2.5%	668.0	2.1%
Public Facilities	516.5	4.1%	110.1	0.6%	626.6	2.0%
Schools	274.9	2.2%	73.6	0.4%	348.5	1.1%
Subtotal [5]	**10,711.9**	84.8%	**17,914.8**	91.0%	**28,626.7**	89.1%
Right-of-Way (ROW) [6]	1,920.1	15.2%	1,575.0	8.1%	3,495.1	10.9%
TOTAL AREA	**12,632.0**	100.0%	**19,489.8**	100.0%	**32,121.8**	100.0%

Assumptions:

1 'Land Use' Acres / Population calculated by dividing the existing (2016) Land Use area (acres) by the 2016 Population.

2 2040 'Land Use' areas calculated by multiplying the projected 2040 (A and B) Total Population by the 'Land Use' Acres/Population factor (see Assumption 1).

3 "Land Use Subtotal" is the sum of "Residential Land" area; "Commercial Land: area; "Park Land" area; and "Industrial Land" area.

4 As the Indiana Dunes National Lakeshore (NL) is a National Park, and administered by the U.S. Department of the Interior's National Park Service in perpetuity, its area was not included within the City's "Park Land" acreage.

5 "Subtotal" is the sum of "Land Use Subtotal"; "Undeveloped Land"; "Indiana Dunes National Lakeshore (NL)"; and "Water Bodies".

6 "Right-of-Way (ROW)" area is the remaining acreage after subtracting the "Subtotal" (see Assumption 5) from the "TOTAL AREA".

7 2040 "ROW" area is the 2016 - Existing ROW in addition to twenty percent of the "Additional Acres Subtotal".

8 "Additional Acres" area is calculated by subtracting the 2040 'Land Use' areas from 2016 'Land Use' areas.

9 A 25 percent contingency is added to the "Additional Acres" area (see Assumption 8) to account for market variability over the next 20 years, the resulting number is highlighted in bold red.

10 2040 "Undeveloped Land" is found by subtracting the "Additional Acres Land Use Subtotal" from the 2016 "Undeveloped Land".

2040 - A

Additional 6,588 people, the average population projections of the NIRPC "DT Enhanced" Model projection, the NICTD "DT Enhanced" Model and The Trade Area "No Build" Models. See TFC Figure 1, *2040 Population Projections*.

Total Population	37,745 people								
	City Limits (Acres) [2]	%	Additional Acres [8,9]	Land within Planning Area, outside the City Limits (Acres) [2]	%	Additional Acres [8,9]	Planning Area (Acres) [2]	%	Additional Acres [8,9]
Residential Land	3,928.5	31.1%	685.7 **857.1**	4,845.4	24.9%	845.7 **1,057.1**	8,773.9	27.3%	1,531.4 **1,914.2**
Commercial Land	1,299.3	10.3%	226.8 **283.5**	498.9	2.6%	87.1 **108.8**	1,798.2	5.6%	313.9 **392.3**
Park Land	991.0	7.8%	173.0 **216.2**	444.5	2.3%	77.6 **97.0**	1,435.4	4.5%	250.5 **313.2**
Industrial Land	1,678.9	13.3%	293.0 **366.3**	209.8	1.1%	36.6 **45.8**	1,888.7	5.9%	329.7 **412.1**
Land Use Subtotal [3]	7,897.7	62.5%	**1,723.1**	5,998.5	30.8%	**1,308.7**	13,896.2	43.3%	**3,031.8**
Undeveloped Land [10]	1,252.7	9.9%		9,249.5	47.5%		10,502.2	32.7%	
Indiana Dunes NL [4]	248.3	2.0%		1,730.4	8.9%		1,978.7	6.2%	
Water Bodies	177.1	1.4%		490.9	2.5%		668.0	2.1%	
Public Facilities	516.5	4.1%		110.1	0.6%		626.6	2.0%	
Schools	274.9	2.2%		73.6	0.4%		348.5	1.1%	
Subtotal [5]	**10,367.3**	82.1%	**1,723.1**	**17,653.0**	90.6%	**1,308.7**	**28,020.3**	87.2%	**3,031.8**
ROW [7]	2,264.7	17.9%	**344.62**	1,836.8	9.4%	**261.74**	4,101.5	12.8%	**606.36**
TOTAL AREA	**12,632.0**	100.0%	**2,067.7**	**19,489.8**	100.0%	**1,570.5**	**32,121.8**	100.0%	**3,638.2**

2040 - B

Additional 10,347 people, the projected population from the NIRPC "DT Enhanced" Model. See TFC Figure 1, *2040 Population Projections*.

Total Population	41,504 people								
	City Limits (Acres) [2]	%	Additional Acres [8,9]	Land within Planning Area, outside the City Limits (Acres) [2]	%	Additional Acres [8,9]	Planning Area (Acres) [2]	%	Additional Acres [8,9]
Residential Land	4,319.8	34.2%	1,076.9 **1,346.1**	5,327.9	27.3%	1,328.3 **1,660.3**	9,647.7	30.0%	2,405.2 **3,006.5**
Commercial Land	1,428.7	11.3%	356.2 **445.2**	548.6	2.8%	136.8 **170.9**	1,977.3	6.2%	492.9 **616.2**
Park Land	1,089.7	8.6%	271.7 **339.6**	488.7	2.5%	121.8 **152.3**	1,578.4	4.9%	393.5 **491.9**
Industrial Land	1,846.1	14.6%	460.2 **575.3**	230.7	1.2%	57.5 **71.9**	2,076.8	6.5%	517.7 **647.2**
Land Use Subtotal [3]	8,684.2	68.7%	**2,706.2**	6,595.9	33.8%	**2,055.5**	15,280.1	47.6%	**4,761.7**
Undeveloped Land [10]	269.5	2.1%		8,502.8	43.6%		8,772.3	27.3%	
Indiana Dunes NL [4]	248.3	2.0%		1,730.4	8.9%		1,978.7	6.2%	
Water Bodies	177.1	1.4%		490.9	2.5%		668.0	2.1%	
Public Facilities	516.5	4.1%		110.1	0.6%		626.6	2.0%	
Schools	274.9	2.2%		73.6	0.4%		348.5	1.1%	
Subtotal [5]	**10,170.7**	80.5%	**2,706.2**	**17,503.7**	89.8%	**2,055.5**	**27,674.3**	86.2%	**4,761.7**
ROW [7]	2,461.4	19.5%	**541.25**	1,986.1	10.2%	**411.09**	4,447.5	13.8%	**952.34**
TOTAL AREA	**12,632.0**	100.0%	**3,247.5**	**19,489.8**	100.0%	**2,466.5**	**32,121.8**	100.0%	**5,714.0**

Strategic Outlook: Focus Areas, Goals, and Recommendations

The Comprehensive Plan is based on the premise that the adopted plan accurately reflects what the City wants to become in the future. The guiding principles, goals and objectives, strategies and courses of action, and policies presented in this report provide guidance for an appropriate pattern and pace of development. The goals indicate how development should relate to the existing and future community. They also provide a logical framework for land-use decision-making at a conceptual level as well as on an area-wide and site-specific basis. Uniform application of these goals, objectives and subsequent strategies and actions should result in a balanced and harmonious community where a high quality of life and economic wellbeing can be achieved and maintained.

FOCUS AREAS

The Future City portion of the Comprehensive Plan is divided into eight focus areas, within which goals and objectives are grouped:

1. **Growth Capacity and Economic Performance**

   Growth capacity describes the suite of tools needed to monitor growth and considers the merits of balancing "green grass" development with infill and redevelopment of commercial districts and residential areas. The element also identifies several economic development tools needed to retain and grow existing businesses, stimulate entrepreneurship, and maintain a strong workforce.

2. **Environmental Management and Green Infrastructure**

   This focus area lays out an environmental preservation and management program for the unique and sensitive ecological areas within the Planning Area. It provides several recommendations focused on development within the Trail Creek watershed and how Trail Creek can be further utilized as a major recreational amenity. Recommended improvements to the City's urban forest canopy as well as its parks, recreational facilities, and open space preserves are also discussed.

3. **Utilities Infrastructure and Public Services**

   This focus area describes the utilities infrastructural improvements (potable water, wastewater, and storm drainage) and public services (fire and police) which will need to be expanded in order to serve a growing population.

4. **Transportation Infrastructure**

   The Transportation focus area identifies what intra-city vehicular and pedestrian facilities need to be improved, developed or expanded upon to accommodate future population growth, in terms of thoroughfare capacity and level of service, and expanded on-street bicycle lanes and recreational trails anticipated to serve an increasingly multi-modal constituency.

5. **Downtown**

   In light of the potential double-tracking of the South Shore commuter rail line, the Downtown focus area recommends several redevelopment projects, and makes the case of transit oriented development around the 11th Street Station. This section also makes the case for expanding the City's public art program.

6. **Housing and Neighborhoods**

   This focus area describes the array of housing prototypes that will be required to accommodate the full lifecycle of Michigan city's growing population. The focus area also recommends how neighborhoods should be organized to promote social interaction among residents (neighbors) to ultimately promote a resilient community.

7. **Sustainability, Resilience and Community Wellness**

   This element discusses sustainability as a theme which is interwoven throughout the Comprehensive Plan. It also underscores the value of sustainability reporting, and recommends a variety of practices to reduce energy consumption. The concept of resilience is introduced and applied at the residential scale. Community wellness is also discussed, regarding ensuring food security and encouraging local food production.

8. **Land Use and Community Character**

   The land use focus are describes land use designations and character classifications used to develop the *Future Land Use Map*. It describes the rationale behind the proposed growth and development centers.

The following terms are defined as they relate to the general organization of *The Future City* report and *Implementation* section, which together, compose the *Michigan City Momentum 2040* Comprehensive Plan (refer also to *Planning Framework* sidebar on page 7).

GUIDING PRINCIPLES

Each focus area begins with a series of guiding principles, which provide the framework, both theoretical and practical, regarding how issues, challenges, and opportunities will be addressed and qualified. Guiding principles are ideas that influence or guide for behavior or evaluation in determining a path forward. They provide the general direction and foundation for developing goals and objectives, strategies and actions.

GOALS

Goals are the observable and measurable end result having one or more objectives to be achieved within a more or less fixed timeframe. For the purposes of this Comprehensive Plan, goals are phrased in a future tense, and characterize what the City will be like having achieved the goal.

OBJECTIVES

Objectives represent the specific result to be achieved within a given time frame and with available resources, having followed a specific course of action. In general, objectives are more specific and easier to measure than goals. Objectives are basic tools that underlie all planning and strategic activities. They serve as the basis for creating policy and evaluating performance.[1]

STRATEGIES

A strategy is method or plan chosen to bring about a desired future, such as achievement of a goal or solution to a problem. A strategy connotes a long-range planning program, as compared to a series of short-range, tactics.

1 Business Dictionary (Available at: http://www.businessdictionary.com/definition/objective.html)

COURSES OF ACTION

A course of action is a possible sequence of operations, that are open to an individual or organization intent on accomplishing a particular objective.

POLICIES

A policy is a statement of intent, and is implemented as a procedure or protocol. Policies can be understood as political, managerial, financial, and administrative mechanisms arranged to reach explicit goals.[2]

As will be discussed in the Implementation section, *Indicators* and *metrics* will be identified through which one can quantifiably determine progress being made in implementing a set course of actions to achieve a particular objective or goal.

2 Wikipedia definition (Available at: https://en.wikipedia.org/wiki/Policy)

Focus Area 1:

Growth Capacity and Economic Performance

Guiding Principles

Growth Principle 1: Good Planning = Good Economic Development. Attract companies by attracting talent. Attract talent by managing land development, maintaining great schools, and making strategic investments in quality public services, amenities, and things to do.

Growth Principle 2: Nuanced, Place-based Strategies are More Effective than Off-the-shelf "Best Practices." Cities are often temped to copy the programs and strategies of other cities whose success they hope to emulate. Marketing and branding activities are frequently done in a strategic vacuum and are sold as (or mistaken for) real economic planning. While there are indeed some universal programs and activities that most cities should adopt simply to stay apace of the competition, these alone will not yield remarkable results unless paired with a more unique, place-based strategy.

Michigan City's key competitive advantages reside in its immediate proximity to Lake Michigan and the Indiana Dunes National Lakeshore; Trail Creek, the Lighthouse Place Premium Outlets; the Blue Chip Casino; direct access to the South Shore Commuter Rail, and the Franciscan Health Regional Medical Center. A truly strategic economic approach therefore will attempt to leverage and maximize one or all of these assets by creating programs and special infrastructure to optimize and accelerate their growth.

Growth Principle 3: Maximize Indigenous Growth. Although most economic development budgets are spent on trying to recruit new companies, most job growth is the result of the expansion of existing local companies and new start-up activity. Because of this, the City needs to be in regular contact with its larger employers regarding expansion opportunities, and make programs and resources available to would-be entrepreneurs as its main economic priorities.

Growth Principle 4: Foster Entrepreneurship. The City needs to promote continued and successful entrepreneurship with funded programs and facilities.

Growth Principle 5: Direct Growth. Establish a balance between contiguous outward growth and inward directed infill development, redevelopment, rehabilitation, and reuse projects. Direct growth into areas where basic services such as sanitary sewer, water supply facilities, police and fire protection can be efficiently and economically provided; in order to promote the responsible use of land, infrastructure, energy and other resources and preserve a compact community form.

Growth Principle 6: Vibrant Economies. A balanced, diversified economy assures desirable local employment opportunities, strengthens the City's tax base, and sustains quality of life.

Growth Principle 7: Align Regulatory Policies with Preferred Outcomes (Low Costs + Low Regulations = Low Outcomes). Competing purely on a low regulation, low cost basis may make sense for asset-poor, low-skilled, opportunity-deprived communities (where assets are few, barriers-to-entry had better be too). That profile however definitely does not fit Michigan City. The City has opportunities to position itself as an economically-diversified, university-endowed, health and wellness-focused, destination city within the metro Chicago region. The City therefore shouldn't try to compete mainly on price and ease of entry especially at the expense of strategic, talent-attracting investments in quality public services and amenities.

Growth Principle 8: Incent Performance. Maximize the use of planning and financial tools to mitigate the cost of development to the community while providing incentives for well-planned development that achieves stated City principles and goals.

Growth Principle 9: Economic Development is a Verb. It needs to be a proactive, facilitated endeavor. Few communities are fortunate enough to have great companies and projects simply fall in their laps. Most places need to work for it with dedicated staff and financial tools and resources. In Michigan City's case, the effort should focus mainly on working alongside commercial property brokers and the City's Economic Development Corporation to connect prospective commercial office tenants to local developers and property-owners.

Growth Principle 10: Enhance Economic Competitiveness. Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers, as well as expanded business access to markets.

Growth Principle 11: "Strategic" and "Opportunistic" are not Mutually Exclusive Terms. When it comes to economic opportunity, cities need to be both strategically focused and light-on-their-feet. Plans should be dutifully implemented. However, there are times when opportunities materialize seemingly out of nowhere that may require pivoting and/or diverting energies away from the chosen course. Although the plan can identify a city's competitive advantages and lay out strategies to capitalize on them, economic development does not unfold in linear fashion. When opportunities present that are not discordant with the plan, the City will need to mobilize quickly and aggressively to make them a reality. There is no shame in the reactive pursuit of a special opportunity, provided that it is "real" and a good fit for the community.

GOAL 1.0:

Fiscally responsible and carefully managed development that is aligned with growth expectations and sequencing, and is in concert with the City's ability to deliver infrastructure and services in a safe, timely, and effective manner.

OBJECTIVE 1.1: Monitor and manage growth to ensure consistency with the *Future Land Use Map*.

STRATEGY 1.1.1: ***Develop the tools to identify and monitor land use demands based on projected population growth.***

ACTIONS AND INITIATIVES

1. **Promote Zoning Integrity.** Guard against Zoning Map amendments that, cumulatively, can lead to extensive residential development in growth areas without adequate land reserves for a balance of commercial, public, educational and recreational uses.
2. **Monitor Trends.** In conjunction with periodic reviews of the Comprehensive Plan, identify market shifts that could have implications for desired housing types, retail or other commercial offerings, and particular public service and recreational needs. Also monitor actual population and development trends and various community indicators (e.g., traffic counts and collision frequency, roadway and intersection capacities, police and fire call volumes and response times, storm drainage volumes and rates in key locations, floodplain changes, water quality parameters, etc.) to detect any growth-related impacts of concern.
3. **Evaluate likely population-dependent thresholds for public facilities and services.** At some point in the future, population demands may approach the desired capacity of important public facilities and services, whether it is water and wastewater systems, roadways, parks, or schools; to accommodate growth and development. Generally, the difference between the established threshold and the existing level of service is the amount available for development. These thresholds will need to be determined as part of feasibility analyses when considering annexation.
4. **Traffic Impact Analyses.** Protect road capacity and safety by requiring traffic impact analyses when proposed developments exceed a designated size or projected trip generation.
5. **Density/Intensity Bonuses.** Use the prospect of increased development yield (retail/office square footage and/or additional residential units in mixed-use developments) to entice redevelopment projects aiming for increased development intensity.
6. **Provide for Lot Size Averaging.** With the ability to reduce lot sizes on some areas of a particular site, land planners can lay out larger lots in more sensitive or scenic areas, such as along a water feature or wetland fringe, steep-slope or sinkhole location, or where a floodplain covers a portion of the property (and also to buffer homes from a highway or railroad corridor, pipeline easement, abutting incompatible land use, etc.). The average-lot design would have the same total number of lots as a conventional layout to ensure no density increase and, therefore, no increased traffic generation or utility demands. However, density bonuses (with offsetting open space requirements) could also be offered as an incentive since lot size averaging, like clustering, can help to achieve expressed community objectives.
7. **Provide for Cluster and Conservation Development Approaches.** Clustering results in better land utilization by preserving natural assets while still allowing some degree of development on constrained sites, which provides return on investment to property owners and addresses area housing needs (including incorporation of townhomes, patio homes, and other housing options in a well-planned setting). In the best designs, natural features are preserved and incorporated as development focal points and amenities, thereby adding value for both the developer and home owners over time, especially when homes and/or other uses are arranged and oriented to take advantage of open space views. By setting aside natural areas and open space, cluster designs are also effective at reducing both storm water runoff and water quality impairment. Better drainage practices can reduce site infrastructure costs, and more compact development generally requires less linear feet of street, water and sewer lines, sidewalks, other utilities, etc.

Given the ecosystem diversity within Michigan City's Planning Area, several levels of alternative

Cluster Development

The reduction of lot size is offset by an increase in the percentage of open space thereby holding density neutral. The open space may protect sensitive resources, preserve valued open space for parks and greenways, and be used to buffer adjacent development.

Development Site Before
- 2 acres
- 85% Open Space Reserve

Standard
- 15 units
- 2 acres
- 0% Open Space Reserve

Cluster
- 15 units
- 1.5 acres
- 15% Open Space Reserve

Planned
- 24 units
- 10,000 square feet
- 65% Open Space Reserve

TYRON FARM CLUSTER DEVELOPMENT

subdivision design should be identified, including: "cluster," "conservation," and "preservation" options. The operating principle is to trade density for open space—with "open space" meaning all the non-built, non-paved/pervious portions of a site.

The increased concentration of units/buildings allowed through each successive category would be offset by a higher open space requirement for the overall site. Particularly for suburban and rural character areas, this is meant to ensure compatibility of the development with area character, with more space on the site automatically set aside for buffering purposes. As with lot size averaging, discussed below, various incentive provisions can be incorporated directly into the standards to promote use of clustering on sites where a conventional layout would work against community character and resource preservation objectives. Incentive possibilities include density bonuses, reduced building setbacks, narrower streets, and greater reliance on natural infiltration and drainage versus "hard" infrastructure to handle storm drainage. Cluster development methods should be promoted with applicants at the concept plan stage and through educational seminars for area land planners and developers.

8. **County Coordination.** Coordinate with LaPorte County to achieve uniform development standards for future growth within the Planning Area.
9. **Coordination with Michigan City Area Schools (MCAS).** Establish an educational initiative with the MCAS, and other public bodies (Plan Commission, Board of Zoning Appeals), stressing the importance of the Comprehensive Plan's role in guiding decisions on development approvals, zoning map amendments, use variances, capital budgeting, and similar planning decisions related to the location of schools relative to new development.

STRATEGY 1.1.2: ***Identify and implement growth management techniques for areas within the Planning Area.***

ACTIONS AND INITIATIVES

1. Interlocal Cooperation. In anticipation of future municipal annexations within the Planning Area, pursue interlocal cooperation agreements with LaPorte County in order to address coordination of subdivision review, thoroughfare planning and construction, floodplain management, signage, utilities infrastructure and other service provision, among other matters of mutual interest.
2. Amend the City's Joint Zoning Ordinance (Appendix C), to include compatibility provisions for the purpose of protecting existing operations and agricultural uses from encroaching development and, in turn, protecting development from common nuisance associated with agriculture, e.g. dust, odor, heavy equipment operation, etc.

STRATEGY 1.1.3: ***Establish a well-managed pattern of development that is fiscally responsible.***

What are Michigan City's Strengths?

A Willingness to Move Forward:

"MC has a strong willingness and drive to change for the better and not stay stagnant. As long as this trend continues with smart leadership, the city with thrive."

Growth Sequencing Program

With the assistance and input from the City's Planning and Redevelopment, Water and Sewer Departments, TFC Map 1, *Growth Sequencing*, was produced to depict areas projected to be developed within the Planning Area over the 20-year time horizon of this Comprehensive Plan. The timeframe was then broken into four planning periods. The first period, termed "Primary Growth Areas," extends from 2018-2025, and includes all of the construction projects are currently permitted. The second period, termed "Secondary Growth Areas," includes those lands projected to be developed between 2025 - 2030. The third period, termed "Tertiary Growth Areas," includes those lands projected to be developed between 2030 and 2035. The last period, termed "Future Growth Areas," includes those lands projected to be

LEGEND

- City Limits
- Comprehensive Plan Area
- Existing Development
- Rural / Undeveloped Land
- Parks and Open Space

Growth Sequencing

- 2018 - 2025, Primary Growth Areas
- 2025 - 2030, Secondary Growth Areas
- 2030 - 2035, Tertiary Growth Areas
- 2035 - 2040, Future Growth Areas

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Lake Michigan

Dunelend Beach
Michiana Shores
Long Beach
Pottawattamie Park
Michigan Township
Michigan City
Trail Creek
Springfield Township
Town of Pines
Beverly Shores
Pine Township
Coolspring Township
Center Township

PORTER COUNTY
LA PORTE COUNTY

12 20 94 212 421 35

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

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MOMENTUM: MICHIGAN CITY 2040

THE FUTURE CITY

TFC Map 1, Growth Sequencing

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

developed between 2035 and 2040. These areas became the primary focus of the *Future Land Use Map*. TFC Table 1, *Growth Sequencing and Demographic Projections*, compares Base Year (BY) 2016 land use percentages with subsequent five year growth periods. Over the next 20 years or so, it is estimated that the population within the Planning Area will grow from 31,157 persons to 41,504 persons; which equates to 10,347 additional persons. One will note that the results of the growth sequencing exercise identified a deficit in the area of residential (967.1 acres) and commercial (141.7 acres) land uses to accommodate the projected population from Scenario B, NIRPC DT Enhanced. The *Future Land Use Map* calculations were adjusted to accommodate future land use requirements.

ACTIONS AND INITIATIVES

1. Continue to update a growth sequencing plan (refer to TFC Map 1, *Growth Sequencing*) and management strategy that identifies areas of development for the next five, 10, 15 and 20 years, to accommodate the targeted population of 41,504 persons in Plan Horizon Year 2040. These sequential areas identify when and where capital improvements and services should be directed.
2. Evaluate the City's Water Department and Sanitary District capital improvement program (CIP) and annual capital plan against the growth sequencing plan to ensure utility extensions and capacity improvement projects are consistent with the defined growth area. The capital improvement program and capital plan should be prioritized in accordance with the sequencing and timing of development.
3. Periodically revisit the growth sequencing plan and update as appropriate to maintain currency.

OBJECTIVE 1.2: Annexation is in Accordance with the City's Growth Sequencing Plan and Fiscal Impact Assessment.

Annexation is the systematic expansion of a city's corporate boundaries into unincorporated (not already part of a local governmental jurisdiction) areas, and a corresponding extension of city services to the newly-annexed areas.

As a general policy, annexation should occur prior to or concurrent with development to properly plan for and coordinate the extension of adequate public facilities and services. However, annexation can also be utilized as a growth management strategy to protect surrounding areas through promoting or discouraging, as appropriate, development in key areas. The City can employ growth management measures (e.g., agriculture zoning) in areas the City annexes for their strategic, long-term significance rather than for purposes of promoting and directing near-term urban development -- all to prevent premature and inappropriate development in such areas.

Based on a review of the City's annexation history, as illustrated in TFC Map 2, *Annexation History*, there have been at least 48 annexation ordinances, involving 25,652 acres, adopted over the last 105 years (Michigan City was incorporated in 1836 and annexations happened from 1906 to 2011). To date, however, much of the City's annexed land remains undeveloped. Upon reviewing the City's existing utilities infrastructure plans (refer to TEC Map 25, *Potable Water System*; TEC Map 26, *Wastewater Collection and Treatment System*; TEC Map 27, *Storm Drainage*; and TEC Map 28, *Fiber Optic*), it is clear that infrastructure will need to be extended to accommodate anticipated growth within the Planning Area, particularly

TFC Table 1, Growth Sequencing and Demographic Projections (Areas in Acres)

Land Use	2017-2025	2025 - 2030	2030 - 2035	2035-2040	**Total Growth Sequencing Areas in 2040**	**Projected Land Use** for Total Population 41,504 people (Scenario: 2040-B, NIRPC DT Enhanced)	**Total Growth Sequencing Areas less Projected Land Use**
Residential Land	715.5	191.2	423.4	709.2	2,039.3	3,006.5	**(967.1)**
Commercial Land	276.1	198.3	-	-	474.4	616.2	**(141.7)**
Mixed-Use	125.8	101.2	-	-	226.9	-	**226.9**
Industrial Land	706.8	1,253.3	295.1	911.9	3,167.1	647.2	**2,519.9**
Total Area	1,824.2	1,744.0	718.5	1,621.1	5,907.8	5,714.0	**193.8**

LEGEND

- City Limits
- Comprehensive Plan Area

Annexation Year

- 1836 (Michigan City Incorporated
- 1906 - 1927
- 1928 - 1939
- 1940 - 1955
- 1956 - 1958
- 1959 - 1960
- 1961 - 1966
- 1967 - 1969
- 1970 - 1975
- 1976 - 2011

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Dunelend Beach
Michiana Shores
Long Beach
Michigan Township
Springfield Township
Pottawattamie Park
Lake Michigan
Michigan City
Trail Creek
Town of Pines
Beverly Shores
Pine Township
Coolspring Township
Center Township
PORTER COUNTY
LA PORTE COUNTY

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

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MOMENTUM: MICHIGAN CITY 2040

THE FUTURE CITY

TFC Map 2, Annexation History

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

in the lands to the west toward County Line Road; and the east, toward Meer Road.

STRATEGY 1.2.1: ***Prepare a Comprehensive Annexation program for lands within the Planning Area.***

In the process of developing a phased annexation program, which is necessary to make prudent and fiscally responsible decisions, the City must evaluate the value of an increased tax base against the cost of providing urban-level services (utilities, transportation, and communications infrastructure), as well as the long-term maintenance of said infrastructure.

ACTIONS AND INITIATIVES

1. Establish criteria through which to consider the suitability and fiscal benefits of annexation.
2. Work with the City's Water Department and Sanitary District to prepare and maintain an annexation plan and associated service planning for gradual expansion of the City limits and extension of facilities and public services; where determined feasible and beneficial. The annexation plan should be consistent with the City's growth sequencing plan. Coordinate the Water Department's and Sanitary District's capital improvement plan with the annexation plan to ensure the availability and capacity of "full municipal services" within the timeframes mandated by Indiana state law.
3. Develop a fiscal impact model to asses the feasibility of providing "full municipal services" and compare them against the anticipated revenues of each annexation proposal.

STRATEGY 1.2.2: ***In order to have greater control over the character, quality, and location of future development around the current edges of the City, consider developing a comprehensive annexation program that would include lands extending to Interstate 94.***

Communities often have the most control or influence over development on the contiguous edges, just beyond the City limits, when they annex those areas. Communities can determine how annexed land can help advance the community vision and planning goals and ensure that public costs of developing annexed areas are balanced with potential tax and other revenues. Orderly annexation helps preserve rural resources, such as agriculture, open space, stormwater infiltration, working lands, and natural habitat, and maintain a free-standing distinction between "town" and "country." Orderly, planned community expansion accommodates population growth and provides the tax base required to meet the community's objectives.

Based on TFC Map 22, *Future Land Use*, most of Michigan City's projected growth will occur within the band of predominantly undeveloped land between U.S. Highway 20 and Interstate 94. As depicted in TFC Map 3, *Annexation Program*, the City should consult with area residents and develop a phased annexation program within this area, for lands it will be providing water and sanitary sewer services.

As discussed within the *Transportation Infrastructure* element, under Strategy 7.2.10 (page 1.153), in order to receive timely and full consideration of the proposed interchange at Interstate 94 and County Line Road it will be important that this area is included within *Michigan City's Urbanized Area,* as depicted in TFC Map 4, *Michigan City Urbanized Area.*

ACTIONS AND INITIATIVES

1. Encourage future annexations to be consistent with the Comprehensive Plan and require that annexation maps are updated to remain current.
2. Encourage future potential annexation areas mapped in the Comprehensive Plan to include a preliminary identification of anticipated zoning as well as a preliminary analysis of how municipal services and utilities infrastructure (e.g., water, sanitary sewer, stormwater, transportation, fiber-optic, and police and fire) would be accommodated.

OBJECTIVE 1.3: Balance greenfield development with infill development and redevelopment.

OVERVIEW

As discussed, the City of Michigan City can utilize a number of strategies, tools and techniques for influencing and managing the pattern and timing of development and redevelopment within the Planning Area. While there is no single approach that meets all needs, a combination of planning, regulatory, and financing mechanisms can be used to influence what is constructed.

LEGEND

- City Limits
- Comprehensive Plan Area
- Annexation History (refer to TFC Map 2, Annexation History)
- Future Annexation Program

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Duneland Beach
Michiana Shores
Long Beach
Michigan Township
Pottawattamie Park
Lake Michigan
Michigan City
Trail Creek
SpringfieldTownship
589.1 ac
232.8 ac
2,374.1 ac
1,585.6 ac
Beverly Shores
Town of Pines
Pine Township
Coolspring Township
Center Township
PORTER COUNTY
LA PORTE COUNTY

12 20 94 212 421 35

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

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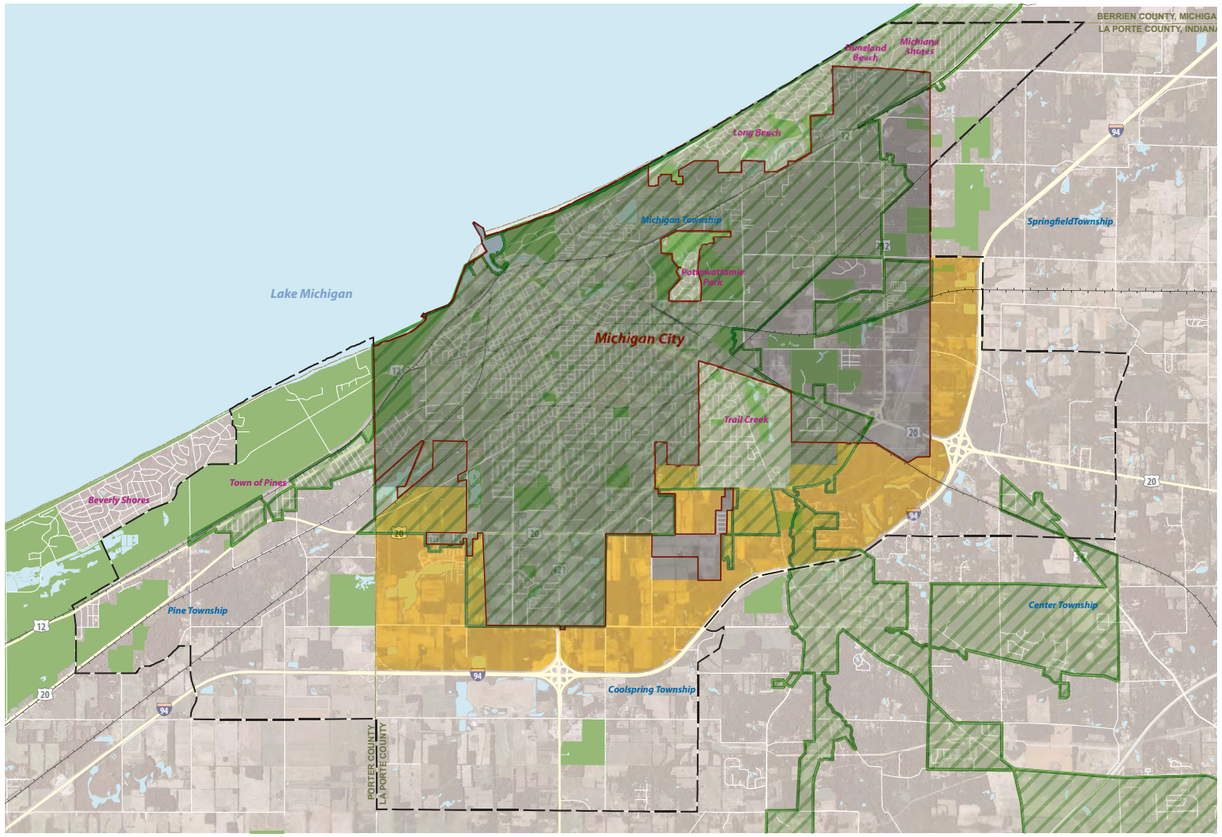
MOMENTUM: MICHIGAN CITY 2040
THE FUTURE CITY
TFC Map 3, Annexation Program

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

TFC Map 4, Michigan City Urbanized Area



Ultimately, growth management and utility extension policies should be based on the community's stated goals and objectives pertaining to the kind of community within which residents want to live. The long-term pattern of growth should be managed to balance market demands with economic development objectives. As discussed within Objective 1.2, future growth should be coordinated with infrastructure and public service investments such that the pattern and timing of development occurs in a fiscally responsible manner.

Infill Development Opportunities

While new development has typically occurred at the City's outskirts on larger swaths of undeveloped land, infill development will occur closer to the city center. These areas are less costly to serve and hence, more efficient as they are already serviced by roads, water and sewer lines, public safety, solid waste collection, and existing parks and schools. The City currently has multiple vacant parcels that could be subject for infill development.

Redevelopment Opportunities

One of the ways to address growth is to focus on redeveloping underutilized properties or obsolete building sites. This may involve construction on individual lots or small undeveloped parcels in established neighborhoods and commercial districts. There are several sizeable underdeveloped parcels that

provide the opportunity for infill development where streets and utilities may be readily extended. In addition, there are several areas that warrant consideration of redevelopment during the horizon of this plan.

There are multiple reasons for resulting undeveloped or under-utilized lands within an existing urban or suburban fabric, and Michigan City is no exception. Common constraints that result in so much left-over land may include the following:

- there may be environmental / brownfield constraints;
- over time land development patterns may result in zoning that is inappropriate to the existing context;
- there may be administrative hurdles, e.g., parcels may require time to replat / rezone before they can be developed; the ability to rezone is problematic; and/or zoning regulations may be cumbersome, time-consuming and costly;
- because zoning ordinances are typically written for development of "green grass" parcels, infill development / redevelopment may be subject to increased procedural and other costs;
- the likelihood of an increase in intensity is unrealistic compared to adjacent parcels;
- existing streets / utilities infrastructure do not have the capacity to support infill development;
- the property may be encumbered by easements that may need to be relocated; and
- individual parcels may be too small in area to accommodate the prescribed building intensity, and must be assembled with adjacent parcels in order to make development financially feasible.

STRATEGY 1.3.1: *Analyze areas within the City of Michigan City that may be worthy of redevelopment.*

ACTIONS AND INITIATIVES

1. Work with the LaPorte County Tax Assessor's Office to identify and evaluate parcels in the Planning Area where the assessed value of the land is higher than the appraised value of improvements to the parcel.
2. Define contiguous areas that warrant redevelopment and designate them as a redevelopment district. Subsequently, prepare a redevelopment plan to determine the type and general form of development, which may serve as a basis for design and implementation.
3. Identify on the *Future Land Use Map* the future character of the redevelopment areas. Establish the zoning provisions necessary to achieve the intended development outcomes.
4. Parking Management. Encourage residential, commercial and mixed-use development models in the City's targeted redevelopment areas, that focus on integration of structured parking to enable more productive use of the overall site in place of extensive surface parking.

STRATEGY 1.3.2: *Develop policies and incentives that encourage and promote infill development and redevelopment.*

ACTIONS AND INITIATIVES

1. Provide incentives for infill development, such as density bonuses if certain performance standards are met. Increased density may be allowed for accomplishing community objectives such as a minimum open space ratio; preservation of trees; conservation of natural resources; sensitivity to adjacent uses; heightened development standards; inclusion of amenities such as parks, trails, and attractions; and other standards of development that are important to the community.
2. Meet with property owners within the potential infill areas, as well as with developers, to identify the constraints to infill development. Consequently, amend the zoning and subdivision regulations and other standards and requirements so as to mitigate the obstacles to infill development.
3. Consider appropriate incentives to overcome infrastructure-related constraints to infill development, or redevelopment, of areas within the City limits by providing adequate street and utility infrastructure, and other measures to accommodate new development requirements. Requirements pertaining to setbacks, lot coverage, and building height may need to be modified to allow feasible development of constrained infill sites.
4. Study the infrastructure needs of the infill opportunity sites and prepare a schedule of capital improvements, including the timing and methods of funding the improvements. Prioritize capital projects that will benefit undeveloped sites, potentially increase density and the efficiency of the infrastructure system.

5. Create and adopt infill development standards concerning density, intensity, and other dimensional requirements to maintain a consistent character with existing adjacent development. Of particular importance within many of the older, historic areas is to ensure that the architecture, including façade treatments, massing and materials, density and intensity, etc., are consistent with those in the immediate neighborhood. For instance, a brick building may not be appropriate or desirable in an area where existing housing primarily has clapboard siding.
6. To enable infill development and/or redevelopment, maintain an annual rehabilitation and replacement program for potable water and reclaimed water distribution and wastewater collection systems within well-established areas.
7. Identify the areas that are most conducive for infill development and either pre-zone them or develop interim zoning regulations to ensure that development conforms to the future intent of the area and is compatible with the scale and character of adjacent development.
8. Zoning in support of redevelopment. Together with other incentive measures, apply targeted zoning strategies and performance standards to designated redevelopment zones. Options may include items such as reduced setbacks, waiver to height limitations, increased density, reduced parking standards, and reduced impact fees. For example, business parks (BP) and heavy industrial (HI) districts need to be re-evaluated as to their future feasibility of being developed for an industrial use. Many of these industrial zones are centrally located parcels of land that may be more suitable for residential or mixed use development. Redevelopment of commercial / retail areas. Continue to emphasize redevelopment and revitalization opportunities for large, underutilized retail sites, such as the Marquette Mall collection of parcels.
9. Establish "green-light" procedures to streamline approval of applications that comply with the City's established infill development standards, including expedited review and permitting, waiving permit fees, etc.

Sidebar

Top Strategies to Promote Building Reuse

Cities across the country are coming up with creative and innovative approaches to make building reuse easier and more likely. The following list of strategies and best practices for strengthening building reuse draws from the five-city Partnership for Building Reuse as well as Preservation Green Lab research conducted in Jacksonville, Florida; Tucson, Arizona; and Louisville, Kentucky.

1. **Leverage data and mapping tools to understand reuse opportunities.** Knowing a city's built assets is the first step to being able to target incentives, programs, and infill development. Spatial analysis can help identify needs and develop programs that are targeted for the greatest impact.
2. **Eliminate, reduce, or recalibrate parking requirements.** Reducing or eliminating parking requirements in pedestrian-friendly areas and areas near transit can incent investment in older buildings. Shared parking in nearby locations can also fill this need.
3. **Update zoning codes to meet the needs of the 21st century.** Promote new uses, greater diversity of uses, accessory dwelling units and other tools that heighten residential density, and other context-sensitive zoning changes to provide more opportunities for reuse and infill development.
4. **Retain and strengthen existing incentive programs for building reuse.** Support ongoing advocacy for the federal Historic Tax Credit and new and strengthened state historic tax credits. Revitalization tax credits, transfer of development rights, and incentives for vacant properties are also important.
5. **Remove key barriers that prevent change of use in existing vacant and underutilized buildings.** Establishing provisions within the zoning code for appropriate and compatible "sister uses" can ease the transition to a new use by creating more certainty and reducing red tape.
6. **Develop new sources of public and private capital for smaller projects, or projects in weaker markets.** Leverage new and existing funds to cover gap financing, pre-development costs, and other expenses that may keep small scale developers out of business, hinder investment in weaker markets, or discourage reuse of underutilized buildings.
7. **Develop a "solutions database" to track and promote ways to overcome building code challenges.** Daylighting creative solutions, successful projects, and paths to navigate complex redevelopment problems can be invaluable to small scale infill and adaptive reuse projects.
8. **Adopt a comprehensive adaptive reuse program.** Adaptive reuse ordinances, whether applied citywide or adopted as an overlay, bring together incentives along with flexibility in building and zoning codes, removing unnecessary barriers to reuse projects. The Model Adaptive Reuse Ordinance can be adapted and adopted in any municipality, and builds upon the "gold standard" policy supporting building reuse established in Los Angeles in 1999.

Source: Untapped Potential: Strategies for Revitalization and Reuse, National Trust For Historic Preservation – Preservation Green Lab

Growth Management (GM)

If growth is not carefully planned, the elements that first attracted new residents to the community (e.g., community livability, quality schools, economic diversity, etc.) will be slowly eroded by poor quality development. The integrity of public fiscal resources may also be compromised because quality and subsequent cost of new development may not contribute sufficient revenues to cover the costs of the services it demands. Growth management usually involves a combination of techniques to proactively direct the pattern of growth and the timing of infrastructure provision, leading to better long-term economic sustainability. It is a combination of regulatory, capital investment, and financing methods that influence growth and development patterns and protect the community's long-term interests. The overall goal for Michigan City's growth in the years ahead is to ensure that fiscally responsible and carefully managed development is aligned with growth expectations and in concert with the ability to deliver infrastructure and services in a safe, timely, and effective manner.

COORDINATED GROWTH

A new future land use plan for growth within the Planning Area will provide a basis for coordinating a range of other community-building investments by the City and its associated agencies. This will help to ensure that the thoroughfare network, utilities infrastructure and public facilities are extended and located consistent with anticipated types, densities and intensities of new development.

It is ironic, and ultimately unfortunate, that people who move to more remote locations just outside cities, intending to get away from denser, in-city living, can end up as being part of a trend that gradually erodes rural character through piecemeal, less regulated development. This dispersed development activity can begin to impact daily quality of life as increased traffic congestion raises safety issues on minimally improved county roads and at intersections. Eventually, the City—and its existing taxpayers—may have to bear the burden of bringing substandard infrastructure and public facilities up to municipal standards if and when previously developed land is annexed and such standards were not met originally.

GM Policy 1: Strive to accommodate a projected year 2040 population of 41,504 persons in a fiscally responsible and environmentally sensitive manner.

GM Policy 2: Promote a compact urban area by directing development into areas within or in proximity to existing infrastructure-serviced areas. Guide development into locations where the land use is most cost-effectively served by municipal services (i.e., accessible to water, sewer, the urban road network, Police, Fire/EMS services), while stimulating economic development opportunities.

GM Policy 3: The site should be of sufficient size and suitable shape to satisfactorily accommodate the proposed use and achieve an acceptable design relationship with the adjoining uses. The proposal should meet all design standards and policies presented in this Plan.

GM Policy 4: Avoid Linear Land Use Patterns. Create districts approaching a square, as opposed to long oblongs.

GM Policy 5: Encourage land aggregation and/or master planning in instances where development of an individual parcel is constrained due to its size or shape. This should be considered where necessary to conform to land use regulations, achieve land use compatibility or transition or provide adequate transportation improvements.

GM Policy 6: Promote mixed land use at different scales. Locate retail, office, residential, institutional, and recreational uses within walking distance of each other in compact neighborhoods with pedestrian-oriented streets. Land use diversity will:

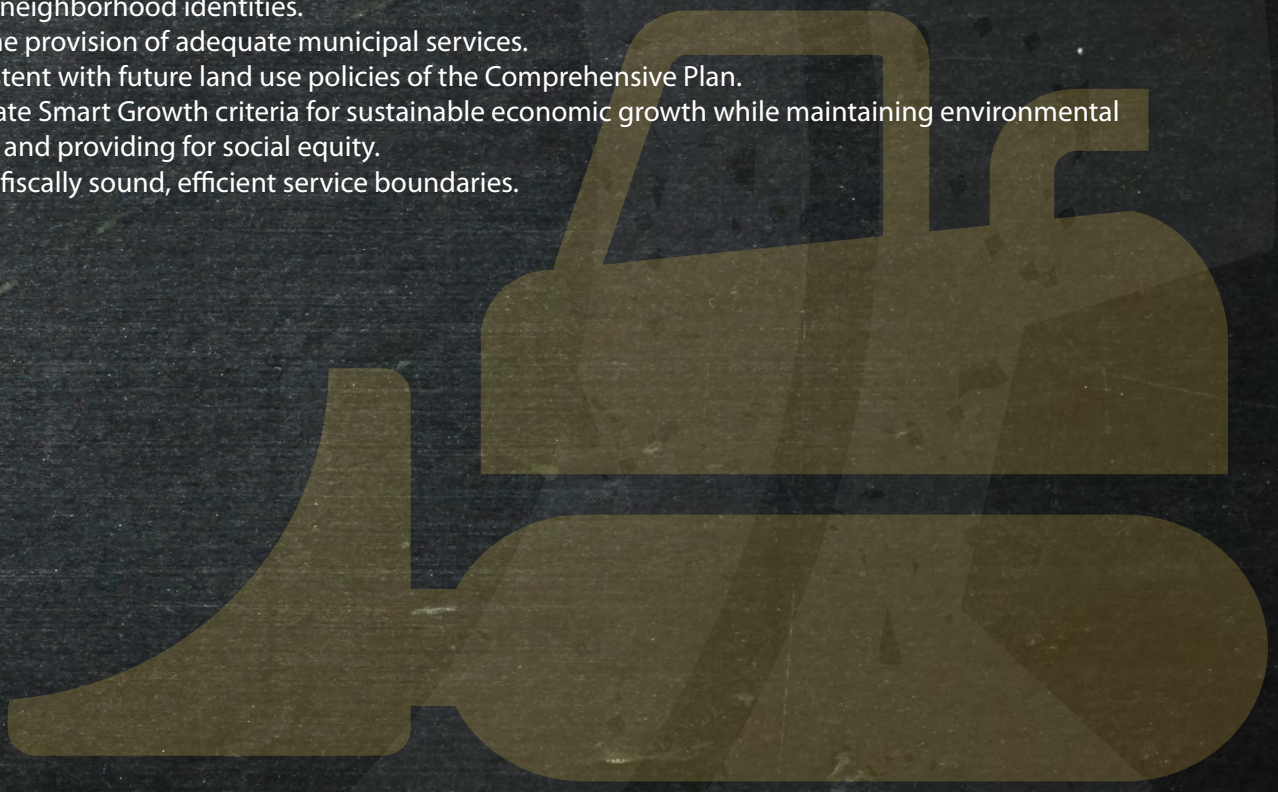
- protect existing investments while providing opportunities for individual initiative and choice;
- promote independence of movement, especially for the young and the elderly;
- provide safety in commercial areas, through around-the-clock presence of people; and
- reduce the need for automobile use by enabling shorter trips.

GM Policy 7: Engender a Sense of Place. Maintain and enhance Michigan City's natural, cultural, scenic and heritage assets in accordance with preservation guidelines and development standards.

GM Policy 8: Annexations should conform to an orderly expansion of City boundaries within planned urban growth areas and provide for a contiguous development pattern.

GM Policy 9: Annexations should:

- Constitute fiscally sound additions to the existing City.
- Be consistent with State law and Plan Commission policies, standards and criteria.
- Preserve neighborhood identities.
- Ensure the provision of adequate municipal services.
- Be consistent with future land use policies of the Comprehensive Plan.
- Incorporate Smart Growth criteria for sustainable economic growth while maintaining environmental integrity, and providing for social equity.
- Promote fiscally sound, efficient service boundaries.



Economic Performance

As stated within the International Economic Development Council's (IEDC) *Economic Development Reference Guide*, the main goal of economic development is improving the economic well-being of a community through efforts that entail job creation, job retention, tax base enhancements and quality of life. As there is no single definition for economic development, there is no single strategy, policy, or program for achieving successful economic development. Communities differ in their geographic and political strengths and weaknesses. Each community, therefore, will have a unique set of challenges for economic development.[1]

This element proceeds from the assumption that the key objective of an economic development strategy is business development and job growth, which comes from the creation of new businesses, the expansion of existing businesses, and the attraction or retention of existing businesses. Thus, a key question for public policy is, *What are the factors that influence business and job growth, and what is their relative importance?*

Some simple assumptions, grounded in basic economic principles, provide a point of departure for answering that question:

- Businesses want to be profitable.
- Profitability is the excess of revenues over costs. Thus, profitability can be achieved and increased by increasing revenues or reducing costs.
- Increasing revenues is primarily a function of the market for the goods and services a firm produces (the demand side of the equation), and deceasing costs is primarily a function of reducing the costs of producing and delivering goods and services (the supply side of the equation).
- Every good or service produced has multiple inputs. Thus, if one wants to influence the costs of production, one should focus on the costs of individual inputs. Some inputs are more important (as a percentage of total production costs) than others, and some are more amenable to the influence of public policy than others (e.g., the costs of infrastructure).
- There are a few things that local governments can do to influence the demand side of the equation (e.g., marketing of regional products, buying locally, assisting local producers in finding local suppliers (import substitution), but the majority and most significant ways that the public sector can influence business profitability are on the supply (cost) side of the equation.[2]

This element provides strategies and actions that the City of Michigan City can employ to encourage economic development in the context of quality growth. It describes a process for selecting strategies for coordinated regional economic development, and provides guidance in how to monitor strategies. These strategies include:

- coordinating economic development programs and support services;
- engaging in business development;
- providing development incentives and financing;
- engaging in business attraction and retention;
- educating the workforce;
- ensuring an adequate land supply;
- providing adequate infrastructure; and
- providing a quality of life conducive to business innovation.[3]

LOCAL GOVERNMENT POLICIES AND STRATEGIES

Even though government cannot affect all the factors important to economic development, it can have a significant impact through both its traditional role as public service provider and regulator, and its entrepreneurial role as a dealmaker and business recruiter. Of these two roles, the former is essential; government must provide quality basic services and an efficient regulatory environment if it wishes to create economic development. Providing further incentives to businesses is optional—whether it makes sense depends on what government can reasonably offer, the extent to which such offerings are necessary to attract firms, and the cost of those offerings.

Local government involvement in economic development can take several forms, including:

- clearing and assembling adequate land for business (zoning, urban renewal, remediation and abatement, and similar devices);

1 IEDC. *Economic Development Reference Guide. Available at: https://www.iedconline.org/clientuploads/Downloads/IEDC_ED_Reference_Guide.pdf*

2 Moore, Terry, 2006. *An Economic Development Toolbox: Strategies and Methods*. Planning Advisory Service (PAS) Report No. 541. American Planning Association, Chicago. Page 6.

3 Ibid. Page 3.

- underwriting risk (industrial development bonds, tax abatement, low interest loan programs);
- providing amenities and infrastructure (construction of utilities, tax increment financing, urban renewal);
- promoting economic development (participation in chambers of commerce, economic development organizations, trade missions, other nonprofit groups);
- providing job training, or establishing or supporting institutions that provide job training (e.g., community colleges and technical schools);
- changing the tax structure to promote economic development; and
- modifying regulations that are seen as burdensome to business.

GOAL 2.0:

A balanced, diversified economy assures desirable local employment opportunities, strengthens the city's tax base, and sustains quality of life.

OBJECTIVE 2.1: Foster a strong and diverse economy which provides a full range of employment and economic choices for individuals and families in all parts of the City and Planning Area.

Market Context

OVERVIEW

Planning for the strategic development of the City of Michigan City requires an understanding of its physical limitations, as well as its market. The market context portion of the planning process, summarized here, focuses on identifying market opportunities within the City and a larger representative trade area, extending beyond the City and the Michigan City – La Porte Metropolitan Statistical Area (MSA). This larger trade area includes the five-county area to the southeast of Michigan City and several communities in Berrien County, to the northeast of Michigan City.

Sidebar

Is Your Site Shovel Ready?

The Indiana Office of Community and Rural Affairs' Shovel Ready program helps local communities identify and prepare sites and existing buildings for economic development; certifies sites and existing buildings to expedite the location and permitting processes for business development; and expedites state and local permits necessary for a specific site. For a site to qualify under the Shovel Ready program, a community must meet the following minimum standards:

- demonstrate that there is official executive-level local government support for developing the site;
- proof of clear title or development option (50-year title search);
- letter from property owner/option holder stating that site is for sale/lease;
- topographical and aerial maps showing the lot layout;
- Phase I Environmental Site Assessment (ESA) performed by a certified professional within the prior six months (Phase I Report and supporting information based on ASTM standards E 1527-00 or E 1527-05.);
- wetland delineation demonstrating that impacts to waters of the state will be avoided or mitigation plan approved by the Indiana Department of Environmental Management;
- water, wastewater, natural gas and electric infrastructure to property line or demonstrate the ability to construct and pay for the infrastructure up to property line; with capacity clearly defined;
- transportation infrastructure to property line or demonstrate the ability to construct and pay for the infrastructure up to property line;
- high speed communications infrastructure to property line or demonstrate the ability to construct and pay for infrastructure up to property line; with capacity clearly identified.

Factors that Matter to Businesses

DIRECT INPUTS

1. **Natural Resources and Supplies**
   - The quality, quantity, and cost of the locally available natural resources and supplies are all relevant.
2. **Land and Built Space**
   - To be effective, communities must have an available supply of shovel-ready land, appropriately zoned and supplied with utilities and services, to accommodate the needs of business.
   - Existing buildings are useful for businesses that do not have the time or funding to pay for a purpose-built structure on previously vacant land.
3. **Labor**
   - The relative productivity and cost of labor is often the single most important factor for businesses (especially service businesses).

FACTORS DIRECTLY AFFECTING THE COST OF INPUTS AND THE REVENUES FROM OUTPUTS

1. **Location relative to supplies and markets**
   - Firms need to bring their supplies (including labor) from other locations. The closer the supplying markets, generally the less expensive this transfer is. The final stage of the production process is getting the product (either goods or services) to market. As with supplies, the closer the receiving markets, the less expensive this transfer is.
   - The move to a knowledge-based economy with high-speed communication infrastructure and improved transportation links has enables firms to locate at a greater distance from their markets.
2. **Infrastructure and utilities (including transportation and telecommunications)**
   - An important role of government is to increase economic capacity by improving the quality and efficiency of infrastructure (e.g., roads, bridges, water and sewer systems, airport and cargo facilities, energy systems, and telecommunications).
3. **Business clusters**
   - Firms co-located with other similar businesses can reduce their direct input costs by sharing a large labor pool and suppliers that have emerged to service the cluster. Clusters also have advantages beyond direct inputs. The interchange of ideas that occurs through proximity can benefit business innovation, creativity, and efficiency.

FACTORS INDIRECTLY AFFECTING THE COST OF INPUTS

1. **Amenity and other quality of life factors**
   - A local jurisdiction with a high level of amenity and other quality of life factors (e.g., good schools, a clean environment, affordable and appropriate housing, and a diverse and exciting culture) attracts people simply because it is a nice place to be. In particular, it attracts skilled workers, decreasing labor costs for businesses.
2. **Local Government Policies and Strategies**
   - In addition to direct public provision of infrastructure and services, public policy can affect the costs of doing business through regulation, taxes, and incentives.

The purpose of the market analysis in the context of a community planning effort such as this is fourfold:

1. Provide a "reality check" for the conceptual planning effort;
2. Ensure that recommendations are grounded in market and economic reality;
3. Set the stage for implementation; and
4. Provide an accurate and independent "story" to tell potential development and investor audiences.

The analysis shows that there is both short-term and long-term market demand in the surrounding trade area and that, with strategic public and private investment and supportive policies, the City could be successfully positioned to capitalize on select niche and destination opportunities.

ECONOMIC AND DEMOGRAPHIC INDICATORS

Economic and demographic characteristics are indicators of the economic health of a market and therefore, affect investment and reinvestment decisions. Because the Planning Area is located in the Michigan City – La Porte MSA development projects within its boundaries can be expected to attract the interest of individuals from a broad geography, one well beyond the MSA boundaries. For this reason, the trade area within which future uses will attract and compete for residents, consumers, users and visitors, will reach across multiple jurisdictions.

TRADE AREA DEFINITION

Since Michigan City has the potential to support development of a variety of product types, a broad trade area was defined for all of the major land uses (residential, retail, office and industrial). A trade area is the geography from which projects in a certain location will draw and compete for the majority of their residents, customers, or tenants. Several determinants are used to define the boundaries of a trade area, some unique to the specific use or product type, and others more universally applicable. The most common are those presented as follows:

- **Physical Barriers** – presence of certain physical improvements including highways, arterials, and significant structures, all of which influence driving and shopping patterns; along with the availability, condition and capacity of infrastructure;
- **Location of Possible Competition** – inventory of potentially competitive projects which can diminish a project's potential market share, and be an indicator of market acceptance;
- **Proximity to Population, Employment and/or Activity Centers** – concentrations of neighborhoods, employment centers, service providers, and commercial entertainment venues which attract target markets that will support development and redevelopment;
- **Zoning** – regulatory designations which will influence investment decisions;
- **Market Factors** – conditions which will set sale and lease prices, influence capital flows, suggest excesses and voids, and ultimately potential project values; and
- **Drive Times, Spending and Commuting Patterns** – consumer habits and biases which can inform the project's potential for success.

Based on consideration of these factors, the Michigan City Trade Area (the Trade Area) was determined to include the following geographies (see TFC Figure 3,

MindMixer Results

How can we make sure our economy is diverse so that no family is left behind?

Attract diverse businesses to Michigan City:

"Encourage more manufacturing, hospitality, transportation, and other businesses to locate in Michigan City to attract a more diverse workforce and increase job opportunities for city residents."

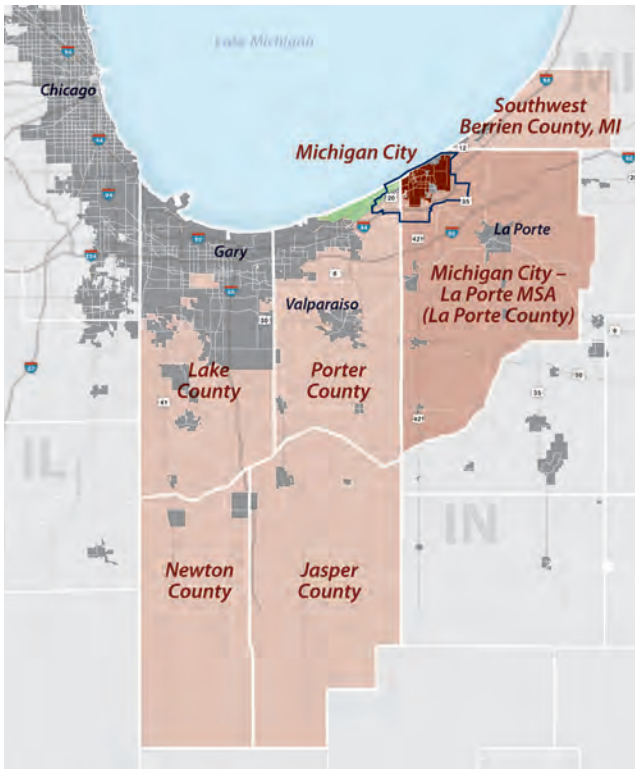
Michigan City Trade Area):

- Michigan City – La Porte MSA (La Porte County)
- Jasper County
- Lake County
- Newton County
- Porter County
- Portions of Berrien County, Michigan (New Buffalo City, New Buffalo Township, Chikaming Township, Three Oaks Township, Galien Township, and Weesaw Township)

As a barometer of an area's economic health and potential for investment, demographic and economic characteristics, taken together with its psychographic profile (refer to TEC Table 2: *Trade Area Psychographic Overview*; and TEC Figures 3-12, *Michigan City Tapestry Segment and Percent of Households, 2016*), can reveal support for product types that may or may not be part of its current inventory. While the built environment is often considered to represent all of a market's preferences, it is often the case that there are other supportable uses which better represent what is not only wanted, but needed, yet absent due to any variety of obstacles or barriers. For this reason, a higher level of attention is given to this component of the analysis.

As presented in TFC Table 2*, Trade Area Demographic Overview*, the Trade Area's total population increased by approximately one percent between 2010 and 2017, similar to the MSA increase. The City's population remained approximately the same during this time period. Future forecasts of household growth estimate a rate of approximately 0.8 percent in the Trade Area over the next 10 years, compared to 0.5 percent in the City and 0.5 percent in the MSA (these estimates do not factor-in the double tracking of the South Shore Commuter Rail line). The average household size in the Trade Area is 2.61, larger than both the City (2.36) and MSA (2.47). Correspondingly, the Trade Area has a higher share of renter, non-family and one- and two-person households. The Trade Area's age profile skews slightly younger than the MSA, but comparable to the City. In terms of education and income levels, a higher percent of residents in the Trade Area hold a bachelors' degree at 22 percent, explaining why a lower percent of households have a median household income below $25,000 and a higher percent have incomes over $100,000. The Trade Area is more ethnically diverse than either the City or the MSA.

TFC Figure 3, Michigan City Trade Area



Market Supply and Demand

An analysis of the current performance of real estate products within an overall market, as well as competitive projects within a trade area, provides an indication of whether a property or area may be ready for new development and/or redevelopment. It also helps to identify potential gaps in the market -- niches that new development and/or redevelopment could fill. In addition, in order to identify potential future market opportunities given the City's competitive position and prevailing market conditions, market demand estimates were prepared for residential, retail, office and industrial land uses from 2016 to 2040. The information which follows presents a summary of current supply and demand conditions for competitive land uses within the Michigan City Trade Area.

MARKET SUPPLY

The LaPorte County residential market continued to show improvement in 2017. Through August 2017, the number of closed sales increased by 7.3 percent as new listings declined by 10.4 percent. Average sale prices were down slightly, from $173,000 to $169,000.

TFC Table 2, Trade Area Demographic Overview			
2017 Indicator (unless otherwise noted)	Michigan City	Michigan City - La Porte MSA	Expanded Trade Area *
2010 Population	31,479	111,467	832,868
2017 Population	31,473	112,650	841,362
2017 Households	12,219	42,991	319,278
Annual Household Growth Rate (Projected through 2027)	0.5%	0.5%	0.8%
Average Household Size	2.36	2.47	2.59
Percent Non-Family Households	19%	16%	14%
Percent One- and Two-Person Households	65%	63%	58%
Percent Renters	33%	25%	35%
Percent Age 65+	16%	17%	13%
Percent Age 0-17	22%	21%	23%
Median Age	38.8	41.0	39.3
Percent With Bachelors Degree	17%	18%	23%
Median Household Income	$38,700	$49,300	$54,400
Percent With Income Below $25,000	32%	23%	22%
Percent With Income Over $100,000	11%	17%	23%
Percent Hispanic	7%	7%	16%
Percent Black/African-American	28%	12%	18%
Percent Asian American	1%	1%	2%

* includes Jasper, Lake, La Porte, Newton and Porter Counties.
Source: U.S. Census; ESRI, Inc.; and Ricker | Cunningham.

The supply of inventory decreased from 7.2 months to 5.0 months, indicating increased potential for new construction.

The retail market in Northwest Indiana, as it is doing across the U.S., continues to fluctuate, with many retailers closing and some chains expanding and upgrading their current locations. Michigan City, in particular, has seen recent interest from national fast food chains and new tenants at Lighthouse Place, the City's outlet center.

Northwest Indiana, including LaPorte County and Michigan City, has an established industrial base of manufacturing, health care and manufacturing businesses. LaPorte County has also been referred to as the home of transportation logistics. The manufacturing sector currently represents 13.5 percent of jobs in LaPorte County and 9.6 percent of jobs in Michigan City. For the most part, overall office and industrial lease rates remain stable over the past couple of years, with industrial rates averaging $2.50 per square foot and office rates averaging $13.75 per square foot. Vacancy rates continue to decline with the limited amount of new construction.

Given the Northwest Indiana region's overall low vacancy rate and shortage of new products, there appears to be pent-up demand for most real estate sectors.

MARKET DEMAND BY PRIMARY LAND USE TYPE

Residential Demand

In TFC Map 5, *Building Permit Activity (2012-2017)* and TFC Table 3, *Building Permit Activity (Michigan City Trade Area)*, summarizes building permit activity for the City and MSA. As shown, new residential construction in Michigan City and the MSA over the past ten years has begun to rebound, although at levels below those experienced prior to the Great Recession (2008 - 2012). Over the last 10 years, Michigan City accounted for 25 percent of total permits issued in the MSA, while permits for single family attached and detached units accounted for 30 percent and 65 percent, respectively. This indicates that the City is capturing a higher than average share of housing products which address affordability. The City's share of single family detached permits is only 13 percent of the MSA.

Demand for residential units in Michigan City is a function of projected household growth across a wider geography – in this case, the expanded five-county trade area (the Trade Area). In other words, Michigan City will compete with other locations in the Trade Area as a potential home for newly formed households, whether they arise through natural increase or net in-migration.

TFC Table 3, Building Permit Activity (Michigan City Trade Area)

Unit Type	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total	Annual Average	% of Total MSA
Michigan City													
Single Family Detached	40	24	8	31	21	14	8	16	12	9	183	18	13.3%
Single Family Attached (2-4 units)	9	6	2	0	0	0	0	0	0	0	17	2	29.8%
Multi-Family (5+ units)	0	0	24	0	0	160	0	24	50	0	258	26	64.8%
Total Units	49	30	34	31	21	174	8	40	62	9	458	46	25.0%
Michigan City - La Porte MSA													
Single Family Detached	301	174	114	156	119	122	97	101	99	92	1,375	138	100.0%
Single Family Attached (2-4 units)	9	6	0	0	0	0	16	0	10	16	57	6	100.0%
Multi-Family (5+ units)	20	0	24	72	24	184	0	24	50	0	398	40	100.0%
Total Units	330	180	138	228	143	306	113	125	159	108	1,830	183	100.0%

Source: U.S. Census Bureau and Ricker | Cunningham.

LEGEND

- City Limits
- Comprehensive Plan Area

Building Permit Activity (2012 - 2017)

- Commercial
- Government
- Residential

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Duneland Beach
Michiana Shores
Long Beach
Michigan Township
Pottawattamie Park
Lake Michigan
Michigan City
Springfield Township
Trail Creek
Town of Pines
Beverly Shores
Pine Township
Coolspring Township
Center Township
PORTER COUNTY
LA PORTE COUNTY

Client: City of Michigan City.

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

MOMENTUM: MICHIGAN CITY 2040

THE FUTURE CITY

TFC Map 5, Building Permit Activity (2012 - 2017)

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

The 2016 base of 319,300 Trade Area households is expected to grow at 0.8 percent annually to arrive at 386,591 households by 2040 – an addition of 67,291 units. Applying a one percent factor to account for a vacancy/turnover buffer, demolition and a modest amount of second-home purchase activity, results in an adjusted 24-year demand for approximately 67,964 units for the Trade Area. Based on current and anticipated home ownership and rental rates, there should be demand for 23,971 additional rental units and 43,993 additional ownership housing units by 2040.

This gross unit demand is further allocated into approximate income-qualified rent and home price groups. The analysis assumes a moderate increase in household incomes over time (using constant 2016 dollars). In other words, new households are expected to be somewhat more affluent than existing households. TFC Table 4, *Residential Demand Analysis* summarizes these demand estimates.

As illustrated in TFC Table 5, *Single Family Detached Demand*, shows reasonable attainable demand for single family detached units in the Trade Area for households earning at least $15,000 per year. This analysis assumes that detached homes will account for around 75 percent of all ownership demand, with the balance coming in the form of attached products (condominium, townhome, rowhouse, loft, patio home, etc.). Therefore, over the next 24 years, the Trade Area could support approximately 32,400 new single family detached units.

Generally speaking, infill neighborhood areas are more suitable for attached ownership housing, particularly near a downtown or central business district. See TFC Table 6, *Single Family Attached Demand*. Neighborhoods in and around Downtown Michigan City, which include significant areas of detached residential development, vacant land and marginal housing, would be potential candidates for this type of infill housing. For vacant areas, detached development could be relatively dense, with patio homes, bungalow courts and other small-lot development working within this relatively urban setting. Redevelopment of existing single-family home sites, however, would likely need to conform to current zoning and lot sizes. Over the next 24 years, the Trade Area could support approximately 10,800 new single family attached units.

TFC Table 4, Residential Demand Analysis

	Households	2016	319,300			
		2026	345,783	Annual Growth Rate	0.8%	
		2040	386,591			
	Household Growth (2017-37)		67,291	Adjust for 2nd homes, demolition, vacancy	1.0%	
	Adjusted Unit Requirement		**67,964**	% Rental	35.0%	

Annual Household Income Range (2017 dollars)	Approximate Rent Range	Supportable Home Price Range	Current Households in Income Bracket	New Households by Income Bracket	Trade Area Demand from New Households (20-yr)			
					Total Units	Estimated % Rental	Total Rental Units	Total Ownership Units
up to $15K	**up to $375**	**up to $75K**	12%	12%	**8,156**	90%	7,340	816
$15-25K	**$375 - $625**	**$75 to $100K**	10%	10%	**6,796**	85%	5,777	1,019
$25-35K	**$625 - $875**	**$100 to $150K**	10%	9%	**6,117**	65%	3,976	2,141
$35-50K	**$875 - $1,000**	**$150 to $200K**	14%	12%	**8,156**	50%	4,078	4,078
$50-75K	**$1,000+**	**$200 to $250K**	19%	16%	**10,874**	15%	1,631	9,243
$75-100K	**$1,000+**	**$250 to $350K**	13%	15%	**10,195**	8%	816	9,379
$100-150K	**$1,000+**	**$350 to $500K**	14%	17%	**11,554**	2%	231	11,323
$150K and up	**$1,000+**	**$500K and up**	8%	9%	**6,117**	2%	122	5,994
		Totals	100%	100%	**67,964**	35%	23,971	43,993

Source: U.S. Census Bureau; ESRI; and Ricker | Cunningham.

TFC Table 5, Single Family Detached Demand				
Annual Household Income Range	Approximate Home Price Range	Trade Area For-Sale Demand (Incomes $15K+)	Estimated % Single Family Detached	Single Family Detached Demand
$15-25K	$75 to $100K	1,019	75%	765
$25-35K	$100 to $150K	2,141	75%	1,606
$35-50K	$150 to $200K	4,078	75%	3,058
$50-75K	$200 to $250K	9,243	75%	6,932
$75-100K	$250 to $350K	9,379	75%	7,034
$100-150K	$350 to $500K	11,323	75%	8,492
$150K and up	$500K and up	5,994	75%	4,496
Totals		43,177	75%	32,383

TFC Table 6, Single Family Attached Demand				
Annual Household Income Range	Approximate Home Price Range	Trade Area For-Sale Demand (Incomes $15K+)	Estimated % Single Family Attached	Single Family Attached Demand
$15-25K	$75 to $100K	1,019	25%	255
$25-35K	$100 to $150K	2,141	25%	535
$35-50K	$150 to $200K	4,078	25%	1,019
$50-75K	$200 to $250K	9,243	25%	2,311
$75-100K	$250 to $350K	9,379	25%	2,345
$100-150K	$350 to $500K	11,323	25%	2,831
$150K and up	$500K and up	5,994	25%	1,499
Totals		43,177	25%	10,794

Note: Assumes Townhome/Condo development stabilizes at 25% of all ownership demand
Source: US Census Bureau; ESRI; and Ricker | Cunningham.

While condominium-type construction has been adversely impacted nationally by the mortgage lending crisis and over-building in recent years, the low-maintenance and potentially pedestrian-friendly aspects of attached housing should grow in share as it finds appeal among an aging Baby Boomer population as well as young professionals. This absorption could take the form of loft condominiums within upper floor commercial buildings, as well as in new townhome or rowhouse construction on underutilized parcels scattered around Michigan City.

Lastly, TFC Table 7, *Rental Apartment Demand*, shows projected rental apartment demand for the Trade Area of 16,600 new units by 2040 (for households earning over $15,000).

TFC Table 7, Rental Apartment Demand		
Annual Household Income Range	Approximate Rent Range	Trade Area Rental Demand (Incomes $15K+)
$15-25K	$375 - $625	5,777
$25-35K	$625 - $875	3,976
$35-50K	$875 - $1,000	4,078
$50-75K	$1,000+	1,631
$75-100K	$1,000+	816
$100-150K	$1,000+	231
$150K and up	$1,000+	122
Totals		16,631

Source: U.S. Census Bureau; ESRI; and Ricker | Cunningham.

As with attached ownership housing, new apartments could be created from rehabbing existing commercial space, built on smaller scattered-site underutilized lots, or developed on larger underutilized tracts as part of a residential mix.

Retail Demand

Future demand for retail space (including restaurant, entertainment, service, etc.) is determined by the potential level of retail expenditures in a given trade area from two sources: those dollars spent by trade area residents outside the trade area, or "leakage"; and those generated by new household growth. TFC Tables 8A and 8B, *Retail Demand, Michigan City Trade Area*, summarizes the calculations of both of these sources of retail demand. For each major retail category, current household retail expenditures (demand) are compared to current retail sales (supply) in the Trade Area to determine if there is a retail "surplus" (supply exceeds demand) or "leakage" (demand exceeds supply). TFC Tables 8A and 8B shows that "leakage" exists in the following retail categories:

- Furniture and home furnishings;
- Electronics and appliances;
- Clothing and accessories; and
- Miscellaneous stores.

The remaining categories currently have retail surpluses, i.e., supply exceeds demand. Projected demand from new household formation over the next 24 years is determined by multiplying growth in households with that portion of household income typically spent on general retail and service purchases. TFC Tables 8A and 8B also show the level of demand by retail category that will be generated by new household formation.

As shown, there is considerable "leakage" in the Trade Area for the retail categories identified above. The level of "leakage" estimated in current retail categories is approximately $257.2 million in retail spending, which

TFC Table 8A, Retail Demand (Michigan City Trade Area)

Retail Category	Estimated 2017 Household Retail Demand	Estimated 2017 Retail Sales (Supply)	Estimated 2017 Retail Void (Leakage)	Estimated Retail Sales/s.f.	New Retail Space Needed to Recapture Void/ Leakage
Furniture and Home Furnishings	$287,763,396	$271,848,828	$15,914,568	$275	57,871
Electronics and Appliances	$288,512,293	$178,752,283	$109,760,010	$300	365,867
Building Materials, Garden Equipment	$701,185,974	$702,824,157	$0	$375	0
Food and Beverage (Grocery)	$1,695,971,499	$1,723,437,563	$0	$450	0
Health and Personal Care	$632,124,186	$704,856,398	$0	$400	0
Clothing and Accessories	$395,469,115	$350,432,911	$45,036,204	$300	150,121
Sporting Goods, Hobby, Book, Music	$217,306,861	$408,507,048	$0	$300	0
General Merchandise	$1,667,113,421	$1,670,867,841	$0	$375	0
Miscellaneous Stores	$435,493,794	$348,962,053	$86,531,741	$275	314,661
Food Service and Drinking Places	$1,036,826,642	$1,150,617,046	$0	$450	0
Total	$7,357,767,181	$7,511,106,128	$257,242,523		888,519

Source: ESRI; Urban Land Institute; and Ricker | Cunningham.

TFC Table 8B, Retail Demand (Michigan City Trade Area)

Retail Category	Annual Household Growth Rate (2017-2037)	Net New Household Retail Demand	New Retail Space Needed for Household Growth	Total 20-Year New Trade Area Retail Demand (s.f.)
Furniture and Home Furnishings	0.8%	$60,644,766.21	220,526	278,398
Electronics and Appliances	0.8%	$60,802,592.69	202,675	568,542
Building Materials, Garden Equipment	0.8%	$147,771,607.00	394,058	394,058
Food and Beverage (Grocery)	0.8%	$357,417,922.10	794,262	794,262
Health and Personal Care	0.8%	$133,217,163.85	333,043	333,043
Clothing and Accessories	0.8%	$83,343,233.90	277,811	427,931
Sporting Goods, Hobby, Book, Music	0.8%	$45,796,386.77	152,655	152,655
General Merchandise	0.8%	$351,336,219.50	936,897	936,897
Miscellaneous Stores	0.8%	$91,778,244.52	333,739	648,400
Food Service and Drinking Places	0.8%	$218,506,280.43	485,570	485,570
Total	0.8%	$1,550,614,417	4,131,235	5,019,754

Source: ESRI; Urban Land Institute; and Ricker | Cunningham.

could potentially support an additional 888,500 square feet of space. This indicates a substantial "void" in the current market for these retail store types. An additional $1.6 billion in retail spending is anticipated from new household growth. Together, current "leakage" and future household spending could potentially support a total of 5.0 million square feet of new retail space over the next 24 years.

Office Demand

Demand for new office space is derived from two primary sources: expansion of existing industry; and the relocation of new companies into the market. Employment projections by industry classification for the Michigan City Trade Area were used to estimate demand over the next 22 years (2016-2040). Applying current growth rate estimates by industry category nets an overall 0.9 percent sustained annual employment growth rate, resulting in demand for approximately 24,600 new office employees over the next 22 years. Assuming differing levels of office space needed across various industry categories, the analysis revealed demand for over 6.8 million square feet of new office space over this period, as depicted in TFC Tables 9A and 9B, *Office Demand (Michigan City Trade Area)*.

Industrial Demand

As with office, demand for new industrial space is derived from two primary sources: expansion of existing industry; and the relocation of new companies into the market. Employment projections by industry classification for the Michigan City Trade Area were used to estimate demand over the next 24 years. As depicted in TFC Tables 10A and 10B, *Industrial Demand (Michigan City Trade Area)*, applying current growth rate estimates by industry category nets an overall 0.9 percent sustained annual employment growth rate, resulting in demand for approximately 20,100 new industrial employees over the next 24 years. Assuming differing levels of industrial space needed across various industry categories, the analysis revealed demand for nearly 11.0 million square feet of new industrial space over this period.

TFC Table 9A, Office Demand (Michigan City Trade Area)

Office Category	Estimated 2016 Employees	Estimated Growth Rate 2016-2040	Estimated 2040 Employees	Estimated New Employees
Natural Resources, Mining and Construction	19,100	1.30%	26,041	6,941
Manufacturing	29,600	0.20%	31,054	1,454
Trade, Transportation and Utilities	70,600	0.60%	81,500	10,900
Information	4,600	0.50%	5,185	585
Financial and Real Estate Activities	16,400	0.70%	19,389	2,989
Professional and Business Services	23,000	1.50%	32,879	9,879
Educational and Health Services	83,600	1.40%	116,712	33,112
Leisure and Hospitality	46,600	0.90%	57,780	11,180
Other Services	19,500	0.90%	24,178	4,678
Government	22,500	0.30%	24,177	1,677
Totals	335,500	0.93%	418,894	83,394

Source: Indiana Department of Workforce Development, Research and Analysis; ESRI; and Ricker | Cunningham.

MICHIGAN CITY MARKET SHARE

Several factors influence an area's ability to capture investment dollars. These can be categorized as: top-down considerations; bottom-up considerations; external considerations; and others. Some of which the public sector (or stakeholder entities) can control, and others they cannot.

Top-Down Considerations

- Demand for certain land uses;
- Demographic and psychographic conditions which support certain product types;
- Untapped market niches (product voids);
- Competitive projects (proposed, planned and under construction).

Bottom-Up Considerations

- Physical capacity of the community / individual parcels to accommodate market-supported product types – fewer physical constraints;

TFC Table 9B, Office Demand (Michigan City Trade Area)

Office Category	Estimated % in Office Space	Estimated Net New Office Employees	Sq Ft per Office Employee	Estimated 24-yr Office Demand
Natural Resources, Mining and Construction	40%	2,776	300	832,937
Manufacturing	5%	73	300	21,809
Trade, Transportation and Utilities	10%	1,090	400	435,990
Information	80%	468	250	116,987
Financial and Real Estate Activities	90%	2,690	250	672,482
Professional and Business Services	80%	7,903	250	1,975,713
Educational and Health Services	20%	6,622	300	1,986,747
Leisure and Hospitality	10%	1,118	250	279,488
Other Services	30%	1,403	250	350,859
Government	30%	503	300	150,943
Totals	30%	24,647	277	6,823,955

Source: Indiana Department of Workforce Development, Research and Analysis; ESRI; and Ricker | Cunningham.

TFC Table 10A, Industrial Demand (Michigan City Trade Area)

Industry Category	Estimated 2016 Employees	Estimated Growth Rate 2016-2040	Estimated 2040 Employees	Estimated New Employees
Natural Resources, Mining and Construction	19,100	1.30%	26,041	6,941
Manufacturing	29,600	0.20%	31,054	1,454
Trade, Transportation and Utilities	70,600	0.60%	81,500	10,900
Information	4,600	0.50%	5,185	585
Financial and Real Estate Activities	16,400	0.70%	19,389	2,989
Professional and Business Services	23,000	1.50%	32,879	9,879
Educational and Health Services	83,600	1.40%	116,712	33,112
Leisure and Hospitality	46,600	0.90%	57,780	11,180
Other Services	19,500	0.90%	24,178	4,678
Government	22,500	0.30%	24,177	1,677
Totals	335,500	0.93%	418,894	83,394

Source: Indiana Department of Workforce Development, Research and Analysis; ESRI; and Ricker | Cunningham.

- Vision and desire for certain uses and product types;
- Size of parcels, parcel ownership (public and private), owner investment objectives;
- Zoning (and other regulations) and presence of easements.

External Considerations

- Delivery system – who are the area's builders / developers, what are they willing and able to offer?
- Financing markets – availability of capital with reasonable funding terms for certain product types;
- Forces beyond those currently in the market (e.g., migration to community by persons who do not represent the existing profile of residents and consumers).

Other Considerations

- Available resources to position and promote investment in the community;
- Public support for a long-term vision.

Based on the market analysis summarized herein, the land uses summarized in TFC Table 11, *Summary of Market Demand (City of Michigan City)*, are supportable within the City. Ideally, a mix of uses will be configured in a synergistic manner that encourages an integration of activities and product types. When effectively integrated, these multi-use developments yield higher values for a more sustained period of time. Rather than addressing the needs and interests of single markets, collectively, the land uses tend to become destinations and draw on the interest of individuals beyond their respective trade areas. Beyond its land uses, successful development of the City will depend on a commitment to quality over quantity as reflected in a unified program of signs, gathering places, and landscaped features; appropriate transitions between uses; access to, yet preservation of natural amenities; and, improvements of a suitable scale.

The City is well-positioned to compete for a market share with attainable capture rates ranging from three percent to 10 percent depending on the product type. Actual investment levels will be dictated by numerous factors including – the physical capacity of the area to accommodate development, desires of property owners, community vision, and effectiveness of the City's ability to position itself and its assets and "ready the environment" for investment. TFC Tables 11 summarizes potential market demand for land uses in the City over the next 22 years.

TFC Table 10B, Industrial Demand (Michigan City Trade Area)				
Industry Category	Estimated % in Industrial Space	Estimated Net New Industrial Employees	Sq Ft per Industrial Employee	Estimated 24-yr Industrial Demand
Natural Resources, Mining and Construction	20%	1,388	600	832,937
Manufacturing	80%	1,163	400	465,268
Trade, Transportation and Utilities	60%	6,540	800	5,231,877
Information	20%	117	400	46,795
Financial and Real Estate Activities	15%	448	400	179,329
Professional and Business Services	15%	1,482	400	592,714
Educational and Health Services	20%	6,622	400	2,648,996
Leisure and Hospitality	5%	559	400	223,590
Other Services	30%	1,403	400	561,375
Government	20%	335	600	201,257
Totals	24%	20,059	548	10,984,137

Source: Indiana Department of Workforce Development, Research and Analysis; ESRI; and Ricker | Cunningham.

TFC Table 11, Summary of Market Demand (City of Michigan City)					
		Michigan City			
		Market Share		Absorption (Units/Sq Ft)	
Land Use Type	Trade Area Demand (2016 to 2040)	Low	High	Low	High
Residential (Units):					
Single Family Detached	32,400	3%	5%	972	1,620
Single Family Attached	10,800	8%	10%	864	1,080
Rental Apartments	16,600	6%	8%	996	1,328
Residential Subtotal	59,800			2,832	4,028
Non-Residential (Sq Ft):					
Retail	50,000	6%	8%	3,000	4,000
Office	6,800,000	4%	6%	272,000	408,000
Industrial	11,000,000	4%	6%	440,000	660,000
Non-Residential Subtotal	17,850,000			275,000	412,000

Source: Ricker | Cunningham.

STRATEGY 2.1.1: ***Engage with, and leverage the entire regional asset-base.***

As previously summarized, for most cities the region is the geographic unit that has the greatest impact on local prosperity. Regions represent larger markets and collections of resources (and have a drawing power) that most cities, by themselves, cannot command. For this reason, Michigan City's economic development programs should be conceived in a regional context (expanded Trade Area) while also being responsive to local circumstances and opportunities.

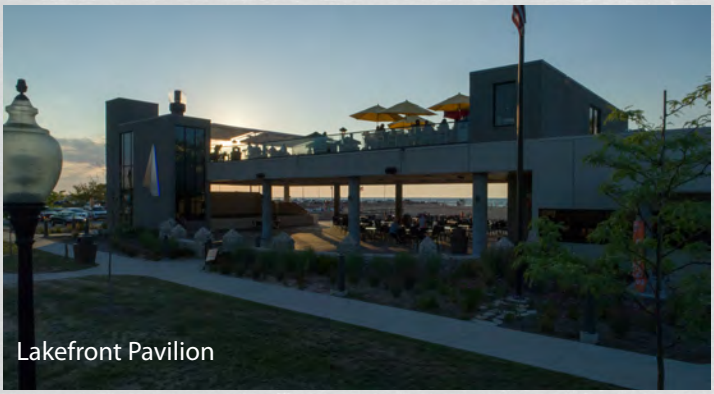
ACTIONS AND INITIATIVES

1. Continue to work with regional partners to advance, secure, and execute initiatives aimed an improving the quality of life and economic well-being of communities within the region. These include:
   - Northwestern Indiana Regional Planning Commission (NIRPC);
   - Northern Indiana Commuter Transportation District (NICTD);
   - Northwest Indiana Regional Development Authority (RDA).

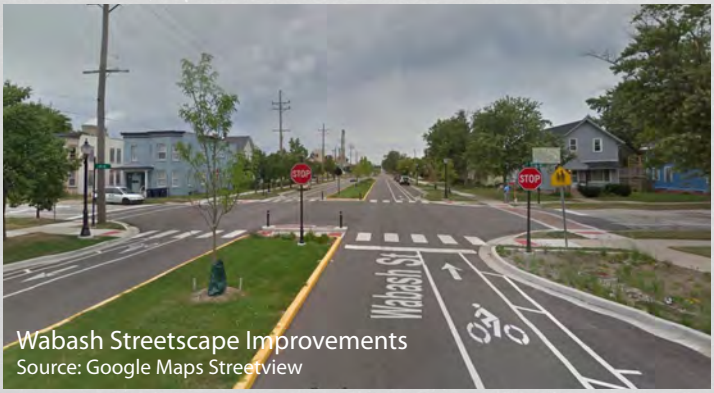
STRATEGY 2.1.2: ***Treat economic development as a Team Sport.***

Partnering with allied organizations to bring new companies into the region needs to be a key tenet of the City's economic development mindset. Utilize prudent allocation of local, regional, state, and federal resources to support economic development and environmental sustainability. The City is well-endowed with a strong Economic Development Corporation (MCEDC) and Redevelopment Commission (MCRDC), each of which has a variety of tools with which to leverage capital from a variety of sources. As depicted on TFC Map 6, *Michigan City Projects*, there has been well over $one billion in public and private sector project investment over the last four years; plus approximately 500 acres annexed for two future business parks, and a residential subdivision for executive style homes. The City has truly benefited from a seasoned team of public and quasi-public interests, working in concert with private sector investors and real estate development community to leverage local, regional, state, and federal resources to support and advance economic development initiatives within the City.

Michigan City Projects


Lakefront Pavilion

Michigan City Police Department



Wabash Streetscape Improvements
Source: Google Maps Streetview

Uptown Artists Lofts
Source: KIL Architecgure, www.kilarchitecture.com

LEGEND

- City Limits
- Comprehensive Plan Area
- Tax Increment Financing (TIF) Districts
- Enterprise Zone Boundary
- Private Company Project in Progress
- Private Company Complete
- Government Company Project in Progress
- Government Company Complete

Source: Michigan City Economic Development Corporation (MCEDC) Project Map

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Duneland Beach
Michiana Shores
Long Beach
Michigan Township
Pottawattamie Park
SpringfieldTownship
Lake Michigan
Michigan City
Trail Creek
Beverly Shores
Town of Pines
Pine Township
Coolspring Township
Center Township

Meer Rd Sewer Project
Highway 12 Sewer Extension
Year: 2017
Cost: $500,000
KTR Corporation
Year:2015
Cost:$355,659
Sandin Manufacturing
Year:2014
Cost:$996,169
Midwest Metal Products
Year:2014
Cost:$550,000
Dollar General
Year:2016
Cost:$593,000
Lake Michigan Gateway Implementation Strategy
Year:2014
Lakefront Pavilion
Year:2016
Cost: $3.8M
Washington Park Master Plan
Year:2016
Shoreline Brewery Expansion
Year: 2017
Cost: $2.8M
NIPSCO
Year: 2016
Cost: $260M
City Redevelopment Site
Year:2016
701-705 Franklin St. Future City Plaza Expansion
Year: 2017
Cost: $5M
Uptown N. Art Loft
Year: 2016
Cost: $13.7 M
D. Martin Enterprise
Year: 2013
Blue Chip Casino Hotel & Spa
Year: 2017
Cost: $11M
100 Washington Restaurant
Year: 2016
Taverna Tonelli
Year:2017
Details Laundry
Year: 2017
Cost:$250,000
Cheney Run Treatment Feasibility Project
Michigan Blvd Corridor Improvs
Year:2014
Cost:$16 Million
Wabash St Streetscape Improvements Design & Construction
Year: 2016
Cost: $410,000
New Train Station & Double Tracking Project
Year: 2020
Cost: $290M
New Police Department 1201 E. Michigan Blvd
Year: 2016
Cost: 13 M
Woodruff- Fiber Ready Designation
Year: 2016
SILVER BIRCH
Year: 2018
Cost: $24M
Airport Runway Extension
Year: 2020
Cost: $9M
Tonn & Blank Property 12",16" & 20" Water Mains US 20/ US 35-Ind. 212 to Meer Road
INDOT Intersection Improvements
Pine St. Washington St. 9th St Two-way Conversation Design & Construction
Year: 2016
Cost: $2,500,000
Barker Building Redevelopment
Year: 2015
Cost:$750,000
Edgewood Dental
Year: 2017
Cost:$987,000
Upgrade McDonald's
Year: 2016
Cost: $2,000,000
LEFCO
Year: 2016
Cost: $600,000
IMPREGLON
Year: 2016
Cost: $500,000
Tonn & Blank Property Water Mains
Lalumiere
Year: 2017
Saint John Rd - 12" Water Main
Year: 2016
Cost: $410,000
O'Reilly Auto Parts
Year: 2017
Cost:$594,000
Chrysler Jeep Dodge Ram Auto Dealership
Year: 2017
Cost:$14.5M
Athletico Therapy
Year: 2016
Dunes Plaza
Year: 2015
Cost: $20 Million
HOLLADAY PROPERTIES
Year: 2017
Cost: $5.5M
Williams Trucking
Year: 2017
Cost: $4M
Pine School Water & Sewer Extension
Sonic
Year: 2017
Cost: $550,000
Chicago Faucet Company
Year: 2014
Cost: $3M
Larkspur Drainage & Street Improvements
Year: 2016
Cost: $850,000
Belle Tire
Year: 2017
Cost: $700,000
CR 400 N. From Cleveland to Woodland Ave & Woodland Ave from CR 400 N. to Pahs Rd. 20" & 12",
Cost: $1.07 Million
Ohio Street Improvements
Year: 2017
Cost: $10.5M
12" Water Main Kieffer Rd - CR 950 W to Microtel Motel
South Dr. From CR 400 N. to Westwind Dr. 8" Water Main
20" Water Main CR 950 West - Kieffer Road South to I-94
Franciscan Health - Michigan City
Year: 2018
Cost: 240 Million
Duneland Dialysis
Year: 2016
Interchange Upgrade & Signage
Year: 2016
Hampton Inn
Year: 2016

PORTER COUNTY
LA PORTE COUNTY

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

MOMENTUM: MICHIGAN CITY 2040

THE FUTURE CITY

TFC Map 6,
Michigan City Projects

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

ACTIONS AND INITIATIVES

1. Continue to work with local partners in applying for and leveraging capital resources to achieve stated Comprehensive Plan strategies and objectives.
2. As will be discussed in the *Implementation* section, continue to document and record achievements based on specific indicators and metrics.

OBJECTIVE 2.2: Continue to Pursue Place/Asset-Based, Opportunity Development.

Although various economic doctrines abound, there is no set prescription, formula, or set of rules to do economic development at the local level. Each community faces a different set of challenges, opportunities, assets and aspirations that call for unique combinations, applications, and the mixing and matching of various tools and actions. One thing is for sure however; the best economic development programs involve one or more highly inventive responses to a local condition or opportunity (i.e., a place/asset-based strategy), while mediocre outcomes usually fall to less successful communities which are followers/hopefuls that rely too heavily on formulaic "best practices." This more place/asset-responsive approach can be thought of more simply as "opportunity development."

STRATEGY 2.2.1: *Focus on place-based strategies.*

Nuanced, place-based strategies are more effective than off-the-shelf "best practices." Cities are often tempted to copy the programs and strategies of other cities whose success they hope to emulate. Marketing and branding activities are frequently done in a strategic vacuum and are sold as (or mistaken for) real economic planning. While there are indeed some universal programs and activities that most cities should adopt simply to stay apace of the competition, these alone will not yield remarkable results unless paired with a more unique, place-based strategy.

Michigan City's key competitive advantages reside in its local assets, including:

- immediate proximity to Lake Michigan;
- Indiana Dunes National Lakeshore, which is slated to become the nation's 60th National Park;
- Trail Creek;
- Lighthouse Place Premium Outlets;
- Blue Chip Casino;
- direct access to the South Shore Commuter Rail Line;
- Franciscan Health Regional Medical Center.

A truly strategic economic approach therefore will attempt to leverage and maximize one or all of these assets by creating programs and special infrastructure to optimize and accelerate their growth.

STRATEGY 2.2.2: *Maximize Indigenous Growth.*

Although most economic development budgets are spent on trying to recruit new companies, most job growth is the result of the expansion of existing local companies and new start-up activity. Because of this, the City needs to be in regular contact with its larger employers regarding expansion opportunities, and make programs and resources available to would-be entrepreneurs as its main economic priorities.

STRATEGY 2.2.3: *Encourage business growth in infill locations.*

In addition to encouraging expansion of existing businesses and attracting new businesses, the community can consider where businesses locate within the community. Encouraging business growth in specific locations, such as historic downtowns or other core activity centers, can help improve the overall quality of life for existing and future residents, workers, and visitors. This improved quality of life also translates into a competitive advantage for local businesses and is critical for strengthening the local economy.

ACTIONS AND INITIATIVES

1. Utilize the *Future Land Use Map* to promote locating new businesses in the proposed business development centers

OBJECTIVE 2.3: Support business development activities to retain, expand and recruit businesses.

Business retention programs assist small businesses to prevent their relocation and to help them survive in difficult times. Retention programs typically involve partnerships among public and private organizations that assess the assets and opportunities of individual companies through periodic surveys, interviews, and visitations. The purpose is to establish relationships

between community businesses and economic developers to strengthen existing companies, establish early warning systems to flag at-risk businesses that require assistance, and ensure that public programs meet local business needs. Business retention initiatives usually include a mechanism for linking expanding businesses with public programs designed to mitigate growing pains and regulatory issues.

STRATEGY 2.3.1: *Evaluate the feasibility and timing of developing a co-working facility.*

As described in the sidebar, *Economic Opportunity: Incubation, Innovation Centers, and Coworking* (following pages), co-working is a membership-based officing facility where small businesses, startups, and telecommuters can conduct their individual work in a shared office environment. According to Brian Schutt, co-founder of Refinery46, a co-working facility in Indianapolis which is 60 percent occupied, co-working facilities can provide start-ups with essential "business pieces," like legal and accounting services. Their plan: "first, attract good people and companies that want to collaborate and grow; second, work with those companies on talent attraction and workforce development."[1]

ACTIONS AND INITIATIVES

1. Consider conducting a market assessment regarding the feasibility of administering a co-working facility in Michigan City. The facility could be administered by the Economic Development Corporation of Michigan City (EDCMC).
2. In conjunction with the development of an industrial arts institute (refer to spread on pp. 1.220-1.221), consider developing a large co-working space for artists to assemble and finish large art works.

STRATEGY 2.3.2: *Consider developing a micro-loan program.*

"Microfinance" refers to the financial services provided to low-income people, traditionally to support self-employment. This includes small loans, savings plans, insurance, money transfers and other basic financial services. Microloans are typically defined as very small, short-term loans with a low-interest rate, extended to self-employed individuals, new startups with very low capital requirements, or small businesses with only a few employees. The U.S. Small Business Administration's (SBA) average microloan is about $13,000.

ACTIONS AND INITIATIVES

1. Consider the conditions upon which a low-interest microloan program could be launched within Michigan City, administered by either the Redevelopment Commission or the Economic Development Corporation.

1 April 05, 2018, Andy Ober. Coworking Space Carving out New Market in Inside Indiana Business with Gerry Dick (Available at: http://www.insideindianabusiness.com/story/37888978/coworking-space-carving-out-new-market).

MindMixer Results

How can we make Michigan City an economically and globally competitive place to work and live?

Great tax incentives ✓✓✓

Better transportation ✓✓✓

Increase funding for schools ✓✓✓

Greater focus on downtown entertainment and cultural amenities ✓✓✓

Streamlining existing regulations ✓✓

Improvements in city services and public facilities ✓✓

More affordable housing ✓

"Education is the key to the development of more skilled workforce - better for the economy in multiple ways." ✓

Sidebar

Economic Opportunity: Incubation, Innovation Centers, and Coworking

Entrepreneurship is a powerful force driving innovation, productivity, job creation, and economic growth. Studies show that places with a high level of entrepreneurial activity tend to be better off economically. The challenge is that 50 percent of all new small businesses fail; often because they lack sufficient financing, business networks and skilled employees in their early days. Young organizations face many vulnerabilities and liabilities. They may lack sufficient financing, business networks and skilled employees in their early days. They may still be having problems ensuring consistent production quality. It takes time to develop a reputation in the market and a stable set of customers and suppliers.

INNOVATION AND ENTREPRENEURS

Numerous studies show that high-growth and "gazelle" firms consistently outperform other businesses in the economy in terms of growth in sales and/or growth in employment. Gazelles are the subset of high-growth firms that are very young, nimble, and light on their feet and able to seize opportunities; and ultimately are economically important to the economy because they contribute disproportionately to job creation. Indeed, since 1979, more than 75 percent of all new jobs created in the United States have been generated by fewer than 10 percent of small businesses.

ENTREPRENEURSHIP ECOSYSTEMS

Business incubators reduce the risk of small business failures, reporting success rates as high as 87 percent. Business accelerators and incubators provide innovative, early-stage entrepreneurs with resources, facilities, and expertise to help them develop their business plans and seek follow-on financing. They play an important role in the venture capital system, helping innovators gain strategic advantage in a competitive international marketplace. To retain these start ups, according to the Harvard Business Review, the new holy grail for governments is to create an environment that nurtures and sustains entrepreneurship, or an "Entrepreneurship Ecosystem." There is a growing amount of evidence that business incubation should be tailored to a community's character, needs, and desires – there's no magic bullet.

Innovation Cafe in Kansas City, MO, Sells membership to a collaborative community with access to professional infrastructure.

Indy Hall, Coworking space in Philadelphia, PA.

SMALL BUSINESS + CREATIVE JOBS
= LOCAL GROWTH

- The majority of new jobs are produced by small local businesses.
- Entrepreneurs convert ideas into jobs, wealth, and competitiveness.
- Small businesses are better at replacing jobs following a recession.
- Creative industries account for 35 percent of the jobs, and 51 percent of the wages.

Refinery 46 Home Services and Construction coworking facility. Source: Refinery 46 Facebook page

Torpedo Factory Art Center, Publicly accessible working artist studios in Alexandria, VA. Source: http://www.pixelsatanexhibition.com/

According to Forbes, each entrepreneurship ecosystem is unique, each being the result of the hundreds of elements interacting in complex ways. However, there are some basic elements that tend to appear in most ecosystems, including: (1) physical space; (2) business incubation services; (3) partnerships with governments, universities and business organizations; and (4) some form of government fiscal support.

NECESSITY FOR BUSINESS INCUBATION

The National Business Incubation Association (NBIA) states that business survival rates can be increased through business support services such as incubation and mentorship. The NBIA claims that business incubators reduce the risk of small business failures, reporting that 87 percent of all firms that have graduated from their incubators are still in business.

Business accelerators and incubators provide innovative, early-stage entrepreneurs with resources, facilities, and expertise to help them develop their business plans and seek follow-on financing. They play an important role in the venture capital system, helping innovators gain strategic advantage in a competitive international marketplace.

RETURN ON INVESTMENT

Incubation and innovation centers have shown a positive return on investment in dollars, new jobs, company retention, and increased attractiveness. The Okanagan Research and Innovation Centre, now known as Accelerate Okanagan, claims that for every dollar spent on business incubators, $30 is returned to the local economy in wages, taxes, sales, and services. The Economic Development Administration of the U.S. Department of Commerce has showed that business incubation has a much larger economic impact and return on investment than other forms of public infrastructure expenditure. They report that incubators can provide up to 20 times more jobs than infrastructure projects such as water and sewer improvements.

The University of Saskatchewan reports that start-up companies tend to remain within the community, contributing to the economic development and diversification of the local economy. Studies from around the globe consistently link entrepreneurship with rapid job creation, GDP growth, and long-term productivity increases. Perhaps most importantly, the NBIA states that 84 percent of incubated graduates stay in the community where they were incubated.

ON PLACE BALLET

"Place ballet" describes the regularity of place founded in habit, routine, and supportive physical environment.

Conducting their own daily activities, people come together in space, which takes on a sense of place. Individual participants using the same space unintentionally create a larger place with its own tempo of activity and rest, bustle, and calm.

"Place ballets may occur at various scales, indoors and out. A lounge, office building, village square, or any other situation where some users come together regularly, face-to-face, may provide a foundation for place ballet." (David Seamon, PhD. Kansas State University)

CO-WORKING FACILITIES

Coworking is a new form of membership-based officing where small businesses, startups, and telecommuters conduct their individual work in a shared office environment. A mixture of open work spaces and private offices provides choice and flexibility for members to work in a community setting. The first coworking space was founded in 2005 in San Francisco, and at last count there were over 12,000 coworking spaces up and running in the world.[1]

Typical coworking members are small businesses that come from the technology, advertising, marketing and information sector but there are other examples of small and large businesses joining coworking facilities. In Indianapolis, for example, Refinery46 coworking facility is based around home service and construction agencies. And in Boston, larger companies are using coworking space and buildings because there is little space to lease in the city as well as because of their growth needs, the ability to move quickly to find space, the flexibility of the lease, and the convenience of collaboration and access to talent. The over arching reason the coworking market is growing is because of the collaborative atmosphere. In the Refinery 46 example, this facility brings businesses together that are just starting out and may not be able to afford or have access tools to help them grow and succeed. This collaborative atmosphere, flexible space and convenience is a tool to attract talent, develop a workforce, and grow the economy.

1 Local Office, Houston, Texas. What is Coworking? localoffice.com/coworking/

STRATEGY 2.3.3: *Expand the EDCMC online site directory to include residential properties available for redevelopment.*

Identify and advertise on the EDCMC's website residential blocks composed of available properties within Michigan City which may be aggregated, replatted, and redeveloped as a planned unit development composed of a variety of housing types (accruing potentially higher densities), pedestrian amenities (pocket parks), and internal vehicular circulation (woonerfs).

ACTIONS AND INITIATIVES

1. Work with area Realtors to identify blocks within residential neighborhoods worthy of redevelopment.

STRATEGY 2.3.4: *Expand programs to promote and sustain entrepreneurship.*

Encouraging entrepreneurs to start businesses gives people power over their own lives and lets them build wealth in their own communities. Business owners who also live in the community tend to spend more on local business services and keep more of their earnings in the local economy. They also have a vested interest in the community and are less likely to move elsewhere in response to incentives offered by other cities.

Entrepreneurship development programs provide potential entrepreneurs with the capital, training, and technical assistance they need to start-up and grow their business. Incubators are one of the many initiatives used for entrepreneurship development, but programs also include technical assistance, financing, legislation, marketing, accounting, and networking.

The economic performance objectives that follow are distilled from the issues documented in *The Existing City* report and provide a context for the opportunities and proposals that follow.

ACTIONS AND INITIATIVES

1. Partner with Ivy Tech Community College and/or the A.K. Smith Area Career Center to provide office space for SCORE mentors to provide business and technical assistance to start-up entrepreneurs.

STRATEGY 2.3.5: *Provide a range of affordable housing options for a diverse and expanding workforce.*

Perhaps the City's biggest challenge is in the area of offering diverse housing options that appeal to a broad cross-section of the professional workforce. These include urban-format townhouses and apartments in active, diverse, mixed-use neighborhoods. Such housing options are increasingly important in attracting lifestyle-driven talent workers.

ACTIONS AND INITIATIVES

1. Partner with residential developers to determine under what conditions, market or other, they may be interested in investing in residential redevelopment projects.
2. Work with the Planning and Redevelopment Department to consider re-zoning residential blocks to afford higher densities; as well as possible incentives to attract residential developers.
3. Work with the City Engineer, Sanitary District and Water Department to evaluate the existing condition of utilities infrastructure.
4. Package residential development concepts and advertise on the EDCMC online site directory.
5. Work with the City attorney to streamline the building demolition process, which is outlined on page A.151 of *The Existing City* report. Survey neighboring communities with similar governmental structures to examine alternative regulatory frameworks that may be employed.
6. Identify and advertise successful examples of where the Hoosier Homestead Initiative has enabled home ownership and enhancement of residential neighborhoods in Michigan City.

OBJECTIVE 2.4: Ensure a highly skilled and trained workforce that is prepared to meet and exceed the employment needs of future business and industry.

Workforce development and/or training refers to community efforts to train individuals for specific jobs or industries. Training may cover everything from soft skills (work ethic, attitude, getting to work on time) to basic skills (literacy, numeracy) to specific job skills (from carpentry to website development). Community workforce efforts may also include job placement assistance, resume writing, interview skills, and retention

Sidebar

The Creative Class

In various publications, including, *Rise of the Creative Class* (2002), Richard Florida, PhD., an American economist and social scientist (http://www.creativeclass.com), has identified a socioeconomic class, he refers to as the "creative class." Members of the creative class engage in work whose function is to "create meaningful new forms." Within the creative class, the super-creative core are people who produce things that are readily transferable and broadly useful. Scientists, engineers, university professors, poets, novelists, artists, entertainers, actors, designers, architects, as well as nonfiction writers, editors, cultural figures, and analysts are considered "creative professionals," who work in a wide range of knowledge-based occupations. These people engage in creative problem-solving. Florida states that a third of the American workforce makes up the creative class, or as he says, those people who are fortunate enough to be paid to use their creativity in their work.

In Florida's publications he asks the question, "in a world where people are highly mobile, why do they choose some cities over others and for what reasons?" He discovered the creative class values the following characteristics of a city:

- high-quality, multi-dimensional, *real* experiences;
- active, participatory recreation;
- street-level culture composed of cafes, sidewalk musicians, and galleries;
- active, outdoor recreation like bicycling, jogging, and kayaking; as well as newer, more extreme sports, like trail running and snowboarding;
- authenticity and uniqueness—historic buildings, established neighborhoods, unique music scene, a mix in the built environment, and social and ethnic diversity.

Florida finds that companies follow people and that creative businesses and employees are increasingly attracted to communities that offer diverse cultural and recreational opportunities.

Source: *Cities and the Creative Class*, By Richard Florida, *The Rise of the Creative Class: Why cities without gays and rock bands are losing the economic development race*. By Richard Florida. Washington Monthly May 2002.

services such as legal advice and child care, that help people stay in a job once placed there. The goal of workforce training programs is to improve the quality and skill sets of individuals, to place them in jobs, and help businesses find an employee base in line with their needs. A good workforce training program, therefore, serves two customers: individuals and businesses.[1] According to the *Labor Market Summary of Indiana Metropolitan Areas*, in February 2018, the labor force within the Michigan City-La Porte, IN Metropolitan Statistical Area (MSA) consisted of 46,718 persons, up 687 persons from January. Over the past 12 months, the labor force has fallen by 1,006 (or 2.1 percent). Of the labor force, 44,878 persons were employed and 1,840 persons were unemployed (Unemployment Rate: 3.9 percent).[2] According to the *2016 Northwest Indiana State of the Workforce and Economic Indicators Report*, in 2013, the following key industries in Northwest Indiana Trade Area contributed to the Gross Regional Product (GRP): [3]

- Manufacturing (46,885 jobs in 2015): 35 percent
  - Job Concentration: 70 percent above national average
  - Industry job growth (2015-20125): 1.2 percent
- Healthcare and Social Assistance (48,480 jobs in 2015): 7 percent
  - Job Concentration: 15 percent above national average
  - Industry job growth (2015-20125): 20.7 percent
- Construction (19,647 jobs in 2015): 7 percent
  - Job Concentration: 10 percent above national average
  - Industry job growth (2015-20125): 9.5 percent
- Retail Trade (41,409 jobs in 2015): 5 percent
  - Job Concentration: 17 percent above national average
  - Industry job growth (2015-20125): 5.6 percent
- Transportation and Warehousing: (16,859 jobs in 2015): 4 percent
  - Job Concentration: 34 percent above national average
  - Industry job growth (2015-20125): 8.9 percent

1 IEDC. *Economic Development Reference Guide. Available at: https://www.iedconline.org/clientuploads/Downloads/IEDC_ED_Reference_Guide.pdf*

2 2018. *Labor Market Summary of Indiana Metropolitan Areas* (Available at: https://dwaldron.blob.core.windows.net/lmidash/20170609/msa.html).

3 2016, Northwest Indiana Workforce Board. Northwest Indiana State of the Workforce and Economic Indicators Report. (Available at: http://www.innovativeworkforce.com/wp-content/uploads/2017/04/StateoftheWorkforceReport-2016Final.pdf).

The Report recommends the following courses of action:

1. Increase the number of high school and college students who are engaged in work-based learning experiences such as internships and summer jobs.
2. Increase the number of current workers who obtain new post-high school credentials, and engage employers identifying career ladders to reward skills attainment.
3. Increase the number of regional employers who commit to a specific level of engagement with our K-12 schools, colleges and adult education and training centers to address skill needs.
4. Ensure that all graduating high school seniors have a specific next step defined for the attainment of further credentials, and that follow-up occurs to determine results with modification of plans as needed.
5. Expand successful programs that work to prepare minority and first-generation college students for on-time degree attainment, including an emphasis on a wide array of counseling services to address academic and non-academic barriers for at risk students as they enter and advance in college.
6. Convene employers in multiple sectors to develop crosssector training and education programs for information technology and customer service to support all industry sectors.
7. Create an inventory of skills needed to fill the jobs of today and tomorrow.

STRATEGY 2.4.1: *Provide a range of workforce training programs and opportunities in Michigan City.*

Providing workers with an opportunity to educate themselves and train for more skilled jobs helps them compete for jobs in the community now and in the future. A workforce with the right mix of skills and education is an important asset for attracting new industries. Offering local residents the opportunity to gain skills for a wider range of jobs can also reduce the need for residents to commute long distances to find appropriate employment, thereby improving quality of life for workers and reducing traffic congestion and air pollution. To tailor this goal to local conditions, City staff would need to know the education and skill levels of their local workforce and the skills that potential growth industries need. This analysis might result in goals tailored to different industries and types of advanced education and workforce training, including

community and four-year colleges and job training programs that teach both job-specific technical skills and soft skills such as communication, teamwork, and time management. Local educational institutions and job training centers can be key partners in achieving these goals.

ACTIONS AND INITIATIVES

1. Consider partnering with Ivy Tech Community College to expand the number of industry-recognized manufacturing certification courses offered in Michigan City to include:
    - Manufacturing, Production, and Operations
    - Advanced Manufacturing Technician
    - Mechatronics and Industrial Automation Technician

    Currently, the only courses offered are:
    - Certified Production Technician
    - NIMS CNC Operator
    - Business Administration
2. Consider partnering with Ivy Tech Community College to expand the number of industry-recognized healthcare certification courses offered in Michigan City to include:
    - Health Information Management
    - Nursing - LPN to ASN Transition Program
    - HI-9000 Allied Healthcare Professional Program

    Currently, the only courses offered are:
    - Healthcare Specialist
    - Surgical Technology
3. Consider partnering with Ivy Tech Community College to expand the number of industry-recognized construction certification courses offered in Michigan City to include:
    - Construction Technology
    - Industrial Technology
    - Building Construction Management
    - Interior/Exterior Building Maintenance

    Currently, there are no construction certification courses offered.

Economic Performance (EP)

EP Policy 1: Provide the training resources necessary to ensure a highly skilled workforce.

EP Policy 2: Reduce barriers to economic growth, while recognizing regulatory function.

EP Policy 2: Promote diversification of the commercial/industrial base.

EP Policy 3: Reduce barriers to economic growth, while recognizing regulatory function.

EP Policy 4: Expand economic opportunity and improve economic equity for Michigan City's growing population through sustained business growth.

EP Policy 5: Foster an environment that encourages innovation and entrepreneurship, builds on local strengths for business success and growth, and offers businesses a functional and attractive place to locate.

EP Policy 6: Ensure parks, trails, natural areas, and a healthy environment continue to protect the City's quality of life that attracts and retains businesses and work force.

EP Policy 7: Use land efficiently. Encourage infill development and redevelopment, particularly of brownfield sites. Cluster businesses to ensure transportation efficiency.

EP Policy 8: Use plans and investments to help create a positive business environment in the City and provide strategic assistance to retain, expand, and attract businesses.

EP Policy 9: Facilitate the success and growth of small businesses and coordinate plans and investments with programs that provide technical and financial assistance to promote sustainable operating practices.

EP Policy 10: Encourage innovation, research, development, and commercialization of new technologies, products, and services through responsive regulations and public sector approaches.

A. K. SMITH AREA CAREER CENTER

Focus Area 2:

Environmental Management and Green Infrastructure

Guiding Principles

Environment Principle 1: Interconnected Communities. Maintain an interconnected network and wide range of landscape amenities that support native species, maintain natural ecological processes, sustain air and water resources, and contribute to the health and quality of life for communities and people.

Environment Principle 2: Green Infrastructure. Green infrastructure should function as the framework for conservation and development, and should therefore be planned and protected before development. Green infrastructure requires making connections to places and activities within and beyond the community.

Environment Principle 3: Ecological Integrity. Ecological integrity refers to the ability of an ecosystem to support and maintain ecological processes and a diverse community of organisms. Avoid land uses that compromise ecological integrity and deplete natural resources.

Environment Principle 4: Preserve Patches. In terms of landscape ecology, a "patch" is defined as a relatively homogeneous area that differs from its surroundings. Patches are the basic unit of the landscape that change and fluctuate, a process called patch dynamics. Retain large contiguous or connected areas (patches) that contain critical habitats.

Environment Principle 5: No Non-natives. Minimize the introduction and spread of non-native species.

Environment Principle 6: Focus on Biocapacity. Defined, "biocapacity" refers to the capacity of ecosystems to produce useful biological materials and to absorb waste materials generated by humans, using current management schemes and extraction technologies. The biocapacity of a given territory reflects its specific natural potential in terms of available resources under given management skills. Land-use decisions and management practices should be compatible with the natural potential of the area.

Environment Principle 7: Recreational Opportunities. Provide, maintain, and enhance recreational opportunities through high-quality parks, facilities, and open spaces.

Environment Principle 8: Services and Programs. Provide recreational services and programs that facilitate quality experiences and learning opportunities for individuals throughout the community.

Environment Principle 9: Economic Development Opportunity. Create greater opportunities for Michigan City to capitalize on the environmental and recreational resources of the City and County through tourism- and recreational-based businesses.

Environment Principle 10: Active Lifestyles. Encourage healthy and active lifestyles that promote physical and mental wellness, along with social growth.

GOAL 3.0:

Lake Michigan and its associated aquatic and terrestrial environs, are protected, managed, and enhanced as the region's greatest natural resource.

OBJECTIVE 3.1: Continue to improve Trail Creek water quality, with respect to fecal coliform, dissolved oxygen, nutrients, and total suspended solids.

STRATEGY 3.1.1: ***Protect and manage the natural hydrology of the Trail Creek watershed to minimize sediment, nutrient, and bacteria loading into the stream, for the health, safety and enjoyment of all its user groups.***

ACTIONS AND INITIATIVES

1. The Sanitary District should partner with the Towns of Long Beach, Pottawattamie Park, and Trail Creek to develop a phased wastewater collection implementation program.
2. Regulate growth within the Trail Creek watershed by requiring urban level services (potable water and wastewater infrastructure) for all new development (i.e., prohibit septic systems within watershed).
3. Preserve riparian corridors within the Trail Creek watershed by amending Article 20 - *Stormwater Management Regulations*, within the City's Code of Ordinances, to require minimum setbacks (in linear feet) from the edges of 1st order, 2nd order, and 3rd order riparian forest cover and herbaceous streams and wetlands, as outlined within the Natural Resources Conservation Service,' (NRCS) *Conservation Practice Standards for Riparian Forext Buffer*, Code 391 (https://efotg.sc.egov.usda.gov/references/public/IN/391_Riparian_Forest_Buffer.pdf) and NRCS' *Conservation Practice Standards for Riparian Forext Buffer*, Code 390 (https://efotg.sc.egov.usda.gov/references/public/IN/390_Riparian_Herbaceous_Cover.pdf).

STRATEGY 3.1.2: ***Update Trail Creek Management Plan.***

The *Trail Creek Management Plan* was adopted in 2008. As many conditions have changed, it time to update the plan to gauge progress made over the last 10 years, and determine how strategies and recommendations need to be amended to reflect the current environment, issues and challenges.

ACTIONS AND INITIATIVES

1. Approach the Trail Creek Watershed Partnership to be the likely sponsoring entity of the Plan Update.
2. Seek funding opportunities.
3. In conjunction with the Trail Creek Watershed Partnership, the City's Sanitary District, and others, evaluate the status of implementation goals, issues and challenges that need to be addressed, as well as likely sources of information that will be required (i.e. reports, GIS datasets, etc.).

STRATEGY 3.1.3: ***Continue to promote the use of low impact development strategies, tools, and techniques to restore pre-development hydrology and conform to performance criteria within Article 20 - Stormwater Management Regulations for all new development areas.***

Part of a larger practice of sustainability, low impact development techniques reduce the strain on the environment that a typical development can produce, especially dealing with stormwater management. The main premise of low impact development, or LID, is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source. A typical development will deal with stormwater by trying to direct it off site as quickly as possible. Practices involving LID tend to slow the movement of stormwater, and are intended to prevent more stormwater from leaving the site than before development. As depicted in sidebar Low Impact Development, techniques to help mitigate stormwater dispersal include: bioretention, green roofs, pervious paving, rain barrels and cisterns, vegetated swales and rain gardens.

Another stormwater management approach is green streets which incorporate vegetation (perennials, shrubs, trees), soil, and engineered systems (e.g., pervious pavements) to slow, filter, and cleanse stormwater runoff from impervious surfaces (e.g., streets, sidewalks). Green streets are designed to capture rainwater at its source, where rain falls. Green streets protect water quality in rivers and streams by removing up to 90 percent of pollutants. They replenish groundwater supplies, absorb carbon, improve air quality and neighborhood aesthetics, and provide green connections between

parks and open space. Additional discussion as well as strategies on how to develop green streets can be found in Focus Area 4, *Transportation Infrastructure.*

ACTIONS AND INITIATIVES

1. Continue to work with the Sanitary District's Stormwater Advisory Group (SWAG) in identifying realistic LID applications for new development.
2. Work with parcel owners and developers regarding the application / implementation of LID best practices during the pre-Development Review Meeting.
3. Incent the implementation of LID applications by providing expedited plan review.

STRATEGY 3.1.4: *Stabilize eroded embankments along Trail Creek.*

Work with private landholders to stabilize eroded embankments along Trail Creek utilizing bio-engineering techniques (refer to sidebar).

ACTIONS AND INITIATIVES

1. Identify scoured embankments along Trail Creek and its tributaries that are eroding and stabilize using appropriate bio-engineering applications, as described in the *Bio-engineering Techniques* sidebar below.

Bio-engineering Techniques

Employ the following bio-engineering and other non-structural controls over structural controls to restore damaged habitat and protect shoreline and stream bank erosion:

LIVE STAKING

BRUSH LAYERING

BRUSH MATTRESSING

LIVE CRIBWALLS

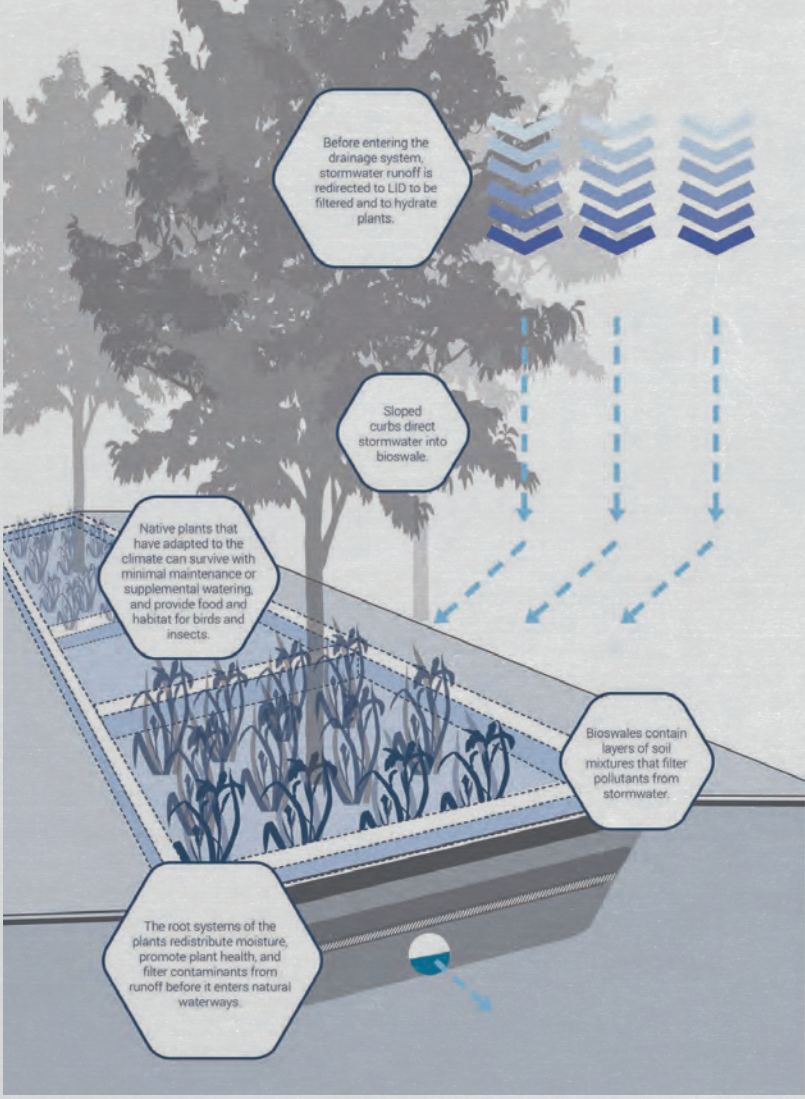
Source: F.X. Browne, Inc.

- **Live Staking** involves the insertion and tamping of live, rootable vegetative cuttings into the ground.
- **Live Fascines** are long bundles of branch cuttings bound together into sausage-like structures. When cut from appropriate species and properly installed, they will root and immediately begin to stabilize slopes.
- **Brush Layering** consists of placing live branch cuttings in small benches excavated into the slope. The portions of the brush that protrude from the slope face assist in retarding runoff and reducing surface erosion.
- **Brush Mattressing** involves digging a slight depression on the bank and creating a mat or mattress from woven wire or single strands of wire and live, freshly cut branches from sprouting trees or shrubs.
- **Branch Packing** consists of alternating layers of live branch cuttings and compacted backfill to repair small localized slumps and holes in slopes.
- **Joint Planting** involves planting live cuttings of rootable plant material into soil between the joints or open spaces in rocks that have previously been placed on a slope.
- **Live Cribwalls** consist of a hollow, box-like interlocking arrangement of untreated log or timber members. The structure is filled with suitable backfill material and layers of live branch cuttings, which root inside the crib structure and extend into the slope.

Sidebar

Low Impact Development

Low Impact Development (LID) is an innovative stormwater management approach with a basic principle that is modeled after nature: manage rainfall at the source using uniformly distributed, decentralized, micro-scale controls. The goal of LID is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source. Techniques are based on the premise that stormwater management should not be seen as stormwater disposal. Landscape features, known as Integrated Management Practices (IMPs) are the building blocks of LID. Almost all components of the urban environment have the potential to serve as an IMP; this includes not only open space, but also roof tops, streetscapes, parking lots, sidewalks, and medians. LID is a versatile approach that can be applied equally well to new development, urban retrofits, and redevelopment / revitalization projects.



Source: Designing for Impact, A Regional Guide to Low Impact Development Houston-Galveston Area Council

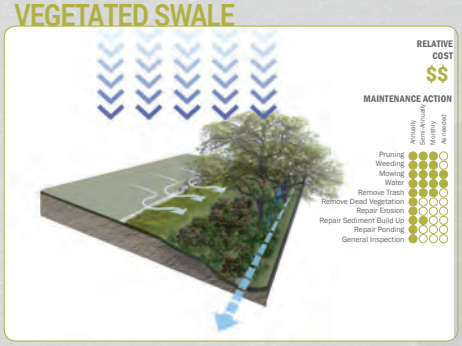
LID is in the works in Michigan City at the Wabash Street Rain Gardens.

WHAT DOES LID LOOK LIKE?

LID practices mimic the natural processing of stormwater runoff and can create more attractive communities. LID techniques and strategies are listed below.

VEGETATED FILTER STRIP

VEGETATED SWALE

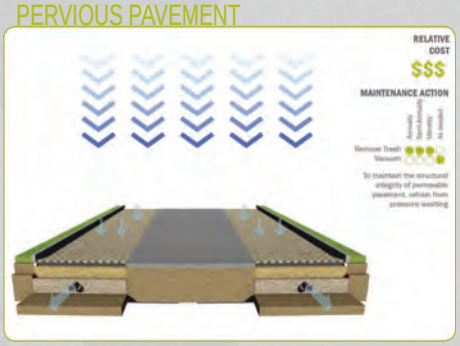


BIORETENTION CELL / RAIN GARDEN

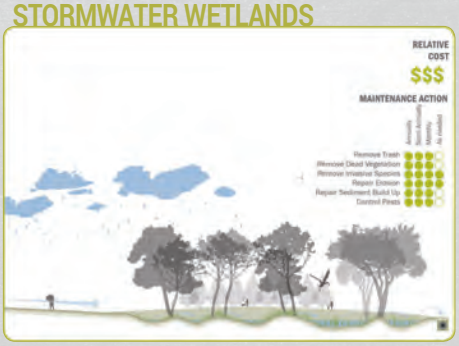
BIOSWALE

STORMWATER PLANTER BOX

PERVIOUS PAVEMENT



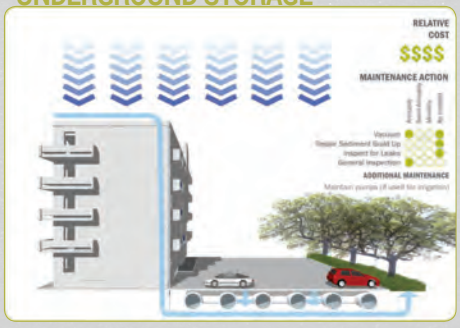
CONSTRUCTED STORMWATER WETLANDS



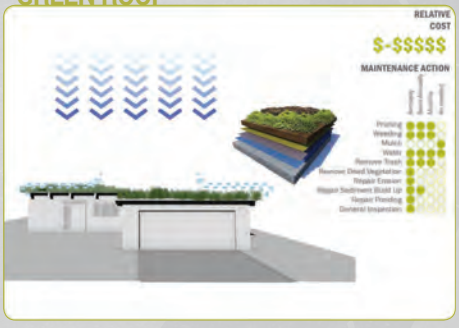
RAIN BARREL

CISTERN

UNDERGROUND STORAGE



GREEN ROOF



As illustrated, a range of techniques can be utilized to achieve low-impact development (LID). It is important to determine that the technique selected to mimic a site's predevelopment hydrology is consistent with the character of the built environment.

Source: *Designing for Impact: A Regional Guide to Low Impact Development*. Houston-Galveston Area Council.

OBJECTIVE 3.2: Promote Trail Creek as a significant recreational amenity within the region.

Combine enhanced recreational activities with opportunities for interpretation and education programs related to natural systems and resource conservation within the Trail Creek watershed.

STRATEGY 3.2.1: *Pursue Recreational Stream designation for Trail Creek.*

As set forth in 2011 Indiana Code Title 14. *Natural and Cultural Resources*, Article 29. *Rivers, Streams, and Waterways*, Chapter 8. *Recreational Streams*, Recreational Stream designation of Trail Creek would enable fishing and boating within the waterway, while prohibiting unauthorized access to the banks of Trail Creek.

ACTIONS AND INITIATIVES

In reviewing the above-mentioned statute and the rules that the State's Natural Resources Commission have created to designated a recreational stream, It is recommended that the Trail Creek Watershed Partnership undertake the following course of action on behalf of the City of Michigan City. The Trail Creek Watershed Partnership should contact the Natural Resources Commission to confirm the following course of action.

1. Define the reach of Trail Creek for which Recreational Stream designation is being sought (i.e., from E Street Bridge upstream to Liberty Trail Bridge).
2. Conduct a parcel analysis to determine ownership of parcels along both banks of Trail Creek.
3. Draft a petition outlining the benefits of Recreational Stream designation, which include:
   - decreased liability;
   - increased protection powers through enabling the Police to patrol the waterway;
   - increased severity of trespass.

   Have property owners sign the petition in support of designation.
4. Present the environmental, economic, recreational, tourism-related benefits of the Trail Creek Recreational Stream designation initiative to the Mayor, City Council, Plan Commission, and Director of the Sanitary District and request City sponsorship.
5. Present the Trail Creek Recreational Stream designation initiative to the LaPorte County Drainage Board and petition for a resolution of support.
6. Petition the Indiana Natural Resources Commission (NRC) to advertise and then conduct a public hearing authorizing the identified reach of Trail Creek to be officially designated as a Recreational Stream.

STRATEGY 3.2.2: *Improve pedestrian access to key reaches of Trail Creek.*

ACTIONS AND INITIATIVES

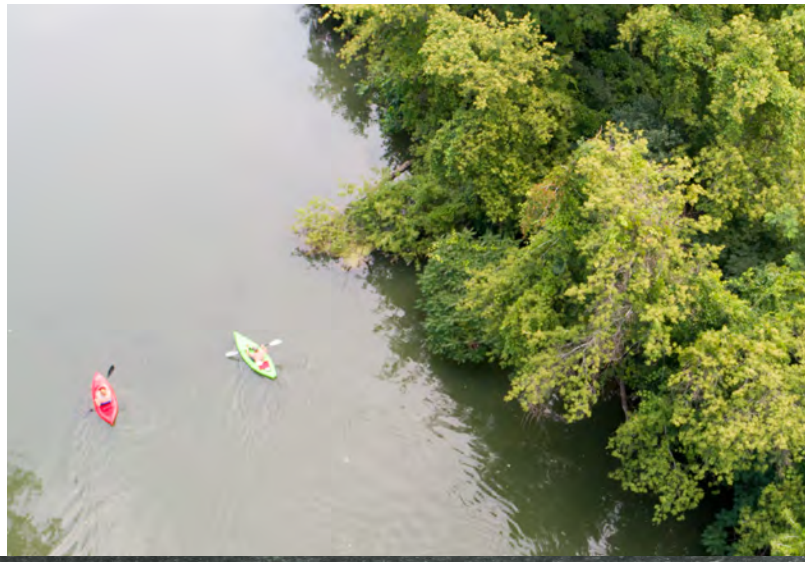
1. As proposed within the *Trail Creek Open Space Study* (April 2011):
   - Continue to promote the use of the existing paddler access point at Millennium Plaza;
   - Enhance existing paddler access point at Hansen Park.
2. Improve access to Trail Creek at Friendship Gardens and at Cheney Run Wetland Park.

STRATEGY 3.2.3: *Develop a Trail Creek Blueways program.*

ACTIONS AND INITIATIVES

1. Coordinate with Northwestern Indiana Regional Planning Committee's (NIRPC's) 2020 Blueways Plan.

1. Promote Trail Creek Blueway (refer to TFC Map 7, *Trail Creek Blueway*) as part of the Northwest Indiana Regional Planning Commission (NIRPC) Blueways system (available at: http://nirpc.org/media/54990/WaterTrailsSall.pdf).



LEGEND
City Limits
Comprehensive Plan Area
Off-Street Recreational Trails
On-Street Bike Lanes
Boat Launch
Lake Michigan Water Trail
Trail Creek Blueway
Dunelend Beach
Michiana Shores
Long Beach
Long Beach Country Club
Stockwell Woods
Michigan Township
Sheridan Beach Esplanade
Friendship Botanic Gardens
Oak Hills Park
Washington Park
Canada Park
Trail Creek
Charles R. Wescott Park
Hansen Park
Krueger Memorial Park
Winding Creek Cove Park
Pottawattomie Country Club
Tall Timbers Park
Ridgeland Park
Walker Street Playground
Karwick Nature Park
Water Tower Park
Pullman Field
Joe Hawkins Memorial Park
Cleveland Avenue Park
Gill Field
Zilla Park
Michigan City
Michigan City Municipal Golf Course
Mott's Woods
Congdon Park
MC Fish and Game Club
Ames Field
Gardena Park
Nelson Park
Trail Creek
Barker Woods Nature Preserve
Ruby Woods
Trail Creek Fen
Adams Park
Henry Lake Area
PORTER COUNTY
LA PORTE COUNTY
Coolspring Township
Creek Ridge County Park
Patriot Park
Michigan City Campground
12
20
94
421
212
MOMENTUM: MICHIGAN CITY 2040
THE FUTURE CITY
TFC Map 7: Trail Creek Blueway
04
2,250
,500
9,000
Feet
Client: City of Michigan City
Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham
Primary Data Sources: City of Michigan City, LaPorte County, Porter County, Indiana DNR, and ESRI
Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranties made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.
ADOPTED November 20, 2018

STRATEGY 3.2.4: *Utilize key stream corridors within the Trail Creek watershed to function as greenways.*

As depicted on TFC Map 22, *Future Land Use*, several riparian corridors, including the Trail Creek West Branch, East Branch (Bull Ditch), Main Branch, Waterford Creek, are depicted as future greenways.

ACTIONS AND INITIATIVES

1. Conduct feasibility determination studies regarding enhancing these stream corridors to function as greenways.
2. Begin by examining land ownership along the streams.
3. Develop alternative recreational trail alignments and trailheads, and develop order of magnitude costs.

OBJECTIVE 3.3: Preserve and manage sensitive lands within the Planning Area.

STRATEGY 3.3.1: *Support and provide critical input into the Sanitary District's Land Acquisition Framework program.*

As outlined within the Sanitary District's draft *Land Acquisition Framework* report, the purpose of this framework program is to identify public and privately owned parcels for possible acquisition and subsequent implementation of green infrastructure strategies, tools and techniques to aid in stormwater management, for recreation, and for incorporation into the City's *Open Space Plan*. This analysis has resulted in the identification of the top 20 "most suitable" parcels for acquisition, as well as the creation of tools that will allow City staff to view the results for all parcels within the City. The Sanitary District's consultant, the Delta Institute, developed an index framework to assess the suitability of parcels within Michigan City for acquisition. Relevant parcels were evaluated according to a series of criteria that were grouped under three subcategories: 1) Site Readiness, 2) Stormwater Management, and 3) Recreation and Conservation; as depicted in TFC Table 12, *Land Acquisition Criteria*.

Using the framework outlined above, a total of 17,617 parcels in and around Michigan City were analyzed and scored; normalizing values to a 0-100 scale. The higher the value, the more suitable a parcel is deemed for acquisition.

The following represent some of the overall findings and characteristics of the selected top 20 parcels.

- **Parcel Size**: The cumulative acreage of the top-scoring parcels is 106.5 acres, the largest of which is 27.1 acres and the smallest is less than a tenth of an acre.
- **Parcel Ownership**: The majority (55 percent) of the top 20 parcels are privately owned. The remaining parcels are publicly owned by either other Michigan City Departments or other local state and county agencies.
- **Parcel Property Class**: 45 percent of parcels are vacant residential platted lots. 45 percent of the parcels are exempt (state, municipal, or board of education), and 10 percent of parcels are commercial vacant land.
- **Improvement Status**: 55 percent of parcels are unimproved (do not have structures), and 45 percent of parcels are improved (have structures).

TFC Table 12, Land Acquisition Criteria

No.	Criterion	Score
Site Readiness		
1.	Is parcel under public ownership - Michigan City or MC Sanitary District?	4
2.	Is parcel under public ownership - other MC Department?	3
3.	Is parcel under public ownership - other local, county, or state agencies?	2
4.	Is parcel unimproved / vacant?	4
5.	Does parcel intersect a wetland?	2
6.	Is parcel adjacent to public ownership?	1
7.	Is the parcel within a TIF District?	1
Stormwater Management		
8.	Is parcel adjacent to waterways?	4
9.	Is parcel within area with predefined stormwater issues?	3
10.	Is parcel within floodplain?	2
11.	Does the parcel contain outfalls?	1
Recreation and Conservation		
12.	Is parcel within Trail Creek Corridor?	3
13.	Is parcel adjacent to existing managed lands?	2
14.	Does parcel contain a fishing access point?	1

ACTIONS AND INITIATIVES

Based on review and analysis of the top 20 parcels selected for potential acquisition, the following observations and recommendations are offered:

1. Make sure that the criteria used for identifying lands for acquisition are consistent with criteria used for concurrent land preservation programs administered by other organizations and agencies; so as to advance the work of others and hopefully accrue additional synergies related to functional connectivity.
2. Consider reducing the scoring value for publicly-owned lands, and lands that currently possess wetlands and surface waters; as these lands will likely not be developed in the near future.
3. Exclude lands along Trail Creek downstream of the E Street Bridge, as these parcels are not considered sensitive and will likely be redeveloped to serve other public purposes.
4. Prioritize land acquisition recommendations on parcels that possess high landscape value, that are currently being threatened due to development pressures.

STRATEGY 3.3.2: *Promote landscape functional connectivity within the Planning Area.*

According to the Chicago Wilderness' report, *Refinement of the Chicago Wilderness Green Infrastructure Vision, Final Report* (2012), a system of interconnected habitats is more likely to maintain natural communities and ecological processes. Landscape ecology recognizes two different forms of habitat connectivity: *structural connectivity* refers to the physical characteristics of landscape elements like shape, size and location of features in the landscape, ignoring the behavioral response of organisms to landscape structure; and *functional connectivity*, which describes the degree to which landscapes actually facilitate or impede the movement of organisms and processes. A link or linkage in this analysis refers "to an arrangement of habitat (not necessarily linear or continuous) that enhances the movement of animals or the continuity of ecological processes through the landscape."

ACTIONS AND INITIATIVES

1. Reduce fragmentation within large patches of natural open space area due to development.

Sidebar

Ecosystem Services

Trees and forests are valued for basic goods, such as food and wood fiber, but they deliver important services that are often perceived to be free and limitless - air and water purification, flood and climate regulation, biodiversity, and scenic landscapes are just a few. Taken for granted as public benefits, ecosystem services lack a formal market and are traditionally absent from society's balance sheet.[1]

Ecosystem services make up our natural life support system and are a form of natural capital.

Like financial capital, manufactured capital, and human capital, natural capital is a requisite for economic progress and human welfare (Hawken, et al., 1999). Accounting for natural assets requires measuring the stocks and flows of ecosystem services and making sure the people who rely on these assets know their value and the cost of losing them. Understanding the extent to which a forested landscape purifies the air or moderates coastal flooding, for example, can lend priority to regional investments in land management and conservation.

Valuing ecosystem services presents an opportunity to:

- Promote public awareness of the importance of forests, wetlands, and grasslands;
- Provide an economic incentive for private landowners to own and sustainability manage forests and rangelands; and
- Encourage ecological restoration and support the partnerships and innovative solutions needed to finance restoration activities.

Resting on the concept of sustainability, ecosystem management is described as the optimum integration of human needs and requirements, the ecological potential of a landscape, and economic and technical considerations (Jensen and Everett 1994, Zonneveld 1988). The main principle, then, is to sustain the integrity of ecosystems (i.e., ecosystem functions, composition, and structure) for future generations while providing immediate goods and services to an increasingly diverse public (Jensen and Everett, 1994; Overbay, 1992).

Green Infrastructure

Planners' understanding of best environmental practices are typically siloed within environmental, social and economic "solutions." Rarely are complex issues approached from an integrated, systems-oriented perspective. Green infrastructure offers an alternative to this narrow approach – a way of not only tackling specific challenges head on, but of realizing multiple secondary benefits at the same time. It is through this integrated approach that the full ecological potential of landscape systems will be harnessed. By considering the widest range of functions a resource can perform simultaneously, green infrastructure can enhance the primary use of the land and unlock the greatest number of benefits.

Green Infrastructure refers to a strategically planned and managed network of wilderness, parks, greenways, conservation easements, working lands and sites that intersperse and connect rural areas, towns, and cities.

When appropriately planned, designed and managed green infrastructure can function to provide an array of interrelated benefits and ecosystem services. Green infrastructure has conservation value that supports native species, maintains natural ecological processes, sustains air and water resources, and contributes to the health and quality of life for communities and people. It is our natural life support system.[1]

- **As open space**, green infrastructure provides recreational opportunities and places for people to enjoy being outside.
- **As a system of greenways**, green infrastructure can provide corridors for active transportation, increased biodiversity, and an effective means to manage storm water.
- **As a forest canopy**, green infrastructure offers protection from the harmful effects from urban heat islands by providing shade and cooling, as well as improved air quality.

1 Northeastern Illinois Planning Commission, 2004

The simultaneous, sustainable and multi-functional benefits of green infrastructure cannot be underestimated. Beyond being potentially more cost-effective and capable of meeting the environmental, social and economic objectives than conventional 'gray' infrastructure; green infrastructure, as a natural, ecosystem service-providing infrastructure, can help raise the adaptive capacity and urban resilience of our regions, communities, neighborhoods and individuals.

SCALES AND DENSITIES

Green Infrastructure should be strategically preserved, planned, designed and managed at a range of spatial scales to provide useable space while supporting natural and ecological processes.

- **At the regional scale**, planning and managing green infrastructure systems should focus on retaining and expanding areas of continuous and unfragmented natural resources, such as woodlands, wetlands and prairies; as well as large expanses of agricultural lands, to ensure that prime farmland remains connected and viable. Green infrastructure systems should also be planned in conjunction with regional transportation infrastructure and planned growth areas. Because communities are the focus of growth they stand to benefit the most from green infrastructure.
- **At the local government scale**, green infrastructure plans should identify land for preservation and management ahead of future development. The development of greenways between large areas of natural resources is perhaps best applied at the local government or community level. Indeed, increasing ecological carrying capacity can really only happen in cities, as the eco-productivity of natural areas cannot be increased without destroying their evolutionary logic.[2]
- **At the district and neighborhood scales**, green infrastructure techniques mimic natural processes that can reduce the need and costs for certain gray infrastructure.[3] When stormwater runoff is diverted from a conventional stormwater system to areas where water can be evaporated, infiltrated, or captured and reused, water quality is improved.
- **At the site scale**, the application of low-impact development strategies, tools and techniques can slow stormwater runoff so it does not overload conventional stormwater drainage systems. Green

2 Birkeland, 2014.
3 Heartlands Conservancy, 2013

roofs and blue roofs can detain stormwater runoff, increase the longevity of roofing materials by reducing thermal shock, and reduce cooling costs. Rain gardens, vegetated swales, and other forms of micro-detention can be effective in restoring a site's pre-development hydrology.

IDENTITY AND PLACE

Green infrastructure, as embodied in a community's parks, gathering places and open space networks enhances a city's form, sense of place and identity; and provides a system of spaces and places through which people can connect with nature. The cultural connection to place helps to shape a community's outlook on the broader landscape and forges bonds between people and the physical dimensions of their community. Despite this understanding of people and place, the current planning and design paradigm through which communities are designed leads to the development of increasingly homogeneous environments and the disconnection and disruption of people with the landscape, its open spaces and ecosystem services.[4] Resilience and sustainability are ultimately determined by the way people choose to live. Communities and neighborhoods must be designed to engender a sense of place and identity so as to inspire within people a renewed connection with the landscapes within which they live.

PLANNING PRINCIPLES

Within APA PAS Report No. 571, *Green Infrastructure: A Landscape Approach*. Rouse and Bunster-Ossa (2013) identify six principles that inform the planning and design of green infrastructure:

5. **Multi-functionality.** Multi-functionality refers to the multiple overlapping functions and ecosystem services that green infrastructure provides, spanning multiple systems over a range of spatial scales. In urban areas where land is valuable and the challenges are often the greatest, it is critical that green space is of high quality and achieves multiple functions.[5]
6. **Connectivity.** Connectivity underscores the importance of green infrastructure as a physically connected network of systems and spaces. Well-connected green infrastructure resources create infrastructure that is adaptive and resilient to changes in climate, such as dramatic increases in rainfall. Physical connections make the most impact, often by creating stepping stones that enable biodiversity migration and connect places with active transportation routes.6 A connected green infrastructure system provides greater ecosystem service benefits such as improved air and water quality, removal of pollutants and infiltration of stormwater. [7]
7. **Habitability**. Habitability connotes the degree to which green infrastructure provides critical aspects of habitat and home for multiple species of plants and animals; and a restorative place within which humans can recreate and be healthy. Networks of high-quality biological habitats also provide valuable links for the migration, dispersal and genetic exchange of species in the wider environment.[8]
8. **Resiliency**. Resiliency refers to green infrastructure's ability to provide protection against a shifting environmental baseline; whether it functions as a buffering mechanism against increased storm events within coastal areas; or whether it is a system of micro-detention basins that trap stormwater runoff and provide a natural means of irrigating street trees.
9. **Identity**. Identity describes the sense of being associated with a specific physiographic region that is composed of a unique community of flora and fauna, the character of which contributes to a heightened sense of aesthetic awareness that one is within and part of a larger place. With landscapes, every environmental detail is a partial disclosure of the larger environment. Within the biotic community there are indicator species – plants and animals from whose presence in a particular area can be deduced a spectrum of physical conditions that infer the ecological context of the place.
10. **Return on Investment.** Return on Investment is a principle that reminds planners and designers that the utilization of the ecosystem services provided by green infrastructure must not only be communicated to raise awareness, but translated into financial terms and justified based on the conservation of capital and other resources. Planners, designers and managers must demonstrate the contribution green infrastructure using the tools of planning policy and metrics of economic value to quantifiably validate what normally is understood using common sense.

4 Selman, 2012
5 CIWEM, 2010
6 Landscape Institute, 2013
7 Heartlands Conservancy, 2013
8 CIWEM, 2010

2. Employ ecosystem management best practices to preserve, sustain, and manage unique terrestrial ecosystems within the Planning Area.

STRATEGY 3.3.3: ***Develop a lighting program for developed areas that embraces best practices in illuminating environmentally sensitive areas*** (refer to Comprehensive Plan section, *On Lighting*, pp. 1.199-1.201).

OBJECTIVE 3.4: Improve the condition, diversity, and degree of cover of Michigan City's Urban Forest Canopy.

Based on the preliminary GIS analysis and assessment of the 2010 City Tree Inventory it appears that the City's forest canopy may be in decline. The City Forester needs the requisite tools to further analyze the condition, capital resources, and manpower to adjust the trajectory and re-establish a high-quality, functioning urban forest canopy.

STRATEGY 3.4.1: ***Continue to improve the Tree Inventory GIS program.***

The City's tree inventory was originally developed by Davey Tree Service in 2010. At the time of drafting this Comprehensive Plan the tree inventory consisted of a spreadsheet which included approximately 10,645 entries (trees). Attributes inventoried include:

- Common Name
- Address
- Location on the street (X and Y coordinates as per State Plane System)
- Botanical Name
- Size, Diameter at Breast Height (DBH)
- Condition
- Maintenance Recommendations
- Land Use
- General Notes
- Date and Time Recorded

Working with the Sanitary District's GIS Division and the City Forester the spreadsheet was translated into a GIS program. To aid in interpretation, attributes were reduced to tree location, size, and condition (red for "in decline," yellow for "fair," and green for "good" condition).

The following actions represent what needs to be accomplished to update the GIS program so it accurately reflects the current state of the City's urban forest canopy.

Urban Trees and Forests

Urban forests are an integral part of community ecosystems, whose numerous elements, including people, animals, buildings, infrastructure, water and air, interact to significantly affect the quality of urban life.

Urban forest services and benefits include, but are not limited to:

- **Local Climate and Energy Use**: trees influence thermal comfort, energy use, and air quality by providing shade, transpiring moisture, and reducing wind speeds.
- **Air Quality**: Trees improve air quality by lowering air temperatures, altering emissions from building energy use and other sources, and removing air pollutants through their transpiration.
- **Water Flow and Quality**: Trees and soils improve water quality and reduce the need for costly stormwater infrastructure and treatment by intercepting and retaining or slowing the flow of precipitation reaching the ground.
- **Noise Abatement**: Properly designed plantings of trees and shrubs can significantly reduce noise.
- **Wildlife and Biodiversity**: Urban forests help create and enhance animal and plant habitats and can act as "reservoirs" for endangered species.
- **Soil Quality**: Trees and other plants help remediate soils at landfills and other contaminated sites by adsorbing, transforming, and containing a number of contaminants.
- **Real Estate and Business**: Landscaping with trees - in yards, in parks and greenways, along streets, and in shopping centers - can increase property values and commercial benefits.
- **Individual Well-being and Public Health**: The presence of urban trees and forests can make the urban environment a more aesthetic, pleasant, and emotionally satisfying place in which to live, work and spend leisure time.

Source: USDA

LEGEND

- City Limits
- Comprehensive Plan Area
- Neighborhood and Subdivision Boundaries
- Existing Inventory of Trees
- Areas within City Limits in need of inventory
- Areas within the Planning Area in need of inventory

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Lake Michigan
Dunelend Beach
Michiana Shores
Shoreland Hills
Kimball Woods
Birch Tree Farms
Long Beach
The Shores
Long Beach Cove
Lakeland
Sheridan Beach
Beachwalk
Lake Hills
Washington Park/ Hungry Hollow
Canada
CBD
Memorial
Potawattamie Park
Tryon Farm
Mayfield Place
The Woodlands
Tall Timbers
Springfield Township
Elston Grove
Westside
Michigan City
Beechwood
Matt's Woods
Davidson Manor
Cushman Acres
White Oak Manor
Trail Creek
Southshore Acres
Forest Manor
Knapp
Edgewood Forest
Coolspring Acres
Hawthorne Park
Lakeside Glen
Southwood
Edgewood
Barker Woods
Village Green
Suburban Estates
Eddyville
Oakwood Manor
Town of Pines
Beverly Shores
Pine Township
Coolspring Township
Center Township
Southgate
12
20
94
212
421
35
PORTER COUNTY
LA PORTE COUNTY

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

MOMENTUM: MICHIGAN CITY 2040
THE FUTURE CITY
TFC Map 8, Tree Inventory GIS

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

ACTIONS AND INITIATIVES

1. As depicted on TFC Map 8, *Tree Inventory GIS* (previous page), there are several areas of the City where existing trees within the public right-of-way have not been inventoried or mapped. The City Forester should work with the Sanitary District's GIS Division as well as Neighborhood Association volunteers to develop a phased street tree inventory and mapping program for the remaining undocumented areas of the City. Street tree type (Genus and species), size (diameter at breast height), and condition should be inventoried. The City Forester will need to provide some training for volunteers. The GIS Division will need to provide detailed maps of neighborhoods requiring tree inventories.
2. Scrub the database of trees that have been removed.
3. Include additional relevant attributes, including tree type.
4. Provide data input training for additional users. Train the City's Vector Control Receptionist to input notes regarding specific trees based on calls from citizens. Train the City's Street Department Receptionist to input data into the Tree Inventory GIS when specific trees have been pruned and/or removed.
5. The City Forester should keep the City's Tree Board apprised of progress.
6. For all users of the Tree Inventory GIS, acquire the next version of ArcGIS Online when it is made available.

STRATEGY 3.4.2: *Increase the quantity and variety of trees in the City.*

ACTIONS AND INITIATIVES

1. Work with the Tree Board to prioritize areas within the City where additional (thematic) tree planting is warranted, with respect to neighborhoods, districts and corridors.
2. Work with the City's Tree Board and City Forester to develop a thematic, phased, street tree planting program for principal gateways and corridors leading in to the City. Identify tree type, size (caliper), and spacing.
3. Promote the City's Tree City USA designation. As of June 2017, Michigan City has been designated a Tree City USA Community for over 17 years.
4. Provide Tree Board members with the Arbor Day Foundation's, *Tree Board Handbook*. The *Handbook* is a comprehensive guide to help community Tree Board members understand their role and how they can best contribute to the board. The *Handbook* is a must read for any Tree Board member passionate about managing and enhancing the community's urban forest canopy. The Handbook can be purchased and downloaded from the Arbor Day Foundation's website (https://shop.arborday.org/product.aspx?zpid=2252).
5. Require drought-resistant species of street trees in all new residential developments, the planting location and spacing of which must be coordinated with utility placement to avoid problems as the street trees grow.

STRATEGY 3.4.3: *Implement and enforce the City's Tree Credit program.*

Section 27(Q) of the Zoning Ordinance provides tree credits as an incentive to preserve trees during construction of a new structure. In order to obtain tree credits one must submit a *Tree Preservation Plan* that is approved by either the Director of the City's Urban Environmental Department and/or the City Arborist. Specific protective barricading requirements must be adhered to in order to receive the necessary credits. Decisions regarding tree credits may be subject to appeal to the Board of Zoning Adjustment (BZA).

The current zoning ordinance lacks an application statement, meaning that it is not clear what zoning districts the tree credit program can be applied to. It is logical to assume that this could be applied to any district. However by stating that the tree credit program is allowed in all residential districts, the chances of someone taking advantage of the program is increased. Additionally, because Section 18 is entitled "Regulations of General Applicability," it becomes questionable whether all of the other sections of the Code apply to all districts. The concept of a Tree Credit program is a great starting point from which additional incentives and requirements can be created. Currently Section 27(Q)(8) only allows for the tree credits to be used to satisfy perimeter landscaping requirements.

ACTIONS AND INITIATIVES

1. Require tree preservation for residential development and especially for infill development and redevelopment in neighborhoods with mature tree canopies. Required open space ratios and density transfers will allow increased flexibility in subdivision design to avoid loss or disruption of mature stands of existing vegetation.

2. The City should consider using the Tree Credit program to provide developers with additional incentives such as reduced minimum lot area.

STRATEGY 3.4.4: ***Promote the theme, "Bringing Nature into the City."***

Bringing nature back into cities — or preventing it from being destroyed — is a growing imperative in cities across the world. Taking lessons from conservation biology and applying them to the built environment, cities are proactively creating habitat for certain animals, increasing urban tree canopies and even reintroducing species that have long been displaced by roads and buildings.[1]

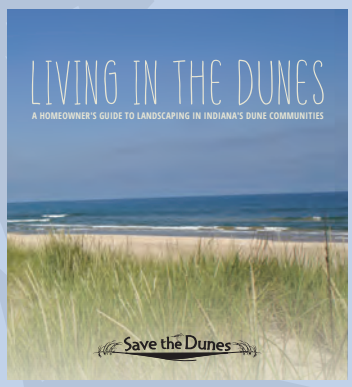
ACTIONS AND INITIATIVES

1. Augment the City's Code of Ordinances, Sec. 102-36 - Tree species to be planted through developing and distributing promotional materials, such as the Save the Dunes' publication, *Homeowners' Guide to Living in the Dunes*, see sidebar (below), *Indiana Dunes Landscape*; which are focused on perpetuating landscape character and ecosystem health and diversity through the planting of native species of flora.

1 Berg, Nate. October 19, 2016. "Bringing nature back to cities is good for plants, animals, and humans." Ensia. Available at: https://ensia.com/features/nature-cities/

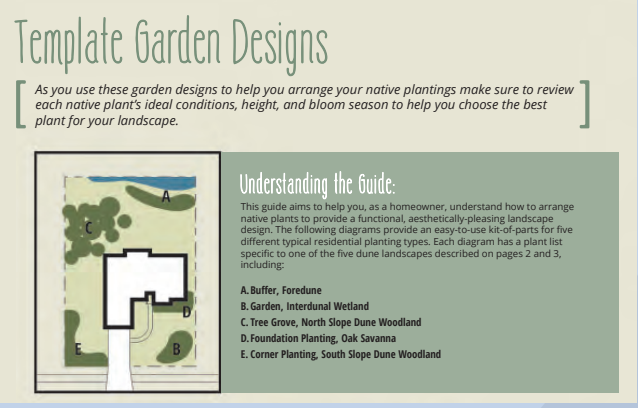
Indiana Dunes Landscape

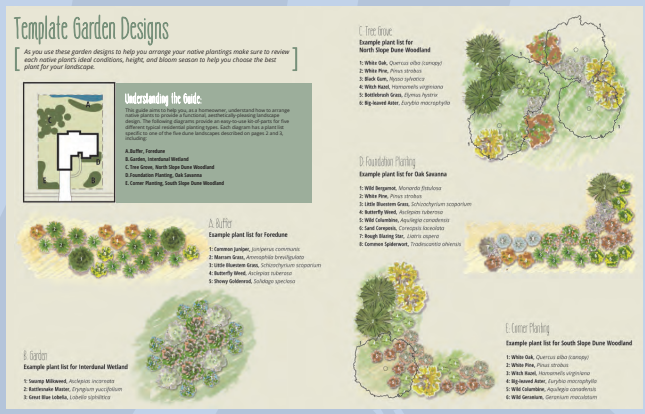
Save the Dunes with the support of National Oceanic and Atmospheric, Administration and the Indiana Department of Natural Resources, Lake Michigan Coastal Program, and additional foundations has a developed a "Homeowner's Guide to Landscaping in Indiana's Dunes Communities". This guide provides residents with the knowledge and tools to protect the dunes and the landscape they live in by identifying invasive species and which native plants to use instead. In addition, template garden designs are offered as well as best practices to ensure preservation of the dunes ecosystem.



Source: savedunes.org/dunes-residential-guide

A native plant is one that occurs naturally in a particular region, ecosystem, or habitat without direct or indirect human intervention. Below are native plant species of the Indiana Dunes region.





OBJECTIVE 3.5: Remediate contaminated lands within the City limits.

The current U.S. EPA the definition of a brownfield is "a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant." Brownfields typically are abandoned, unused, or underused industrial and commercial properties on which expansion, redevelopment, or reuse may be complicated by the presence, or perceived presence, of contamination. Brownfields remediation adds new developable land to a community's inventory of developable land, uses existing infrastructure, and adds new construction, investment and jobs to the City. Communities can use brownfields redevelopment to meet a series of goals, including neighborhood revitalization, open space creation, crime reduction, blight clearance, workforce development and growth management. Brownfields, therefore, can be important catalysts for economic development and reduces pressure to develop greenfield sites. In an IEDC study, which sampled 107 projects, research found that $1 of public investment in brownfield redevelopment leverages an average private investment of about $2.50.[1]

STRATEGY 3.5.1: *Remediate and redevelop brownfield sites and other developed lands that suffer from environmental or other constraints.*

As depicted in TEC Map 40, *Brownfields*, there are well over 60 identified brownfields within the City limits.

The *City of Michigan City Brownfields Inventory* (2016) lists those sites that, A) are known to have environmental contamination; B) sites with unknown environmental conditions; where there is warrant for further environmental assessment; and C) sites that require no further action (environmental remediation has been completed and the Indiana Dept. of Environmental Management (IDEM) has issued a letter stating that no further action (NFA) is required. These categories have been incorporated into TFC Table 13A-B, *Brownfields Remediation Prioritization*. This table prioritizes the list of brownfields sites within the City limits requiring remediation over the 20-year horizon of this Comprehensive Plan. Sites have been prioritized based on:

1. High redevelopment potential (e.g., Site No. 44: 11th Street Station);
2. Proximity to the lakefront and Trail Creek (e.g., Site Nos. 10-15; 16-20; 23-25);
3. Proximity to the South Shore Rail Line double-tracking project (e.g., Site Nos. 21-22; 28-29; 45-49, 35)

Several sites presumed to be contaminated have been included within TFC Table 13A-B, that were not identified within the 2016 Brownfields report, such as the 11 parcels associated with the former Barker-Pullman Rail Yard site.

ACTIONS AND INITIATIVES

1. Based on TFC Table 13A-B, develop a brownfields remediation prioritization program which identifies, in order of priority, remediation of sites that are likely to be environmentally contaminated. Review TFC Table 13A-B on an annual basis to re-confirm prioritization. Determine which site must be remediated in order to implement the double-tracking construction program. For those sites with unknown environmental contamination, perform the requisite environmental assessment to determine severity and feasibility of remediation.
2. Redevelopment of brownfields sites requires an environmental assessment to determine the extent of contamination and to develop remediation strategies. The feasibility of site cleanup, market forces, and other factors may help to define appropriate reuse options, which range from open space to mixed use development. For those sites known to be contaminated, work with a licensed environmental consulting firm to develop a program, schedule and budget to complete the environmental assessment and environmental remediation.
3. Provide incentives, investments, technical assistance and other direct support to overcome financial-feasibility gaps to enable remediation and redevelopment of brownfields..
4. Follow the passage, administration, and state allocation of the U.S. Congress' Brownfields Enhancement, Economic Redevelopment, and Reauthorization Act of 2017, as administered by the U.S. EPA, to provide funding for the remediation of brownfield sites.

1 IEDC. *Economic Development Reference Guide. Available at: https://www.iedconline.org/clientuploads/Downloads/IEDC_ED_Reference_Guide.pdf*

TFC Table 13A, Brownfields Remediation Prioritization

Sites with Known Environmental Contamination

Priority	Site No.	Property Address	Property Owner	Property Size	Current Property Use	Past Property Use	Environmental Information
1	44	Former South Shore Rail Road Station, 114 East 11th Street	Campo Development Group LLC	n/a	Vacant building	South Shore Rail Road Station	No documentation present on IDEM's Virtual File Cabinet website. Contaminated soils and groundwater exist below this property. Reports are present in City files.
2	28	Former Chrysler-Plymouth Dealership, 824 East 11th Street/ Concord Custom Cleaners, 1033 East Michigan Boulevard (See Note below)	Michigan City Redevelopment Commission	0.2732 acres	Vacant building	Auto dealership (auto sales and service)/dry cleaner in east corner of property (prior to 2001)	Chrysler-Plymouth Dealership - Reportedly, four gasoline USTs were removed from the site in 1991. The site was a generator of hazardous waste. Concord Custom Cleaners - Reportedly, five USTs were removed from the site in 1992. The site was identified as a generator of hazardous waste. Contaminated groundwater exists below these properties. Reports are present in City files.
3	15	Blank Management Group LLC,	Blank Trail Creek, LLC	5.20 acres	Office/ warehouse	Pump manufacturing	SCP Site No. 000000206 received a NFA-Commercial/Industrial Standard from IDEM for soils and groundwater. Reports are present on IDEM's Virtual File Cabinet website.
4	23	Trail Creek Redevelopment Area, East of East Michigan Boulevard, North of East 8th Street and South of Trail Creek	Michigan City Redevelopment Commission	1.65 acres -- 0.57 acres -- 1.07 acres	Vacant lots	Bensz Boat Storage Facility; Norfolk and Western Railroad Property; Erincraft Facility; Weber Sign Service Facility; and, Hoosier Ice House (Sobkowiak Property).	Sobkowiak Property (Indiana Brownfields Site No. 4040034 received a NFA-Residential Standard from IDEM for soils and groundwater. Weber Property (Indiana Brownfields Site No. 4030055) - Impacted soils were remediated to IDEM's Residential Standard. Based on 2012 results, groundwater below the Weber Property was not impacted and can be closed at the Residential Standard. Bensz Boat Storage Facility (Indiana Brownfields Site No. 6060102), Erincraft Facility (Indiana Brownfields Site No. 4071001) and Norfolk and Western Railroad Property (Indiana Brownfields Site No. 4030053) - Impacted soils were remediated to IDEM's Residential Standard. Contaminated groundwater exists below these properties. Reports are present in City files and on IDEM's Virtual File Cabinet website. Beacon Parcel ID: 460128304002000022 Beacon Parcel ID: 460128304008000022 Beacon Parcel ID: 460128304009000022
5	45	Lakeshore Convenience, 1002 Franklin Street	Mahmoud Jarrar and Abdulla Bassaam	0.329 acres	Vacant store	Dry-cleaning plant and auto service station	The site was identified as a generator of hazardous waste. Contaminated soils and groundwater exist below this property. Reports are present in City files.

Note: Currently, two sites are considered to have been fully assessed and could move forward to remediation: Site 28 - Former Chrysler-Plymouth Dealership (824 East 11th Street)/Concord Custom Cleaners (1033 East Michigan Boulevard) and Site 23 - Trail Creek Redevelopment Area (East of East Michigan Boulevard, North of East8th Street and South of Trail Creek). Michigan City has retained a law firm to litigate both of these sites for environmental assessment/remediation costs as PRPs have been identified.

TFC Table 13B, Brownfields Remediation Prioritization

Sites with Unknown Environmental Contamination

Priority	Site No.	Property Address	Property Owner	Property Size	Current Property Use	Past Property Use	Environmental Information
6	10	Former Manufacturing Facility, 1215 East 2nd Street	Tellus Properties LLC	0.3873 acres	Vacant building	Light manufacturing and assembly	No documentation present on IDEM's Virtual File Cabinet website.
7	11	Vacant Lot, 1203 East 2nd Street	John Chalikian	0.2439 acres	Vacant lot	Commercial warehouse	No documentation present on IDEM's Virtual File Cabinet website.
8	12	Vacant Lot, 1125 East 2nd Street	Vanessa Corley	0.2640 acres	Vacant lot	Auto sales/car wash	No documentation present on IDEM's Virtual File Cabinet website.
9	13	Vacant Building, 210 Cook Street	Gregory Liput and Margaret O'Malley	0.1147 acres	Vacant building	Industrial shop	No documentation present on IDEM's Virtual File Cabinet website.
10	14	Vacant Building, 212 Cook Street	Victor and Dorothy Palmer	0.2439 acres	Vacant building	Light manufacturing and assembly	No documentation present on IDEM's Virtual File Cabinet website.
11	62	1100 W Barker Ave	Matthew Rogatz, Trustee, Trust Harry and Peggy Maisel	15.07 acres	Class: Industrial Light Manufacturing and Assembly	Former Barker-Pullman Rail Yard	Beacon Parcel ID:460132332018000022
12	63	Otis Street	Matthew Rogatz, Trustee, Trust Harry and Peggy Maisel	0.1700 acres	Class: Industrial vacant land	Former Barker-Pullman Rail Yard	Beacon Parcel ID: 460132138021000022
13	64	Otis Street	Matthew Rogatz, Trustee, Trust Harry and Peggy Maisel	0.1500 acres	Class: Industrial vacant land	Former Barker-Pullman Rail Yard	Beacon Parcel ID: 460132138020000022
14	65	Otis Street	Matthew Rogatz, Trustee, Trust Harry and Peggy Maisel	0.1000 acres	Class: Industrial vacant land	Former Barker-Pullman Rail Yard	Beacon Parcel ID: 460132138034000022
15	66	William Street	Matthew Rogatz, Trustee, Trust Harry and Peggy Maisel	0.4500 acres	Class: Industrial vacant land	Former Barker-Pullman Rail Yard	Beacon Parcel ID: 460132138033000022
16	67	William Street	Matthew Rogatz, Trustee, Trust Harry and Peggy Maisel	0.6100 acres	Class: Industrial vacant land	Former Barker-Pullman Rail Yard	Beacon Parcel ID: 460132138032000022
17	68	Green Street	Matthew Rogatz, Trustee, Trust Harry and Peggy Maisel	0.4200 acres	Class: Industrial vacant land	Former Barker-Pullman Rail Yard	Beacon Parcel ID: 460132138002000022
18	69	William Street	Matthew Rogatz, Trustee, Trust Harry and Peggy Maisel	0.0900 acres	Class: Industrial vacant land	Former Barker-Pullman Rail Yard	Beacon Parcel ID: 460132138023000022
19	70	Otis Street	Matthew Rogatz, Trustee, Trust Harry and Peggy Maisel	0.1000 acres	Class: Industrial vacant land	Former Barker-Pullman Rail Yard	Beacon Parcel ID: 460132138024000022
20	71	Otis Street	Matthew Rogatz, Trustee, Trust Harry and Peggy Maisel	0.0970 acres	Class: Industrial vacant land	Former Barker-Pullman Rail Yard	Beacon Parcel ID: 460132138025000022
21	72	Otis Street	Matthew Rogatz, Trustee, Trust Harry and Peggy Maisel	0.2500 acres	Class: Industrial vacant land	Former Barker-Pullman Rail Yard	Beacon Parcel ID: 460132138029000022
22	18	Building, 101 Wabash Street	Cadence Holdings, LLC	0.4200 acres	Under-utilized warehouse	Commercial warehouse	No documentation present on IDEM's Virtual File Cabinet website.
23	19	Vacant Building, 403 West Michigan Boulevard	IDNR	0.6100 acres	Vacant building	Auto body/engine repair facility	The site was a generator of hazardous waste.

TFC Table 13B, Brownfields Remediation Prioritization (Continued)

Sites with Unknown Environmental Contamination

Priority	Site No.	Property Address	Property Owner	Property Size	Current Property Use	Past Property Use	Environmental Information
24	20	Vacant Building, 700 West Michigan Boulevard	James Clark	5.66 acres	Vacant building	Light manufacturing and assembly	One non-petroleum oil UST was removed from the site in 1991. Remedial activities were conducted and a NFA requested. NFA documentation from the IDEM was not available. The site was a generator of hazardous waste.
25	21	Vacant Building, 515 Sheridan Avenue	Robert Harris	2.37 acres	Vacant Building	Industrial small shops	No documentation present on IDEM's Virtual File Cabinet website.
26	22	Best Body Shop, 555 Sheridan Avenue	Willie Bogan	2.4 acres	Vacant building	Auto body shop	No documentation present on IDEM's Virtual File Cabinet website.
27	25	Seneca Petroleum Company, 1108 East 8th Street	Seneca Petroleum Company Inc.	2.5 acres	Bulk petroleum facility	Bulk petroleum facility	Reportedly, two USTs (1-gasoline and 1-diesel fuel) were removed from the site. The site was a generator of hazardous waste.
28	29	Millenial Auto Group, 1200 East Michigan Boulevard	Norman, Wanda and Paula Jones	1.291 acres	Auto sales/ service	Auto sales/service	No documentation present on IDEM's Virtual File Cabinet website.
29	41	Vacant Building, 701 West 6th Street	Philip and Layana Hanson	1.175 acres	Vacant building	Industrial warehouse	No documentation present on IDEM's Virtual File Cabinet website.
30	46	Former Al's Marathon Service Station, 902 West 11th Street	Elijah Haddad	0.135 acres	Vacant building	Auto service station	Three gasoline, one kerosene and one waste oil USTs were removed from the site in October 1989. NFA documentation was not available.
31	47	Billy's Body Shop, 501 Chicago Street	Billy and Lisa Lepard	0.067 acres	Body shop (appears vacant)	Auto service station	No documentation present on IDEM's Virtual File Cabinet website.
32	48	Grant's Body Shop, 506 Chicago Street	Jimmy Grant	0.166 acres	Auto body shop	Auto body shop	No documentation present on IDEM's Virtual File Cabinet website.
33	49	Biela Printing Company, 1004 Kentucky Street	David and Claudia Biela	0.197 acres	Printer (appears vacant)	Auto service station	No documentation present on IDEM's Virtual File Cabinet website.
34	35	Former Gardex Building, 500 North Carroll Avenue	Park Place Investment Partnership	1.3 acres	Vacant warehouse	Industrial warehouse	No documentation present on IDEM's Virtual File Cabinet website.

Environmental (E)

E Policy 1: Employ environmental technologies and green infrastructure best practices to respond to the site, its surroundings, and local and regional ecological systems.

E Policy 2: Contributions of natural resources (ecosystem services) to human well-being are explicitly recognized and valued and that maintaining their health is a primary objective.

E Policy 3: Natural community and biodiversity preservation is incorporated into planning processes and utilize their authorities to protect these habitats where they exist to sustain natural processes and minimize the likelihood of species becoming extinct.

E Policy 4: Habitat protection planning to:

- Maintain large contiguous areas of open space, rather than fragmented parcels.
- Establish priorities for habitat and species protection so that the distribution and abundance of these species is not compromised.
- Protect rare vegetative features and steer development toward more "common" areas.
- Balance public recreational opportunities with habitat protection efforts.

E Policy 5: Restoration/creation of habitat should be a component of the protection plan although priority should be given to the protection of existing high quality habitat.

E Policy 6: Identify and protect wildlife corridors which can be incorporated into the habitat protection plans as linkages to larger blocks of land; this would include riparian corridors and other greenways.

E Policy 7: Where practicable, all development, including transportation facilities, should avoid significant penetration impacts to large stands of existing forest cover. Thoroughfares and structures should be aligned and constructed to remain along or just within forest edges only.

E Policy 8: To the extent possible, preserve active agricultural land uses. Consider their value to future generations. Consider their value to the community in case of a national emergency threatening the integrity of the food supply. And think of their value as open space.

E Policy 9: Respect Environmental Constraints. Plan around the physical characteristics of the land, including slope, soil types, floodplains, wetlands, and other environmental characteristics. When feasible, retain natural site amenities. Promote the retention of stands of trees, natural vegetation, stream corridors, and environmentally sensitive areas whenever possible to act as buffers between developments and as site amenities within office developments.

E Policy 10: The site should be suitable for the proposed use based on its physical site characteristics. Sites that are steeply sloping, prone to flooding, or contain other sensitive environmental features, should be considered inappropriate.

Parks

Michigan City is rich with abundant natural resources. The unique ecosystems that compose Lake Michigan's shoreline environment, including coastal dunes, Moraine forest, and boreal flatwoods, contain some of the most ecologically diverse habitat areas in North America. In recognition of the need to preserve this unique landscape in perpetuity, the Indiana Dunes National Seashore may soon become America's 60th national park. As outlined within *The Existing City* report, approximately 17 percent of the Planning Area is composed of wetlands and surface waters. 12 percent of the Planning Area is within the 100-year floodplain. There are several open space preserves within Michigan City's parks system. As new park and recreational trail locations are considered, to accommodate the needs of an a growing population, care should be taken to connect, where possible, sensitive lands with park preserves and other open space areas.

GOAL 4.0:

A comprehensive system of well-planned, attractive, passive and active parks, open spaces, trails, facilities, and programmed recreational opportunities to serve a range of needs and lifestyles, including age, ability, accessibility and income, for residents and visitors alike.

Knowing and understanding the existing state of Michigan City's parks and recreation system is the first step in the analysis of needs. To recap, the existing City parks and recreation inventory for the Planning Area is documented in *The Existing City* report (refer to TEC Table 16, *Inventory of Existing Parks and Open Space*), which includes one national lakeshore (1,978.7 acres); two regional parks (279.7 acres); one community park (4.0 acres); 14 neighborhood parks (109.7 acres), 11 special use facilities (530.5 acres); three linear parks / greenways (10.35 linear miles); eight nature preserves (314.5 acres); and five undeveloped parcels (58.5 acres). Overall, the City's developed park and recreation system includes 34 properties comprising 716.22 acres. Including the Indiana Dunes National Seashore, LaPorte County parks, and other parks within the City that are under the jurisdiction of others (i.e., Striebel Pond and Michigan City Marina) or are privately owned and operated (i.e., Friendship Gardens), the total parks system within the Planning Area comprises 1,184.9 acres (3.9 percent of the Planning Area).

Beyond an evaluation of total acreage needs, it is important to determine whether parks are adequately distributed across the City to reflect an association with areas of predominately residential development. It is important to evaluate park service areas, and the geographic areas that have sufficient parks available, in order to identify those residential areas that are in need of additional parks and recreation facilities (refer to TEC Map 32, *Parks and Open Space*).

PARK SYSTEM PLAN

An important goal of the park and recreation system is to ensure broad distribution and accessibility. To develop a system of neighborhood and community parks that will adequately serve the existing and projected future parks and recreation needs of the community, the City needs to acquire and develop parks in areas of need of the types identified in TFC Table 14, *Park Type Needs Based on NRPA Parkland Standards*. Based on NRPA standards, there is currently a deficit of 197.5 acres of community parks. By Horizon Year 2040, this area is projected to increase to 265.5 acres. This projection can be offset, in part, by the nature preserves in and around the City limits. Further, there is currently a regional parks deficit of 65.3 acres; which is projected to increase to 143.3 acres by 2040. This projection can be offset by the National Seashore and the Creek Ridge County Park. These additional parks will help to achieve full service area coverage of community parks and an even distribution of neighborhood parks. The general locations of future parks in the City are shown in TFC Map 9, *Park Service Area Analysis.*

OBJECTIVE 4.1: Assure an even geographic distribution of parks and facilities that will provide equitable opportunity to recreational activities for all citizens.

STRATEGY 4.1.1: ***Meet and preferably exceed National Recreation and Parks Association (NRPA) standards for acres per capita and the facility demands of the population.***

Acquire land and develop parks in the identified "need areas," as displayed in TFC Map 9, *Park Service Area Analysis*, to provide an even distribution of parks and thus, equitable opportunities and convenient access in all areas of the City limits. Specifically, focus attention on the acquisition of 0.25 to 0.5 acre sites to achieve mini park standards; and one to two acre neighborhood park sites to achieve standards; and five to eight acre community parks.

ACTIONS AND INITIATIVES:

1. Endorse the park to population ratios established by the National Recreation and Parks Association (NRPA) to guide the acquisition and development of parks in all sectors of the City. Establish the minimum standards of 1.5 acres of neighborhood parks per 1000 population and five acres of community parks per 1000 residents of the City. These are nationally accepted standards that provide a benchmark goal for the City. They are minimum standards and are not overly generous in providing park space, yet can be achieved by the City of Michigan City.
2. Utilize the service area analysis (refer to TEC Map 32, *Parks and Open Space*, and TFC Map 9, *Park Service Area Analysis* to locate suitable properties for park and/or open space development within the designated need areas.
3. Continue to identify available properties within the City limits to establish new neighborhood and community parks in areas of need.
4. Continue to work with the LaPorte County Planning Department, Parks and Recreation Department, and Assessor's Office to identify available property within the Planning Area for new neighborhood and community parks in areas of need.

National Recreation and Parks Association (NRPA) Three Pillars

IMPACTING COMMUNITIES THROUGH:

CONSERVATION

The conservation pillar is aimed at protecting open space, connecting children to nature, and engaging communities in conservation practices. As such, core to the mission of public parks and recreation is the preservation of natural resources and the promotion of good conservation and stewardship practices.

HEALTH AND WELLNESS

America continues to feel the strain of a serious health crisis affecting adults and young alike. One in which citizens are plagued by poor nutrition, sedentary lifestyles, and unhealthy living habits. The scientific evidence is mounting that parks and opportunities for recreation engender healthier communities; and top health officials in the country confirm that parks and recreation are a critical solution for our nation's health epidemic.

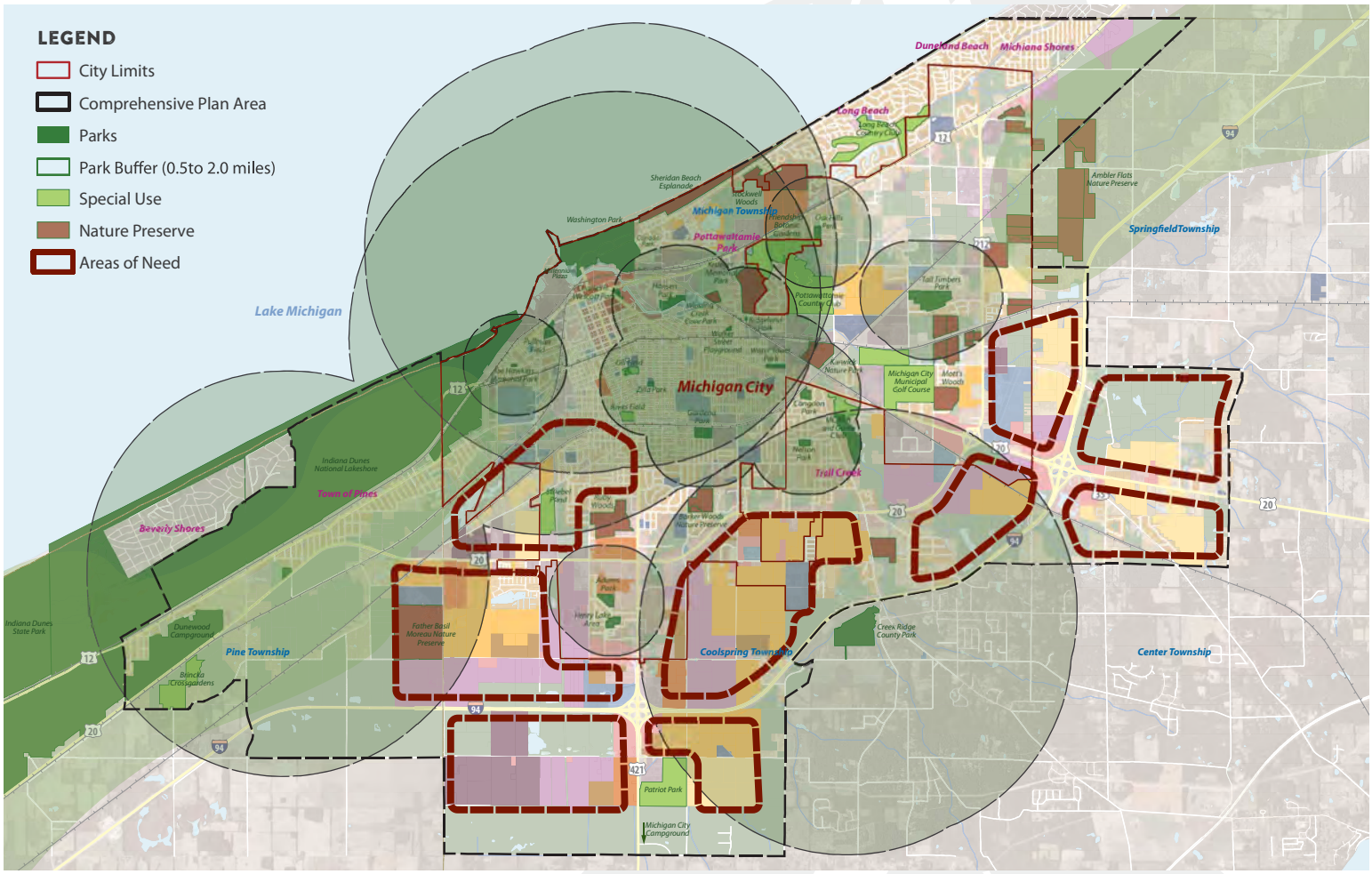
SOCIAL EQUITY

The social equity pillar is focused on ensuring all people have access to the benefits of local parks and recreation. True to the very philosophy of public parks and recreation is the idea that all people, no matter the color of their skin, age, income level or ability - have access to programs, facilities, places and spaces that make their lives and communities great.

TFC Table 14, Park Type Needs Based on NRPA Parkland Standards

Type	NRPA Standard: Acres per 1,000 Residents	Existing Michigan City Park Acreage by Park Type	Current Needs (Based on 2016 Census, 31,157 persons)	Current Existing Facilities are (+) and (-) 2016 Standard	Estimated Need Based on 2040 Projected 41,504 persons	Current Existing Facilities are (+) and (-) 2040 Standard
Neighborhood Parks	1 - 2 acres	109.7 acres	31.0 to 62.0 ac (46.5 ac average)	78.7 to 47.7 ac (62.0 ac average)	41.0 to 83.0 ac (62.0 ac average)	68.7 to 26.7 ac (47.7 ac average)
Community Parks	5 - 8 acres	4.0 acres	155.0 to 249.0 ac (201.5 ac average)	-151.0 to -245.0 ac (-197.5 ac average)	207.0 to 332.0 ac (269.5 ac average)	-203.0 to -328.0 ac (-265.5 ac average)
Regional Parks	5 - 10 acres (200+ acres desirable)	167.7 acres	155.0 to 311.0 ac (233.0 ac average)	12.7 to -143.3 ac (-65.3 ac average)	207.0 to 415.0 ac (311.0 ac average)	-39.3 to -247.3 ac (-143.3 ac average)
	Subtotal	**281.4 acres**	**481.0 acres**	**-200.8 acres average**	**642.5 acres**	**-361.1 acres average**
Special Use Facilities, Nature Preserves, and Open Spaces		903.5 acres				
	Total	**1,184.9 acres**		**-200.8 acres average**		**-361.1 acres average**

TFC Map 9, Park Service Area Analysis



The Benefits of Parks in Advancing the Development of Healthy Communities

According to the National Recreation and Park Association (NRPA), parks and recreation possess three values that make them essential services to communities:

ECONOMIC VALUE:

Parks improve the local tax base and increase property values;

Cities can use parks to reduce public costs for stormwater management, flood control, transportation, and other forms of built infrastructure;

Quality parks and recreation are cited as one of the top reasons for business relocation decisions;

Park and recreation programs generate revenue from operating costs; and

Indirect revenues are generated for the local and regional economies through the hosting of sports tournaments and special events such as arts, music, and holiday festivals. Economic activity from hospitality expenditures, tourism, fuel, recreational equipment sales, and many other private sector businesses yield more sustainable local and regional economies.

PUBLIC HEALTH AND ENVIRONMENTAL BENEFITS:

Parks are the places that people go to get healthy and stay physically fit;

Parks and recreation programs and services contribute to the health of children, youth, adults and seniors;

Designing places within which people can become physically active can improve individual and community health, and result in an increase of residents who exercise regularly;

Research shows correlations between the reduction of stress, lowered blood pressure, and perceived physical health and the length of time spent in parks;

Parks and other conserved open spaces help to improve water quality, protect groundwater, prevent flooding, improve air quality, produce wildlife habitat, and provide places for individuals to connect with natural environment and recreate outdoors;

Cities can use parks to help protect biodiversity; and

When planned as part of a system of green infrastructure, parks can help shape urban form and buffer incompatible uses.

SOCIAL IMPORTANCE:

Parks are a tangible reflection of the quality of life in a community; providing identity for citizens and enhancing the perception of quality of life in the community;

Parks provide gathering places for social groups and families, as well as for individuals of all ages and economic status, regardless of their ability to pay for access;

By providing gathering places, parks facilitate social interactions among residents that are critical to maintaining community cohesion and pride, as well as developing social ties that become the glue that holds the community together and drives future actions;

Voter approval rates for bond measures to acquire parks and conserve open space has exceeded 75 percent in recent years, revealing the public's prioritization of parks in government spending;

Parks and recreation provide places for health and well-being that are accessible by persons of all ages and abilities, especially for those with disabilities; and

Community involvement in the planning and design of neighborhood parks, as well as access to parks and recreation opportunities are positively associated with lower crime rate, vandalism, and juvenile delinquency.

Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.

Source: World Health Organization

STRATEGY 4.1.2: ***Accommodate the current and future needs of residents by providing a system of mini-parks and neighborhood play areas.***

Create smaller parks in portions of the City where development has taken place previously without parks.

The NRPA has developed standards that help to define and characterize specific park types. Mini- or pocket parks are typically no larger than 0.25 to 0.5 acres in area. Pocket parks provide a safe and inviting environment for surrounding neighborhood residents. They also meet a variety of needs and functions, including: small event space, play areas for children, spaces for relaxing or meeting friends, taking lunch breaks, etc. Successful pocket parks have four key qualities: 1) they are accessible; 2) allow people to engage in activities; 3) are comfortable spaces and have a good image; and finally, 4) are sociable places: providing a place where people meet each other and take people to when they come to visit. The benefits of these unique urban spaces often include one or several of the following:

- Support the overall ecology of the surrounding environment;
- Help protect and conserve local wildlife, landscape, and heritage;
- Reduce pollution, traffic, and consumption of resources, such as oil;
- Empower local residents to make decisions that affect their community;
- Make communities safer and more sociable;
- Improve fitness and health;
- Regenerate run-down areas;
- Reinforce relationships between local authorities and communities;

Though pocket parks vary according to specific purposes and locations, there are numerous characteristics that the majority of parks have in common. For example:

- Pocket park users should not have to walk more than 5 to 10 minutes to reach their destination;
- Since parking may or may not be provided, the parks should be accessible by both foot and bike, and should not require the use of a car.;
- Parks should serve a resident population of approximately 500-1000 persons;
- Parks should strive to accommodate as many different users as possible, prioritizing the needs of surrounding neighborhoods;

MindMixer Results

What one attraction are you sure to show off in Michigan City?

Washington Park Beach

"There is no comprehensive plan or vision surrounding the Washington Park Beach and associated parkland. We have an amazing natural asset in our community that is truly unique yet under utilized ... "

- Community gardens are a popular choice when creating a pocket park that is being designed for neighborhood interaction by people of all ages (refer to Strategy 11.3.4, page 1.305). Unlike playscapes, they typically do not include play structures; instead they provide the land, resources, and informational support necessary to grow food for local sale and consumption. Community gardens have a variety of purposes for the people they serve; they unite residents of all ages in fun and productive outdoor activities and facilitate the growth of community solidarity and neighborhood revitalization.

ACTIONS AND INITIATIVES:

1. The City's Parks and Recreation Department should continue to work with the City's Sanitary District to map all publicly owned properties, including those owned by the City, County, and state and federal governments, which may provide opportunity for the development of pocket parks or public open spaces.
2. Consider establishing site selection criteria with which to prioritize decisions regarding new park property and/or acceptance of land donation.
3. Seek to acquire land for neighborhood parks within the developed areas where there are identified geographic deficiencies, which may be vacant tracts or one or two vacant parcels. Utilizing standard park facilities, such as benches, a water fountain, trees and shrubs (depending on the size of the parcel, some playground equipment), develop a standard pocket park design program and cost estimate to facilitate discussion regarding the character and costs of physical improvements, and maintenance of said improvements.

4. Continue to work with community gardening organizations to convert unused available land into neighborhood garden plots.
5. In conjunction with homeowners associations, develop and publish a step-by-step, Adopt-a-Park program for mini, "pocket" parks within neighborhoods. Solicit the involvement of neighborhoods and local organizations to create shared stewardship through maintenance and patrolling of parks and recreation areas. The program will need to have formalized standards as to the requirements for park maintenance and improvement activities. It is also advisable that the program be initiated on a one-year trial basis with each adopting organization, with an evaluation before extending the program for a longer duration.

   The NRPA has summarized a series of important considerations when developing pocket parks in neighborhoods and commercial districts:

   a. **Secure the community's commitment.** The more inclusive the decision-making, the more successful the park will be. Start talking to as many neighbors as possible and secure their help throughout the process. Consider neighborhood resources. Is there someone who is an expert gardener, someone who knows what's going on at every block or someone that can let you use their spigot for water? Seek these people out and get them involved.
   b. **Convene a steering committee.** You will need local leadership for the project. One of the best ways to accomplish this is to create a committee with divided responsibilities in terms of planning and working on the project.
   c. **Choose a site.** Think about how the site will be used. What kinds of improvements are needed? Keep in mind how much the neighborhood can realistically take on to address issues such as the creation and maintenance of the plan and make sure the space suits all expectations.
   d. **Plan**. Determine a site plan either with the help of a landscape architect. Begin to strategize how the landscaping will be installed, how it will be funded, and how the neighborhood will maintain it in the long run.
   e. **Identify and secure potential partners.** Partners should be local businesses, nonprofits and other organizations available in the city. Identify the roles of each partner and secure a written understanding if possible.
   f. **Secure long-term and short-term funding.** Begin to look at various resources for funding in the form of grants, in-kind materials and money from businesses. Consider corporate sponsorships and be sure to think long-term about funding and saving money for maintenance and repairs in the future or to cover other necessary items including liability insurance coverage (refer to Appendix D: Sources of Funding).
   g. **Schedule work days in advance.** Assign a project manager and plan out what activities need to occur in what order. Can everything be done in one day, or will it take multiple work days?
   h. **Plan a big work day/dedication/celebration event.** This is a very important part of the process to the neighborhood and to the partners. This is a chance to possibly garner media attention, as well as involve as many people as possible.
   i. **Implement a maintenance plan.** Before any plants go in the ground, the neighborhood should agree to a maintenance plan and document it in writing.
   j. **Pursue consistent engagement.** Just as maintenance is a never-ending job, so is everything else involved. On-going communication with the neighborhood especially should keep them interested and involved in your project.

STRATEGY 4.1.3: ***Bring all existing and future parks throughout the community to an equivalent standard of quality and excellence.***

ACTIONS AND INITIATIVES:

1. Facilitate an annual walking tour of the parks with the Park and Recreation Board to maintain the familiarity with the system and to view recent revitalization efforts and new construction.
2. Conduct an annual condition assessment by a subcommittee of the Park and Recreation Board members together with five residents representing different areas of the community to achieve an objective review and critique of park conditions.
3. Use the condition assessment report to prioritize annual budget and capital funding commitments.

STRATEGY 4.1.4: ***Ensure the highest possible safety and security of parks and recreation users.***

ACTIONS AND INITIATIVES:

1. Abide by the National Program and Playground Safety guidelines, as well as the United States Consumer Products Safety Commission standards in the design and replacement of playground equipment, fall surface areas, and other recreational facilities and improvements.
2. Conduct regular inspections to identify and schedule repairs, routine maintenance and cleaning, and other necessary improvements.
3. Establish a risk management program and inspection standards to routinely correct safety violations and regularly service park facilities and equipment.
4. Perform a barrier analysis to identify major obstacles for users to safely access parks and recreation areas, such as highways and high-speed arterial roads, abutting collector streets, and railroads and evaluate safety improvement alternatives.
5. Prepare plans to overcome the obstacles for park access identified by the recommended barrier analysis, including pedestrian tunnels and walk-overs, raised crosswalks acting as a traffic calming device, installation of medians as pedestrian refuges, and other physical improvements.
6. Improve accessibility for persons with disabilities by adding sidewalk curb cuts and ramps, wheelchair accessible sidewalks and trails, and providing other accessible facilities and equipment.
7. Install emergency telephones within each park and along trail segments providing direct access to the police dispatching department.
8. Establish a "park watch" program – similar to a neighborhood watch program – in close coordinate with surrounding neighborhoods to assist in monitoring and policing the parks.

STRATEGY 4.1.5: ***Create new, year-round nature and recreation oriented attractions at Washington Park that appeal to visitor and locals residents alike.***

As recommended within the *North Gateway Implementation Strategy*, year-round (particularly in winter), tourist-oriented and recreational, attractions should be considered for Michigan City; in Washington Park and elsewhere. The types, sizes, locations, character, operations and maintenance requirements and revenue generating potential should be considered.

ACTIONS AND INITIATIVES

1. As recommended within the *U.S. Highway 421 / S. Franklin Street "South Gateway" Corridor Redevelopment Plan,* to provide additional winter activities for Michigan City's youth, and a place to host youth hockey and other tournaments, as well as to promote sports tourism (and accrue the regional economic benefits) consider the development of a 150,000 to 200,000 square foot indoor ice skating / hockey rink, as proposed for the redevelopment of the Marquette Mall site.

STRATEGY 4.1.6: ***Utilize the City's nature preserves to promote health and wellness.***

FOREST THERAPY

Shinrin-yoku is a Japanese term that means "taking in the forest atmosphere," or "forest bathing." It was developed in Japan during the 1980s and has become a cornerstone of preventive health care and healing in Japanese medicine. Researchers primarily in Japan and South Korea have established a robust body of scientific literature on the health benefits of spending time under the canopy of a living forest. Now their research is helping to establish shinrin-yoku and forest therapy throughout the world. The idea is simple: if a person simply visits a natural area and walks in a relaxed way there are calming, rejuvenating and restorative benefits to be achieved. Shinrin-yoku is the cornerstone of preventative health care and healing in Japanese medicine.

Studies have demonstrated that extended forest walks result in a wide array of health benefits, especially in the cardiovascular and immune systems, and for stabilizing and improving mood and cognition.–

- Reduced 'fight or flight' nervous system activity
- Lower cortisol – a stress indicator
- Increased immune function
- Lower pulse rate and blood pressure
- Decreased blood sugar levels in diabetic patients

ACTIONS AND INITIATIVES

1. Develop a forest bathing program utilizing the City's nature preserves.
2. The Parks Department should train a staff person to serve as the City's Forest Bathing facilitator. This position would be responsible for promoting forest bathing, including developing printed media on forest bathing benefits and techniques, and lead forest bathing seminars and hikes through nature preserves.

OBJECTIVE 4.2: Provide an interconnected system of paths, recreational trails, on-street bike lanes, and routes that are multi-purpose, safe, accessible, and convenient; and connect Michigan City's parks to neighborhoods, schools, workplaces, and other community destinations.

STRATEGY 4.2.1: ***Continue to aggressively implement the City's recreational trails program.***

Endorse the creation of linear park corridors that bisect and link parts of the City. Implement the proposed recreational trails identified on TFC Map 17, *Recreational Trails and Bikeways Program*, as the major corridors throughout the City (as discussed within the *Transportation Infrastructure* element of this report, page 1.132). These linear park corridors should be constructed, and linked (where feasible) with existing or proposed utility corridors, such as irrigation district canals, railroad rights-of-way, power line or drainage corridors, and major thoroughfares.

ACTIONS AND INITIATIVES:

1. Adopt new right-of-way width standards that allow linear corridors to be established along infrastructure corridors. For example, instead of minimum rights-of-way for drainage canals, require additional rights-of-way for gentler side slopes and trail corridors at the top of the drainage canals
2. Plan future extensions of the City's system of recreational trails and on-street bike lanes to link proposed future neighborhoods with schools and commercial centers, as indicated on TFC Map 22, *Future Land Use.*

STRATEGY 4.2.2: ***Ensure parks are accessible, safe, and connected to their adjacent neighborhoods and other areas of the City.***

ACTIONS AND INITIATIVES:

1. Improve wayfinding to parks and public spaces by installing directional signage along adjacent collector and arterial roadways and at every park entrance so that users and passers-by can easily identify public facilities.
2. Work in coordination with the City Engineer to improve off-site accessibility to each park by developing a sidewalk improvement program to repair, replace, or install new sidewalks, crosswalks, and curb cuts, in high pedestrian use neighborhoods immediately surrounding the parks, schools, and other community facilities.
3. Improve on-site accessibility for persons with physical disabilities, elderly, people with strollers, among others, so that one can travel from off-site (i.e., neighborhoods) or the parking lot, and into and through the park to each amenity. As per the Stakeholder Meeting Responses within the Public Participation section of the *Parks and Recreation Master Plan* (hereafter, Stakeholder Meeting Responses), provide additional accessibility (i.e., benches, boardwalks and observation decks) to the Promenade for elderly and handicapped citizens.
4. Ensure that ADA-compliant handicapped accessible ramps, play structures, and equipment are incorporated into every municipal park.
5. As per the Stakeholder Meeting Responses, consider adding MCT service to select parks to parks for those without transportation.
6. Add full cut-off area and security lighting in parks and school sports fields where needed.

OBJECTIVE 4.3: Acknowledge that parks and recreation needs evolve over time with changes in demographic characteristics, and respond accordingly.

There are several national trends that need to be acknowledged as the City plans for its parks, programs its recreational activities, and promotes its cultural and arts-related events.

1. Increasingly, people suffer from a lack of free time. This is a significant barrier to participation in recreation and cultural activities throughout the United States, which affects both youth and adults. A general lack of time prevents a significant percentage of citizens from participating in recreation and cultural activities as often as they would like. The Michigan City Parks Department acknowledges the need for longer operating hours and flexibility in scheduling in order to accommodate people's busy schedules.
2. More people are physically inactive. The result is higher levels of obesity, particularly among youth, and chronic disease such as diabetes, heart conditions, etc. Reliance on automobiles has created a culture of driving to destinations as opposed to encouraging active forms of transportation such walking or cycling. The popularity of video games, Internet and television are out-competing physical activities.
3. Recent studies indicate a range of emerging parks and recreation activities - including a growing demand for spontaneous, non-programmed recreation and cultural activities - where people can drop-in at their own convenience and take part in a pick-up game of some sort (responds to lack of time). Additionally, there is increasing interest in field sports beyond football and soccer, such as Ultimate Frisbee, disc golf, rugby, etc. Non-traditional sports such as skateboarding, sand volleyball, cricket, etc., are also gaining in popularity. Demands for passive recreation and cultural activities in parks, such as walking, bird-watching, picnicking, etc., are also increasing.

Based on the results of the Parks Department's survey, which received 495 responses; the results of which was included in the *Parks and Recreation Master Plan*, of the

28 parks and facilities listed, the following 16 parks were indicated as having not been visited over the last 12 months by over 75 percent of responders:

- Adams Park (85.3 percent)
- Canada Park (75.4 percent)
- Charles Westcott Park (87.1 percent)
- Hansen Park (83.7 percent)
- Joe Hawkins Park (92.4 percent)
- Karwick Nature Park (75.9 percent)
- Mott's Woods (91.5 percent)
- Oak Hills Park (93.8 percent)
- Pullman Park (81.5 percent)
- Pullman Skate Park (85.5 percent)
- Ridgeland Park (93.8 percent)
- Ruby Woods (89.1 percent)
- Tall Timbers Park (91.9 percent)
- Trail Creek greenway trail (79.8 percent)
- Walker Street Park (90.9 percent)
- Winding Creek Cove Park (88.7 percent)

STRATEGY 4.3.1: *Develop a plan to periodically monitor and quantify park and recreational facility use.*

Analyze patterns of park and facility use to determine why certain parks may be under-utilized. Undertake a parks condition assessment utilizing NRPA criteria to evaluate and rate park facilities, circulation, safety, landscaping, and other amenities.

ACTIONS AND INITIATIVES

1. Develop means with which to monitor, on an annual basis, parks and recreational facilities' use. Re-program parks as needed to ensure continued and enhanced active participation.
2. Continually monitor national trends regarding park use and identify best practices that may be applicable to Michigan City's parks program.
3. Beyond programming and maintaining recreational facilities and equipment for children and adolescents engaged in organized, team-oriented, active recreational sporting events (e.g., baseball, softball), consider passive recreational enhancements for other demographic sectors of the population (including teenagers not involved in team sports) and senior citizens.

STRATEGY 4.3.2: *Reprogram and re-design under-performing parks and recreational facilities.*

Consider ways in which to thematically rebrand certain parks in order to draw specific audiences. For example, some parks may be programmed to attract specific kinds of birds, through planting specific types of plants. Other parks may contain specific ornamental gardens. Other parks may have gardens designed to attract butterflies. Building thematic aspects into each park will pique residents' interest in seeking out parks they may normally not go to.

ACTIONS AND INITIATIVES

1. Budget consultant fees in City's Capital Improvement Program.
2. To ensure broad-based community support and participation, facilitate design workshops for the preparation of master development plans and design schematics for park properties that remain under-utilized, undeveloped, as well as for newly acquired park properties. Work with consultant to prepare a community-based park improvement program, schedule and budget.
3. Seek capital funding for park redevelopment.

STRATEGY 4.3.3: *Take full advantage of unprogrammed public space.*

ACTIONS AND INITIATIVES

1. Routinely send out email blast reminders to Parks Department constituencies about the recreational opportunities parks provide Michigan City's

residents, beyond playgrounds and places for youth sports leagues to practice and compete.

2. Embrace electronic media and ways in which kids can apply computer-based games to Michigan City's parks system. This may include geo-caching and other scavenger hunt-type games; and working with the Pokemon Company International (http://www.pokemon.com/us/about-pokemon/) to locate Pokemon creatures in Michigan City's parks and trails, as a means of drawing Pokemon Go enthusiasts to parks.

STRATEGY 4.3.4: ***Consider amending the City's Code of Ordinances to allow dogs to be walked in public parks and open space preserves.***

ACTIONS AND INITIATIVES

1. Include regulations that dogs must be on a leash at all times.
2. Include regulations requiring dog owners to pick-up dog waste. Provide dog waste bag stations in all public parks and at the entrances to open space preserves

STRATEGY 4.3.5: ***Consider developing a demonstration dog park in the City.***

STRATEGY 4.3.6: ***Consider amending the City's Code of Ordinances to allow dogs (on a leash) to accompany their owners at outdoor dining and drinking establishments.***

OBJECTIVE 4.4: Expand and diversify the Parks Department's recreational programs and activities.

STRATEGY 4.4.1: ***Ensure that recreational programs meet the interests and needs of persons of all ages and abilities by providing programs independently and in cooperation with partners.***

ACTIONS AND INITIATIVES:

1. Provide opportunities for individuals and groups (including low-income, minority, disabled, elderly, and the youth at risk populations) to participate in cultural, recreational, and educational activities that foster better health and wellness and strengthen both mind and body.
2. Consider the creation of a scholarship fund and investigate opportunities to affiliate with other agencies (i.e., public/public or public/private partnerships), special interest groups, service clubs, and the private sector in organizing and operating special events and programs.
3. As per the Stakeholder Meeting Responses, additional environmental and cultural youth education programs are needed. Also, consider the following programs:
   - re-establishing the neighborhood playground program;
   - beach, pier, and water safety programs;
   - indoor facility for hockey, soccer, etc.

OBJECTIVE 4.5: Promote and engage in the conservation and enhancement of natural and cultural resources.

STRATEGY 4.5.1: ***Continue to partner with other environmental non-profits and foundations to identify and acquire (through lease agreements, donations and partnerships) existing natural resources which warrant protection, conservation and/or enhancement; provides habitats for wildlife and endangered species or provides natural open spaces suitable for parks, recreation and both environmental and historical preservation of sites.***

ACTIONS AND INITIATIVES

1. Promote recreational and interactive educational opportunities that will attract users in the region.

Ecotourism: Economic and Conservation Benefits

Ecotourism has become a popular activity in natural areas around the world through providing opportunities for visitors to experience beautiful wonders of nature and culture as well as to learn about the importance of environmental conservation and local cultures. The definition of "ecotourism," as adopted in 1996 by the International Union for Conservation of Nature (IUCN), is: "Environmentally responsible travel and visitation to natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features, both past and present) that promote conservation, have a low visitor impact and provide for beneficially active socio-economic involvement of local peoples."

According to the Nature Conservancy, ecotourism is a tool to accrue benefits for both local people and the protected area, making it an ideal part of a sustainable development strategy where natural resources can be used as tourism attractions without causing harm to the natural area. An ecotourism initiative must have the following aspects in order to be successful:

- have a low impact upon a protected area's natural resources
- involve stakeholders (individuals, communities, eco-tourists, tour operators and government institutions) in the planning, development, implementation and monitoring phases;
- respect local cultures and traditions;
- generate sustainable and equitable income for local communities and for as many other stakeholders as possible;
- generate income for protected area conservation; and
- educate all stakeholders about their role in conservation. [1]

Ecotourism has the opportunity to boost local, regional and national economies. Visitors require numerous goods and services while traveling, including hotels, restaurants, shops, guide services and transportation systems - thus, a multitude of businesses receive direct benefits from ecotourism. Ecotourism has the potential to reduce the threats posed by conventional tourism to natural areas and communities via income generation for: conservation, local enterprise and employment, cultural exchange, environmental education, protected area justification and visitor appreciation. Ecotourism requires rigorous planning and management to realize this potential and to become successful.

Ecotourism can be defined as:

"Environmentally responsible travel and visitation to natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features, both past and present) that promote conservation, have a low visitor impact and provide for beneficially active socio-economic involvement of local peoples."

International Union for Conservation of Nature (IUCN), 1996

1 Drumm, Andy and Alan Moore (2002). Ecotourism Development: A Manual for Conservation Planners and Managers (Vol. 1). The Nature Conservancy, Arlington, VA.

2. Work with the Michigan City Economic Development Corporation (MCEDC) and the Michigan City LaPorte Convention and Visitors Bureau to create an economic development program, schedule, and budget to market, develop, and promote nature-based tourism (focused on the federal, state, and local system of parks and open space areas along Lake Michigan's shoreline within the Planning Area.
3. Evaluate comparable successful nature-based, eco-tourism programs in other parts of the country.
4. Identify key organizations that could help jump-start and maintain a nature-based tourism program.
5. Create educational programs for all age groups that emphasize individual responsibility for conservation in the community, facilitate public participation, and provide healthy, safe, and active recreation.
6. Consider partnering with others to expand the number and frequency of events in the City's park and recreation system.
7. Create a master gardener/master naturalist program and solicit their volunteer assistance in designing, creating, and managing eco-gardens and outdoor environmental classrooms.
8. Create expanded opportunities for environmental outings by offering facilities and programs to promote nature education, habitat observance, and eco-tourism (refer to sidebar, *Ecotourism: Economic and Conservation Benefits,* page 90).

OBJECTIVE 4.6: Utilize a full-range of capital / other resources to implement park and recreational facility enhancements.

FINANCING PARKLAND NEEDS

As summarized in TFC Table 14, *Park Type Needs Based on NRPA Parkland Standards*, Michigan City's anticipated growth translates into a need for additional park facilities. Developing and maintaining a high-quality park system, in response to Michigan City's projected growth, is an opportunity for the City to continue its leadership in providing for the recreational needs of the community. Michigan City must equip itself with the regulatory tools and needed capital to provide the necessary resources, both physical and fiscal, to ensure that the quality of life of the City's residents remains a top priority.

Encourage City staff to pursue alternative methods of funding park system and programming improvements, such as partnerships with non-governmental entities, grant funding sources, establishing "Friends of" organizations, and contracting out programs or operations. Consider these and other methods only where feasible and financially sound.

PARKLAND DEDICATION, FEES-IN-LIEU, AND PARK LAND DEVELOPMENT FEES

Parkland dedication is a local government requirement imposed on subdivision and site plan applications mandating the dedication of land for a park and/or the payment of a fee to be used by the governmental entity to acquire land and/or develop park facilities. These dedications are a means of providing park facilities in newly developed areas of a jurisdiction without burdening existing city residents. They may be conceptualized as a type of user fee, or impact fee because the intent is that the landowner, developer, or new homeowners - those who are responsible for creating the demand for the new park facilities - should pay for the costs of the new parks. On one hand, parkland dedication and fees-in-lieu is a fiscally conservative model in that those who are benefiting from the services are paying for it. The alternative is to raise taxes on existing residents or lower the community's quality of life, neither of which are politically attractive.

Parkland dedication fees ensure that new development pays for new park demands, thereby maintaining Michigan City's quality of life over the years to come. Based on the park acreage deficit that the City is currently facing, as well as the projected population increase of roughly 11,000 additional residents, the establishment of a new means of generating capital for funding the development, operation and maintenance of parks and recreational facilities is essential to maintaining quality of life for all residents in the face of growth.

Benefits of parkland dedication and/or fees-in-lieu are many and include:

- The City is financially able to purchase parks in accordance with a predetermined plan;
- The money for parkland development is available when needed; and,
- The residents/developer involved directly see the benefit of the park fee.

- The philosophy is that because new development generates a need for additional park amenities, the people responsible for creating that need should bear the cost of providing the new amenities. Neighborhood and community parks are intended to serve those people in proximal areas.
- A municipality may also require a developer to construct recreational facilities, pay to the municipality a fee to be used instead of dedicating land (i.e., "fee-in-lieu") or a combination of land dedication, construction of recreational facilities, or the payment of the fee. The dedicated parkland or the payment of the fee is to be used by the municipality to ensure that future residents of the subdivision or land development have adequate park and recreational opportunities.

Parkland Dedication and Fee-In-Lieu Ordinances can provide the following benefits:

- **Energy Conservation**: Recreational areas provided through parkland dedication and fee-in-lieu ordinances inherently conserve energy by encouraging efficient land use, reducing the reliance on vehicles to access recreational areas, and by creating opportunities for walkable activities based on Smart Growth principles;
- **Recreational Opportunities**: Recreational areas and opportunities can be created during the design stage of subdivisions and land developments, when design flexibility is potentially greatest;
- **Reduced Reliance on Public Expenditures**: Public expenditures for recreational facilities are reduced;
- **Additional Funding Potential**: Fee-in-lieu ordinances can generate funds to match other grant sources; and
- **Flexibility**: Fee-in-lieu can used to meet recreational needs in areas where dedicated land may not be practical.

However, the following limitations may be associated with Parkland Dedication and Fee-In-Lieu Ordinances:

- **Cannot be Used to Provide Parkland in Other Areas**: Parkland dedication and fee-in-lieu ordinances cannot be used to address an existing lack of recreational areas (i.e., parkland dedication and fee-in-lieu ordinances cannot be used to provide recreational areas for existing neighborhoods that do not have any).
- **Recreation Plan Required**: A municipality's Code of Ordinances typically requires that the governing body must have a formally adopted parks and recreation master plan, and the park and recreational facilities are in accordance with principles and standards contained in the subdivision and land development ordinance;
- **Accessibility Requirements**: Recreation land or fees, or combination thereof, are to be used only for the purpose of providing park or recreational facilities accessible to the development.
- **A problem with ordinances that contain only the land and fee-in-lieu elements is that they provide only for the acquisition of land.** The additional capital needed to transform that bare land into a park is borne by existing taxpayers. In some instances, the result is that the dedicated land is never developed into a park and remains sterile open space which detracts from a community's appeal rather than adding to it. As a result, many communities across the country have expanded their ordinances to incorporate a park development fee element to pay for the cost of transforming the land into a park.

STRATEGY 4.6.1: *Adopt a Parkland Dedication, Fee-in-Lieu, and Development Fee ordinance.*

Consider amending Michigan City's Code of Ordinances, Chapter 82, Parks and Recreation, to include a Parkland Dedication Ordinance that includes provisions for fees-in-lieu and development fees.

The Michigan City's parkland dedication ordinance should include the following provisions:

- Land must be suitable for park development and approved by the City.
- Land dedication requirements based upon one acre per a designated number of dwelling units in the entirety of the residential development and not by sections or phases;
- Designation of park zones for which fees collected within the zone will be within the zone;
- Discretion of the City to require payment-in-lieu of land dedication for expansion or improvement of existing facilities (rather than development of new facilities) within the same zone as a proposed development;
- Requirement of land dedication or fee upon issuance of a building permit where a plat is not required;
- Fees shall be equal to the sum of the average price of land and on-site improvements of other park facilities, which shall be computed on a per dwelling unit basis;
- Proportional credits for private parks and encumbered lands;
- Encourage the preservation of open space to enhance the community's livability, aesthetic quality, and natural beauty.

ACTIONS AND INITIATIVES:

1. Within the parkland dedication ordinance, stipulate that parkland dedication and subsequent improvements occur during the first phase of subdivision development.
2. Stipulate that parkland dedication fees-in-lieu are allocated to a specific fund to allow for community park dedication and subsequent fund allocation so that the City might have more opportunities to acquire larger parcels of land that benefit a larger service area rather than solely requiring dedication within the area associated with the specific residential development.
3. Include provisions and some degree of surety that will require an implementation timetable for the installation of parks to ensure that developers follow-through in their construction in a timely matter (i.e., certificate of occupancy may be deemed temporary until the park is determined to be sufficiently implemented).

STRATEGY 4.6.2: ***Consider developing park planning zones that relate to an updated Parks and Recreation Master Plan for which parkland dedication funding can be allocated.***

ACTIONS AND INITIATIVES:

1. The Parks and Recreation Department should continue to work with the Planning and Redevelopment Department to develop planning rationale and criteria through which to establish park planning zones.
2. Plan for a quarterly reporting process to share the available parkland dedication funds by planning zone and compare with the priorities within each planning zone.
3. Prioritize expenditures within each planning zone.
4. Continue to work with the City's GIS Department to input the park and recreation planning zones GIS shapefiles into the mapping function of the PRORAGIS™ system.

NRPA's Proragis™

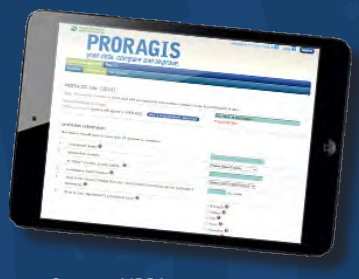


Image Source: NRPA

PRORAGIS™, which stands for *Park and Recreation Operating Ratio and GIS* system, is a tool intended to help agencies analyze and compare their performance and facilities to other similar agencies across the country.

Since its launch in 2010, the National Recreation and Park Administration (NRPA) has worked hard to get all park and recreation agencies to utilize the tool to move beyond what was previously being used as a "one size fits all" comparison between agencies. Historically, park and recreation professionals simply compared themselves using a national benchmarking standard commonly found in most park plans. These level of service recommendations came directly from the *National Park, Recreation and Open Space Standards* which was published by NRPA and used from 1971 to 1995.

STRATEGY 4.6.3: ***Work with LaPorte County to establish a parkland dedication ordinance that would apply, at minimum, to residential development within the Planning Area.***

With ongoing residential development in the Planning Area it will become increasingly important that LaPorte County partners with the City in the provision of parks within the Planning Area, including land acquisition, development, operation and maintenance of new facilities, so as not to overburden existing parks and new parks with Michigan City's City limits.

STRATEGY 4.6.4: ***Look for innovative ways to finance park improvements and activities through fund-raising, sponsorships and other sound fiscal methods.***

Direct City staff to pursue alternative methods of funding park system and programming improvement, such as partnerships with non-governmental entities, grant funding sources, establishing "friends of" organizations, and contracting out programs or operations. Consider these and other methods only where feasible and financially sound.

ACTIONS AND INITIATIVES:

1. Establish more formalized responsibilities of the Park and Recreation Board, including the solicitation of sponsorships or funding to help run recreational program activities.
2. Establish a program and acceptance criteria for donations of land for parks and recreation purposes or public open spaces, which compliments the overall system.
3. Continue to apply for funding through private foundations or other granting entities. Target grant applications that are related to parks and recreation, but are offered through non-traditional park programs (e.g., public health related grants; grants for low impact development, green building, transportation, etc.).
4. As per the Stakeholder Meeting responses, consider partnering with Michigan City Seniors, Inc. to write grants that would benefit the Senior Center.
5. Continue to pursue revenues from public agencies and organizations, and private sources (corporate/business/civic organizations) for parkland acquisition, recreation programs and facilities, and development of cultural arts programs.

6. Establish programs for lease/purchase, tax incentives, and public maintenance to entice private sector participation in park system development and maintenance.
7. Develop a tentative Capital Improvement Program (CIP) for the City's parks and recreation funding to be sure revenue expectations are met and guiding principles are followed.

OBJECTIVE 4.7: Ensure success of the organization through continued development of the staff and department.

STRATEGY 4.7.1: ***The City's Parks and Recreation Department should continue to aggressively pursue CAPRA agency accreditation.***

The designation of the Indiana Dunes National Lakeshore to America's 60th national park will increase expectations related to Parks Department staff knowledge and understanding of environmental systems and implementation of parks maintenance and operations best practices. The Commission for Accreditation of Park and Recreation Agencies' (CAPRA) Standards for National Accreditation provide an authoritative assessment tool for park and recreation agencies. Through compliance with these national standards of excellence, CAPRA accreditation assures policy makers, department staff, the general public and taxpayers that an accredited park and recreation agency has been independently evaluated against established benchmarks as delivering a high level of quality with respect to park facilities.

CAPRA ACCREDITATION PROCESS

Accreditation is based on an agency's compliance with the 151 standards for national accreditation. To achieve accreditation, an agency must comply with all 37 fundamental standards, and at least 85 percent, or 97, of the remaining 114 standards. CAPRA accreditation is a five-year cycle that includes three phases, including:

- Development of the agency self-assessment report;
- On-site evaluation; and,
- The Commission's review and decision.

If accreditation is granted by the Commission, the agency will develop a new self-assessment report which will be revisited every five years. Within each of the four years between on-site visits, the agency will submit an annual report that addresses its continued compliance with the accreditation standards.

UNDERSTANDING CAPRA STANDARDS

A standard is a statement of desirable practice as set forth by experienced professionals. In evaluating an agency for accreditation, the standards are a measure of effectiveness using the cause and effect ("if...then") approach. In practice, if an agency complies with a given standard, then it is expected that the agency's operations related to that standard will be positively affected. Viewed holistically, if an agency complies with the vast majority of the standards, then it is understood that the agency is performing a quality operation.

There are several benefits for pursuing CAPRA Agency accreditation. Benefits for the public include:

- Assurance and validation of well-administered services in accord with approved professional practices;
- Potential for external financial support and savings to the public;
- External recognition of a quality governmental service;
- Holds and agency accountable to the public and ensures responsiveness to meet their needs; and
- Improves customer and quality services.

Benefits for the agency include:

- Public and political recognition;
- Increased efficiency and evidence of accountability;
- Answers the question, "How are we doing?" through extensive self-evaluation;
- Identifies areas for improvement by comparing an agency against national standards of best practice;
- Enhances staff teamwork and pride by engaging all staff in the process;
- Creates an environment for regular review of operations, policies and procedures, and promotes continual improvement; and
- Forces written documentation of policies and procedures.

ACTIONS AND INITIATIVES:

1. Based on review of CAPRA accreditation standards, develop a realistic schedule and plan of priority action items based on a determination of which Fundamental Standards remain to be completed and which remaining Standards the Parks and Recreation Department plans to fulfill.
2. Review the "Suggested Evidence of Compliance" section in order to identify an acceptable means of demonstrating compliance with a standard.
3. Based on CAPRA guidelines, prepare an "Agency Self-Assessment" and "Evidence of Compliance" and submit to the CAPRA.
4. Upon acceptance of the above-mentioned documentation, schedule a tour for CAPRA representatives to visit Michigan City's Parks and Recreation Department and its facilities.

STRATEGY 4.7.2: ***Continue to support existing staff regarding their professional development.***

Develop and expect from staff a strong sense of personal service in connection with all recreational programs and other services in the Department.

ACTIONS AND INITIATIVES:

1. Encourage employee membership and active participation in professional organizations.
2. Provide training and outside educational opportunities for all members of the Parks and Recreation Department to keep them current with the latest standards and industry practices, including those related to maintenance issues, e.g., air conditioning, fire alarm, and plumbing systems.
3. Support staff to obtain professional certifications such as the Certified Park and Recreation Professional (CPRP), the Certified Playground Safety Inspector (CPSI) program, among others.
4. Obtain memberships and participate/attend the conferences and events of the National Recreation and Park Association (NRPA) and Indiana Park and Recreation Association (INPRA).

STRATEGY 4.7.3: ***Continue to improve the Parks and Recreation Department's image.***

As per the Stakeholder Meetings Responses, the Parks and Recreation Department is under recognized by residents and City officials.

1. Improve the Department's image by educating stakeholders on the return on investment from tourism, use of facilities and visitation to attractions that are maintained and operated by the Parks Department.
2. Improve the Parks Department's website.
3. Improve marketing for programs and events.
4. Conduct more frequent interviews with local media. Take credit for the positive things the Parks Department is doing through press releases to local and regional media, and through email blasts to the Department's constituency.

Parks and Open Space Areas (POS)

POS Policy 1: Park planning. Improve parks, recreational facilities, natural areas, and the urban forest in accordance with relevant master plans, management plans, or adopted strategies that reflect user group needs, development priorities, development and maintenance costs, program opportunities, financing strategies, and community input. Consider developing master or management plans for properties that lack guiding plans or strategies.

POS Policy 2: Service equity. Invest in acquisition and development of parks and recreation facilities in areas where service-level deficiencies exist.

POS Policy 3: Advance the development of greenways and recreational trails along key riverine corridors within the Planning Area. Encourage, through Incentives and regulations, residential subdivision design that provides for the extension of the City's greenway linkages and recreational trails through either dedication of land and/or easement for a bike/hike trail or landscape easement or dedication of extra right-of-way along a collector street for a bike/hike trail/landscape easement.

POS Policy 4: Promote the retention of stands of trees, natural vegetation, stream corridors, and environmentally sensitive areas whenever possible to act as buffers between developments and as site amenities within developments.

POS Policy 5: Outdoor public places should have unobstructed sightlines from the adjacent streets, and should be designed to deter vandalism, loitering, and other types of crime and disorder that would disrupt activities in adjacent developments and discourage legitimate users from coming to these places. Use landscape, structures, and buildings to define spaces while, at the same time, provide visual access to encourage their use and enhance safety.

POS Policy 6: Design spaces for specific and flexible uses. Programming and design should be considered in the context of neighborhood uses.

POS Policy 7: Provide play areas for a variety of ages and groups. Design landscape with opportunities for immersive experiences of nature and varied, challenging, and stimulating play elements.

POS Policy 8: Continue to employ ecosystem management best practices in the preservation, management, and interpretation of Michigan City's nature preserves.

POS Policy 9: Continue to support the work of non-governmental organizations (non-profits, foundations, land trusts) in the conservation and management of the unique and diverse ecosystems, of which Michigan City is a part.

POS Policy 10: Recreational facilities. Provide a variety of recreational facilities and services that contribute to the health and well-being of Michigan City residents of all ages and abilities. Establish and manage specialized facilities within the park system that take advantage of land assets and that respond to diverse, basic, and emerging recreational need.

Focus Area 3:

Utilities Infrastructure and Public Services

Guiding Principles

Utilities Principle 1: One Water. Integrate drinking water, wastewater, and stormwater and fit the best water to its intended use.

Utilities Principle 2: Recognize Water as an Economic Good. The recognition of water as an economic good is central to achieving equitable allocation and sustainable usage. Water allocations should be optimized by benefit and cost, and aim to maximize water benefits to society per unit cost. For example, low value uses could be reallocated to higher value uses such as basic drinking water supplies, if water quality permits. Similarly, lower quality water can be allocated to agricultural or industrial use.

Utilities Principle 3: Treat Stormwater as a Resource. Conventional development favors drains and hidden pipes for removing stormwater from a site as efficiently as possible. Low impact development techniques favor natural solutions over constructed alternatives, using trees, swales, and ponds to deal with water at ground level (as opposed to underground) in a multi-functional and aesthetically pleasing manner.

Utilities Principle 4: Natural Infrastructure: Protect and restore natural system functions.

Utilities Principle 5: Ecological Sustainability. Aquatic ecosystems are acknowledged as water "users," and that adequate allocation of available water resources is made to sustain their natural functioning. Achieving this criterion also requires that land uses and developments that negatively impact these systems are avoided or limited.

Utilities Principle 6: Manage Stormwater at its Source. Instead of concentrating water treatment in large, centralized facilities, employ a decentralized system of structures that capture and treat precipitation where it fall, more closely mimicking natural systems.

Utilities Principle 7: Watershed Scale: Plan and implement water infrastructure at a watershed scale.

Utilities Principle 8: Systems Approach. Storm water management, including erosion and sediment control and post-construction pollution prevention measures, need to be an integral part of the site planning process and not just an afterthought.

Utilities Principle 9: Resource Efficiency. Optimize conservation and efficiency investments before developing new supply or expanding treatment.

Utilities Principle 10: Multiple Benefits. Maximize the environmental, social, and economic benefit of every infrastructure dollar. Price water, wastewater, and stormwater for ratepayers/customers to meet the total cost of sustainability requirements.

Utilities Principle 11: Full Life Cycle. Plan, manage, and account for full life cycle infrastructure expenditures.

Utilities Principle 12: Asset Management. Apply best industry practices for repair/rehabilitation and replacement and innovative management.

Utilities Principle 13: Efficiency. Make efficient use of public resources by locating facilities and providing services within areas planned for future growth.

Utilities Principle 14: Reliability and Resiliency. Public facilities and service investments are reliable, able to withstand or recover from catastrophic natural and manmade events, and are adaptable and resilient in the face of long-term change in the climate, economy, and technology.

GOAL 5.0:

An integrated water, stormwater, and waste water system that reduces pollution, protects and restores ecological systems, minimizes energy use and maximizes efficiency, and supports new growth while accommodating existing development.

OBJECTIVE 5.1: Ensure a reliable, efficient and cost-effective water system which delivers adequate quantities and quality of water to satisfy domestic, industrial, commercial, institutional, agricultural and fire protection purposes without compromising the sustainability of the City's water resources.

Potable Water Supply, Treatment Distribution and Storage

As mentioned in the Potable Water System Summary on page A.110 of *The Existing City* report, a *Water System Master Plan* was prepared in 2013 by Wessler Engineering for the Michigan City Department of Water Works. This 20-year *Master Plan* is presently being implemented, as needed, by the Department of Water Works. As indicated on TFC Map 10, *Potable Water System Improvements* (page 103), the *Master Plan* includes water distribution and storage improvements for the entire Planning Area presented on *Future Land Use Map (*TFC Map 22, *Future Land Use)*. The *Master Plan* also includes water supply and treatment improvements.

In conjunction with the *Michigan City Water System Master Plan*, this section of the Comprehensive Plan provides summary information from the *Master Plan* and its author, Wessler Engineering. This procedure has been approved by the Michigan City Department of Water Works.

WATER SUPPLY AND TREATMENT PLANT IMPROVEMENTS

The following items summarize the water supply and treatment plant improvements in the *Michigan City Water Supply Master Plan*:

1. Extend the west intake an additional 1,500 feet in Lake Michigan. This item has been accomplished.
2. Replace the four high service pump motors and associated electrical controls, switchgear and transformers from 2300 volts to 480 volts. Also provide variable frequency drives for the four high service pump motors. Furthermore, make other control system and building mechanical and structural improvements in this plant area. This item has been accomplished.
3. Make these other improvements at the water treatment plant:
   a. Sedimentation and mixing basin walls repair and interior lining,
   b. Repair and recoat the exterior of the walls of the backwash residuals thickener,
   c. Install a chemical feed system to reduce the corrosiveness of the potable water,
   d. Building HVAC control improvements, and
   e. Heating improvements for the pipe gallery and head house.

   Preceding items (a) and (b) have been accomplished. The probable project cost of items (c), (d) and (e) is $700,000.

WATER DISTRIBUTION SYSTEM

The following items summarize the water distribution system improvements in the *Michigan City Water System Master Plan*. Each of the following items is indicated on TFC Map 10, *Potable Water System Improvements*.

1. The U.S. Highway 20 and Ohio Street project is a part of the high and low pressure zone separation plan. In addition, the project provides a loop around the Marquette Mall property which will improve water quality and redundancy. The project includes the installation of a water main along St. John Road from Franklin Street to Ohio Street. The installation of a new 12" check valve in a vault at the intersection of U.S. Highway 20 and Ohio Street will separate the high and low pressure zones. The probable project cost is $410,000.

2. The U.S. Highway 20 at Evergreen Plaza project is a part of the high and low pressure zone separation plan. The project includes the installation of a water main along the north side of U.S. Highway 20 connecting the two existing water mains located on the north side of U.S. Highway 20. The probable project cost is $700,000.

3. The Southwind Drive, CR W 400 N (Kieffer Road) north to Westwind Drive project will provide a loop and increase available fire flow for this high density residential area. The project includes a water main along Southwind Drive. The probable project cost is $130,000.

4. The Monroe Street, Carroll Avenue, Woodland to Tank project will provide additional flow capacity to the Carroll Avenue Tank by providing an additional water main to service the tank. The project includes water mains along Monroe Street and Carroll Avenue. The probable project cost is $620,000.

5. The U.S. Highway 20, Pahs Road, Johnson Road project is part of the high and low pressure zone separation plan. As a part of the project, dead end water mains will be eliminated, and water quality will improve in these locations by looping the water main in the high pressure zone. The project includes water mains along Pahs Road, Johnson Road and U.S. Highway 20. The probable project cost is $1,950,000.

6. The CR W 400 N (Kieffer Road), County Line Road, Hitchcock Street project is a part of the high and low pressure zone separation plan. The project provides a loop in the high pressure zone to eliminate dead end water mains and improve water quality in those locations. The project includes water mains along U.S. Highway 20, Hitchcock Street, County Line Road and CR W 400 N (Kieffer Road). As a part of the project, a bleedback valve at County Line Road and U.S. Highway 20 and a check valve at Hitchcock Street and U.S. Highway 20 will be installed to separate the high and low pressure zones. The probable project cost is $3,740,000.

7. The U.S. Highway 12 and SR 212 Intersection project will provide a water main loop to the northeast portion of the low pressure zone. The water main loop provides additional fire flow capacity and redundancy to the wholesale customers New Buffalo Township and Michiana Water Authority. The project includes a water main along Grand Beach Drive. The probable project cost is $650,000.

8. The Earl Road and County Line Road project will complete a water main loop in the low pressure zone. The project will eliminate dead end water mains and improve water quality in those areas. The project includes a water main along Earl Road and County Line Road. The probable project cost is $2,420,000.

9. The Woodland Avenue and CR W 400 N (Kieffer Road) project will create a water main loop to provide redundancy to the developed area north of the U.S. Highway 421 and Interstate 94 intersection. The probable project cost is $1,070,000.

10. The U.S. Highway 20 – Johnson Road to SR 212 project extends the high pressure zone along U.S. Highway 20 to the E. Michigan Boulevard intersection. The development at the U.S. Highway 35 and Interstate 94 intersection will be able to be connected to the high pressure zone as a result of this project. The probable project cost is $2,240,000.

11. The U.S. Highway 12, County Line Road to Washington Street project provides the Michigan City distribution system with a second feeder main from the Water Treatment Plant to the west side of the system. The water main provides a redundancy to the water main feeding the Beverly Shores Booster Station and the customers in that area. The project includes water mains along Sheridan Avenue, U.S. Highway 12 and County Line Road. The probable project cost is $5,290,000.

LEGEND

- City Limits
- Comprehensive Plan Area

Existing Water Main	Water Main Improvements
6″ Pipe	8″ Pipe
8″ Pipe	12″ Pipe
12″ Pipe	16″ Pipe
16″ Pipe	20″ Pipe
20″ Pipe	24″ Pipe
24″ Pipe	
30″ Pipe	

- BBV = Bleed Back Value between water system pressure zones
- CV = Check Valve between water system pressure zones
- Elevated Storage Tank
- Ground Storage Tank

Water Main System Not Shown for the Towns of Beverly Shores, Pines, Pottawattomie Park and Michiana Shores and the Duneland Beach Community. The Town of Trail Creek does not have a water main system.

Lake Michigan

WATER TREATMENT PLANT LOCATION

WTP

EASTWOOD ROAD ELEVATED STORAGE TANK LOCATION

CARROLL AVENUE ELEVATED STORAGE TANK LOCATION

HITCHCOCK ROAD ELEVATED STORAGE TANK LOCATION

BEVERLY SHORES BOOSTER PUMP STATION LOCATION

PAHS ROAD GROUND STORAGE TANK & BOOSTER PUMP STATION LOCATION

SOUTHSIDE ELEVATED STORAGE TANK LOCATION

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

MOMENTUM: MICHIGAN CITY 2040

THE FUTURE CITY

TFC Map 10, Potable Water System Improvements

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

12. The Welnetz Road and Pinetree Drive project will provide a water main loop for the high density residential area along Salem Court and the businesses along U.S. Highway 20 near Evergreen Plaza. As a result of this project, the water quality to the Evergreen Plaza businesses will improve. The project includes water mains along Welnetz Road and Pinetree Drive. The probable project cost is $770,000.

13. The Lake Shore County Road and U.S. Highway 20 project is intended to provide water to additional customers. The project includes water mains along U.S. Highway 20/Gary-Michigan City Highway and Lake Shore County Road. The probable project cost is $910,000.

14. The Meer Road CSS and SBRR south to Warnke Road project is a portion of a low pressure zone loop on the southeast side of the pressure zone. The probable project cost is $780,000.

15. The Meer Road, Michigan Boulevard north to Warnke Road project is a portion of a low pressure zone loop on the southeast side of the pressure zone. As a part of the low pressure loop, the project includes a check valve to separate the high and low pressure zones. The project includes water mains on Meer Road and Michigan Boulevard. The probable project cost is $1,980,000.

16. The U.S. Highway 421 Corridor – CR W 300 N, CR N 950 W project is a portion of the U.S. Highway 421 Corridor project on the east side of U.S. Highway 421, to provide water south of Interstate 94 and expand the high pressure zone. The probable project cost is $1,780,000.

17. The U.S. Highway 421 Corridor – CR W 300 N, County Line Road project is a portion of the U.S. Highway 421 Corridor project on the west side of U.S. Highway 421 to provide water south of Interstate 94 and expand the high pressure zone. The probable project cost is $4,170,000.

18. Lafayette Street Projects:

A. The Lafayette Street from Main Street to Greenwood Avenue project will provide a larger sized main on the east side of Elston YMCA and AK Smith Area Career Center for fire protection. The water main also provides a connection to many 6-inch water mains running up to Lafayette Street. The probable project cost is $570,000.

B. The Ripley Street, Pine Street, Homer Street and Lafayette Street project will provide a larger size main to the east and west side of the Elston YMCA and AK Smith Area Career Center for fire protection. The probable project cost is $580,000.

19. The U.S. Highway 421 Corridor – U.S. Highway 421 south of Interstate 94 project is a portion of the U.S. Highway 421 Corridor project located along U.S. Highway 421 to W. 100 N. to provide water south of Interstate 94 and expand the high pressure zone. The probable project cost is $3,320,000.

20. The U.S. Highway 35 and Interstate 94 interchange project is to extend water to the east of the U.S. Highway 35 and Interstate 94 interchange and to the customers near the interchange. The probable project cost is $2,910,000.

WATER SYSTEM STORAGE

The following improvements summarize the water system storage improvements in the *Michigan City Water System Master Plan*:

1. **Southside Elevated Tank**

   An elevated water storage tank in the high pressure zone will increase the volume of water and the rates at which it can be delivered throughout the high pressure zone during emergencies. Ideally, the tank should be located across the high pressure zone from the Pahs Road Booster Station. The most likely location for the new southside tank at this time is along U.S. Highway 421 south of Interstate 94. $150,000 for the purchase of the southside tank property is included in the *Capital Improvement Plan*.

2. **Eastwood Road Elevated Tank**

   The installation of a new 1.0 million gallon elevated storage tank will not increase the day to day pressure in the area, but it will provide for additional storage during high demand periods needed to keep the pressures in the eastern portion of the low pressure zone from dropping too low. The probable project cost is $2,450,000.

3. **Pahs Road Ground Storage Tank Structural Repairs**

   These necessary repairs include; repairs of exterior cracks, repair of exposed rebar on the tank dome, repair of the tank dome and wall joint and recoating the entire exterior of the tank. This item has been accomplished.

4. **Pahs Road Ground Storage Tank Mixing System**

   A mechanical system in the 3.0 million gallon tank will eliminate stratification and stagnation of the water in the tank. This item has been accomplished.

WATER SYSTEM BOOSTER STATIONS

The following items summarize the water system booster station improvements in the *Michigan City Water System Master Plan*:

1. **East Booster Station**

   As the distribution system expands to the southeast, another booster station and pressure zone is required. The elevations to the southeast are above the elevation able to be served by the high pressure zone. If the distribution system does expand to the southeast, a new booster station will be required to provide water to the customers in the area at acceptable operation pressures. The East Booster Station will be a 1 MGD rated booster station with the capacity to install additional pumps in the future. The probable cost is $380,000.

2. **West Booster Station**

   As the distribution system expands to the north and west, there is a need for an additional booster station to work in conjunction with the Pahs Road Booster Station in the high pressure zone. The demands are able to be met by the Pahs Road Booster Station and will be able to be met for the foreseeable future. As development occurs in the high pressure zone and additional customers are added, the addition of a booster station in the high pressure zone will provide redundancy in the event of the operation of the Pahs Road Booster Station being impaired. The proposed West Booster Station is a 2 MGD rated booster station, will have capacity to meet the existing demands without the Pahs Road Booster Station in service, and will have space to add pumps and increase the capacity of the West Booster Station. The most likely location for the West Booster Station is near the intersection of U.S. Highway 20 and County Line Road. The probable project cost of the West Booster Station is $750,000.

3. **Chlorine and Ammonia Facilities at Pahs Road Booster Station**

   The Pahs Road Booster Station does not currently have a chlorine feed system. The chlorine residual leaving the Pahs Road Booster Station occasionally falls below desired operation levels. Chlorine and ammonia facilities are recommended to booster the residual in the form of chloramines in the water being pumped into the high pressure zone. The improvements include a chlorine feed system, ammonia feed system and separate precast concrete structures to house each feed system. The probable project cost is $190,000.

4. **Chlorine Facility at Beverly Shores Station**

   To resolve the corrosion and feed problems of the existing chlorine tablet feed system in the Beverly Shores Booster Station, the system should be replaced with a small chlorine gas storage and feed system in an isolated room addition to the booster station. This item has been accomplished.

OBJECTIVE 5.2: Ensure a reliable and efficient collection, transmission, and treatment of all wastewater in a manner that protects environmental and human resources.

Wastewater Collection and Treatment System

The existing Michigan City Sanitary District wastewater collection and treatment system is indicated on TEC Map 26, *Wastewater Collection and Treatment System*. This existing system will receive, transport and treat the wastewater from the projected future population growth in the Planning Area and the projected future land use indicated on the *Future Land Use Map* (TFC Map 22, *Future Land Use)*. The estimated additional wastewater flows from these population and future land use projections can be determined from TFC Table 15, *Summary of Estimated Additional Future Water Usages (gallons / day)*.

The preceding estimated additional future water usages are distributed throughout the Planning Area, in each of the projected land use areas; all residential types, general commercial, mixed use, business parks and industrial. This distribution of additional future water usage is converted to peak hourly additional future wastewater flow rates and presented in TFC Table 17a-b. The map designation numbers in the table are indicated on TFC Map 11, *Wastewater Collection and Treatment System Improvements* (page 1.113). The peak hourly additional future wastewater flow rates are presented in gal/min in the table, for easier comparison to sewer and pump station capacities.

STRATEGY 5.2.1: ***In anticipation of proposed future development, as illustrated on Future Land Use Map, develop an implementation program, schedule, and budget for the following wastewater treatment facility upgrades.***

Each of the existing tributary wastewater facilities in TFC Table 17A-B, *Summary of Estimated Additional Peak Waster Flows from Future Population Growth and Land Use Areas and Future Additional Flow Capacity Recommendations* (pp. 1.111-1.112), and depicted on TFC Map 11, is discussed as follows, regarding the additional peak hourly wastewater flows that are anticipated between now and the year 2040 and the estimated project costs for the required wastewater facilities in public right-of-ways:

ACTIONS AND INITIATIVES

A. **Southwest Corner of Planning Area (North of Interstate 94)**

As indicated on *Future Land Use Map*, the southwest corner of the Planning Area, north of Interstate 94, is projected to have considerable business park and residential development by 2040. The anticipated peak wastewater flows for this development are listed in TFC Table 17A-B, indicated on TFC Map 11, and are discussed as follows:

1. A future wastewater lift station (A1) with an estimated capacity of 120 gal/min will be required on County Line Road, just north of Interstate 94, for the future peak wastewater flow from a small portion of this development area. The force main for this lift station will extend to the north and discharge into a new sanitary sewer on County

TFC Table 15, Summary of Estimated Additional Future Average Daily Water Usages (gallons / day)		
Future Population Growth and Land Use Area Descriptions and Estimated Average Daily Water Usages	By the Year 2040	
All Residential Types @ 100 gal/day/person	1,035,000	(33.8%)
General Commercial @ 950 gal/day/acre	329,000	(10.7%)
Mixed-Use @ 1100 gal/day/acre	464,000	(15.1%)
Business Park @ 600 gal/day/acre	920,000	(30.0%
Industrial @ 600 gal/day/acre	318,000	(10.4%)
Totals	3,066,000	(100%)

Line Road. Estimated Project Cost; for lift station, force main and sanitary sewer: $1,000,000.

2. The existing Pine lift station (A2) will receive future additional peak wastewater flow of 605 gal/min from this development area and will have to be increased in capacity and eventually replaced by a future sanitary sewer and wastewater lift station on Earl Road (A3) with pumpage into the existing Ohio Street sanitary sewer at Earl Road. Estimated Project Cost; for Pine lift station capacity increase and sanitary sewer on CR W 400 N (Kieffer Road): $750,000.
3. The previously mentioned new Earl Road sanitary sewer and wastewater lift station (A5) will have a future peak wastewater flow of 691 gal/min if it replaces the existing Pine lift station (A2). Estimated Project Cost; for sanitary sewer, lift station and force main: $1,250,000.
4. The existing U.S. Highway 20 sanitary sewer (A4) and existing Clark lift station (A5) will both have to be increased in capacity if the existing Pine lift station is increased in capacity. If the existing Pine lift station is replaced by the Earl Road sanitary sewer and lift station, the future additional peak wastewater flow will be 364 gal/min for adjacent development only and only the Clark lift station (A4) will have to be increased in capacity. Estimated Project Cost; for Clark lift station capacity increase and a new sanitary sewer on Hitchcock Road south of U.S. Highway 20: $650,000.
5. The existing Marquette Mall sanitary sewer (A6) and the existing Ohio Street sanitary sewer, both south of Earl Road (A7) and north of Earl Road (A8) have adequate capacity for their projected future additional wastewater flows of 118 gal/min, 482 gal/min and 1205 gal/min, respectively.

Based on the preceding discussion, a new sanitary sewer and wastewater lift station on Earl Road will eventually be required to provide local sanitary service on Earl Road and to transport flow to the existing Pine lift station, which will be abandoned.

B. South (Ohio Street and Cleveland Avenue) Portion of Planning Area (North of Interstate 94)

As indicated on *Future Land Use Map*, this south portion of the Planning Area is projected to have considerable business, commercial, residential, and mixed-use growth by 2040. The anticipated flow route for this development wastewater would be the existing Cleveland Avenue sanitary sewer system which was constructed 20 years ago for this purpose. The Cleveland Avenue sanitary sewer extends from just north of Interstate 94 approximately 2.8 miles to the intersection of Poplar and Belden Streets, with discharge into a 66" dia. sanitary sewer line. A branch of the Cleveland Avenue sanitary sewer just north of CR W 400 N (Kieffer Road) extends to Franklin Street and receives the flow from the existing Ohio Street lift station. The present available capacity in the Cleveland Avenue sanitary sewer system was recently determined by the Michigan City Sanitary District. The results of this determination are presented in TFC Table 16, *Cleveland Avenue Sanitary Sewer System Available Capacity*, and compared to the estimated additional flows from future population growth and land use.

Based on the preceding table, the Cleveland Avenue sanitary sewer system has adequate available

TFC Table 16, Cleveland Avenue Sanitary Sewer System Available Capacity

Cleveland Avenue Sanitary Sewer Size and Location	Present Available Sewer Capacity (gal/min)	Estimated Additional Peak Flow from Projected Land Use Developments by the Year 2040 (gal/min)
18" on Cleveland at CR W 400 N (Kieffer Road)	1820	487 from B1
18" at Franklin Street flowing east to Cleveland	385	394 from B2 Existing Ohio Lift Station
24" on Cleveland at Pahs Road	4095	1191 from B3
27" on Cleveland at Garrettson	4235	1191
30" on Cleveland at Gardena	4850	1191
42" on Greenwood at Cleveland	6980	1191
42" on Tilden and Poplar	6980	1191

capacity for additional flow from future population growth and land use by the year 2040. Therefore, no additional sanitary sewer capacity improvements are required for this area.

C. South (Woodland Avenue) Portion of Planning Area

As indicated on *Future Land Use Map*, this portion of the Planning Area is projected to have considerable residential development and some business development by 2040. The existing wastewater flow route for this area is an existing sanitary sewer on Woodland Avenue from CR W 400 N (Kieffer Road) to U.S. Highway 20. The anticipated peak wastewater flows for this development are discussed as follows:

1. A new wastewater lift station (C1) will be required south of CR W 400 N (Kieffer Road) to pump the new development flow from this area into the existing 12" dia. Woodland Avenue sanitary sewer at CR W 400 N (Kieffer Road). Based on the future additional peak wastewater flows in TFC Table 17A-B, the new lift station (C1) peak influent flow would be 116 gal/min by 2040. Estimated Project Cost; for lift station and force main: $350,000.
2. A new wastewater lift station (C2) will be required on CR W 400 N (Kieffer Road), north of Interstate 94, to pump the new development flow from this area into the existing 12" dia. sanitary sewer on Woodland Avenue. The peak wastewater flow to this new wastewater lift station (C2) would be 148 gal/min. Estimated Project Cost; for lift station, force main and sanitary sewer on CR W 400 N (Kieffer Road): $525,000.
3. The projected future development on Woodland Avenue between CR W 400 N (Kieffer Road) and Pahs Road would add an additional flow which would result in a total peak additional flow of 547 gal/min in this existing 12" dia. sanitary sewer. It is anticipated that this 12" dia. sanitary sewer will not have to be replaced with a larger sewer for this additional future flow.
4. The projected development on Woodland Avenue, north of Pahs Road, would add an additional flow which would result in a total peak additional flow of 663 gal/min in the existing 15" dia. sanitary sewer on Woodland Avenue, north of Pahs Road. This existing 15" dia. sanitary sewer and all downstream sanitary sewers have available capacity for this additional future flow.

D. South Portion of Planning Area (South of Interstate 94)

As indicated on *Future Land Use Map*, this portion of the Planning Area is projected to have considerable industrial, business, commercial, residential and mixed-use development by 2040. This area would be served by a new wastewater lift station at the intersection of U.S. Highway 421 and CR 300 N. In fact, a wastewater lift station with a design flow of 460 gal/min at this location is presently being considered by the LaPorte County Regional Sewer District, with pumpage into the south end of the existing Cleveland Avenue sanitary sewer. As indicated in TFC Table 17A-B, the design flow for the new wastewater lift station (D1), for the future additional peak wastewater flow from the projected area development by 2040, is 1,785 gal/min. This design flow plus the 487 gal/min design flow indicated for item B.1 would total 2,272 gal/min which would exceed the 1,820 gal/min presently available capacity in the existing Cleveland Avenue sanitary sewer at CR W 400 N (Kieffer Road). If and when the new wastewater lift station (D1) flow approaches the available capacity of the existing Cleveland Avenue sanitary sewer, a second sanitary sewer should be constructed on Cleveland Avenue to provide the additional flow capacity to CR W 400 N (Kieffer Road). Estimated Project Cost; for new lift station, sanitary sewers along CR W 400 N (Kieffer Road) and force main to end of Cleveland Avenue sanitary sewer: $3,700,000

D.1 LaPorte County Regional Sewer District

As mentioned in preceding Section D, the LaPorte County Regional Sewer District (LCRSD) is considering wastewater service to this portion of the Planning Area. See TFC Figure 4, *LaPorte County Regional Sewer District*. The *LCRSD 2012 Master Plan* included their future sanitary sewer service areas, all of which would discharge into the MCSD wastewater collection and treatment system and are indicated on TFC Map 11. These LCRSD service areas include many Future Land Use areas in the Planning Area of the Comprehensive Plan, specifically in the following designated tributary areas:

D. South Portion of Planning Area (South of Interstate 94).

E. Southeast Portion of Planning Area.

F. East Portion of Planning Area.

G. Northeast Portion of Planning Area.

TFC Figure 4, LaPorte County Regional Sewer District

Lake Michigan

Michiana

1000 N LS3

1000 N LS2

1000 N LS1

MICHIANA SHORES/MICHIGAN CITY LIFT STATION

MOORE RD LIFT STATION

KARWICK RD LIFT STATION

FREYER RD/SR 212 LIFT STATION

TRYON RD/MEER RD LIFT STATION

KRIEGER LIFT STATION

US 35/RR LIFT STATION

FOX LAKE LIFT STATION

US 20/US 35 LIFT STATION

US 20 LS4

US 20 LS3

US 20 LS2

US 20 LS1

ATHON LIFT STATION

US 20/RR LIFT STATION

PAHS RD LIFT STATION

JOHNSON RD LS1

KIEFFER RD/950 W LIFT STATION

US 35 LS2

US 35 LS1

US 421 LS2

WOZNIAK RD LS4

WOZNIAK RD LS3

WOZNIAK RD LS2

US 421 LS1

WOZNIAK RD LS1

Johnson

Severs

Lake Shore

Washington Park

Tryon

Springlake

Parker

Greenwood

Coolspring

Pahs

Kieffer

Hitchcock

County Line

Beverly

Earl

2nd

10th

Rose

1st

16th

Crescent

Wozniak

Johnson

Legend

Proposed Lift Stations

Existing Lift Stations

Proposed Sanitary Sewers

1000 N, GRAVITY

JOHNSON RD, GRAVITY

US 20, GRAVITY

US 35, GRAVITY

US 421, GRAVITY

WOZNIAK RD, GRAVITY

Proposed Sewer Sub-shed

1000 N

JOHNSON RD

US 20

US 35

US 421

WOZNIAK RD

Existing Pressure Sewer

Existing Gravity Sewer

Existing Service Areas

Study Boundary

Incorporated Areas

National Wetlands Inventory

0 4,000 8,000 16,000 Feet

N W E S

AMERICAN STRUCTUREPOINT INC. www.structurepoint.com

Master Plan
20-Year Sewersheds

LaPorte County Regional Sewer District
809 State Street, Suite 401A
LaPorte, Indiana 46350

LaPorte Regional Sewer District
Lake Michigan Watershed
Sanitary Sewer Masterplan

Date: 02/03/2012 p.10 Fig. 6

Path: P:\IN\2007\0862\D. Drawings\Environmental\ArcView\Exhibits\Misc_Maps\2011 Report\Report Exhibits\IN2007008662.EV.MAP.06.Overall Masterplan Sanitary Sewers.mxd Date:2/2/2012 User:jmccann

Source: www.waterworld.com, Southgate stems sanitary sewer overflow: Michigan City improves wastewater system and recieves recognition from APWA, November 2015.

Besides the possible sanitary sewer service in tributary area D, the LCRSD has a few existing sanitary sewer services in tributary area F, that are connected to the existing MCSD U.S. Highway 20/35 lift station. As a result, financing the required wastewater facilities for the Future Land Use areas in tributary areas D, E, F and G could also involve the LaPorte County Regional Sewer District, in addition to the Michigan City Sanitary District and the property developers. The estimated project costs for the required wastewater facilities in these designated tributary areas will not change, however, with the LCRSD involvement. Also, the LCRSD service area boundaries extend well beyond the Planning Area of the Comprehensive Plan and therefore, future sanitary sewer service in these extended boundaries will not be considered in the Comprehensive Plan.

E. Southeast Portion of Planning Area

As indicated on *Future Land Use Map*, this portion of the Planning Area is projected to have considerable residential development on the south side of U.S. Highway 20, between Woodland Avenue and Johnson Road. As indicated in TFC Table 17A-B, the future additional peak wastewater flow from this projected residential development area will be 283 gal/min by 2040. This wastewater flow could all flow to a new wastewater lift station (E1) at U.S. Highway 20 and Johnson Road or a small portion of this development's wastewater could flow by gravity into the existing 15" dia. sanitary sewer on Woodland Avenue. The new lift station (E1) could pump back into the existing sanitary sewer on Woodland Avenue which has sufficient available capacity for this future additional flow also. The other potential discharge point for the new lift station (E1) at U.S. Highway 20 and Johnson Road is into a possible future sanitary sewer on Johnson Road, for the Town of Trail Creek. However, it is unlikely that a sanitary sewer on Johnson Road will exist prior to the construction of a new lift station at U.S. Highway 20 and Johnson Road. Total Estimated Project Cost; for lift station and force main to Woodland Avenue: $700,000.

TOWN OF TRAIL CREEK

As mentioned in the preceding section, the new wastewater lift station (E1) at the intersection of Johnson Road and U.S. Highway 20 could discharge into a new

TFC Table 17A, Summary of Estimated Additional Peak Wastewater Flows from Future Population Growth and Land Use Areas and Future Additional Flow Capacity Recommendations			
Map Designation No.	Tributary Wastewater Facility Descriptions and Locations	Estimated Additional Peak Hourly Wastewater Flows (gal/min) in the Year 2040	Future Additional Flow Capacity Recommendations
A	**Southwest Corner of Planning Area**		
A1	Future Lift Station at County Line Road and Interstate 94	120	Provide for future local development
A2	Existing Pine Lift Station (including A1)	605	Remove and replace with A.3
A3	Future Earl Road Sanitary Sewer and Lift Station (including A2)	691	Provide when A.2 reaches full capacity
A4	Existing U.S. 20 Sanitary Sewer to Clark Lift Station (not including A2)	364	None if A.3 is provided
A5	Existing Clark Lift Station	364	Provide larger pumping capacity
A6	Existing Marquette Mall Sanitary Sewer	118	None
A7	Existing Ohio Street Sanitary Sewer (south of Earl Road)	482	None if A.3 is provided
A8	Existing Ohio Street Sanitary Sewer (north of Earl Road)	1,205	None
B	**South (Ohio to Cleveland) Portion of Planning Area**		
B1	Existing Cleveland Avenue Sanitary Sewer, South of CR W 400 N (Kieffer Road).	487	Provide additional capacity if the existing sanitary sewer reaches full capacity.
B2	Existing Ohio Street Lift Station and Cleveland Avenue Sanitary Sewer Extension to Franklin Street	394	None, except possible removal of wet weather I/I flow tributary to Ohio Street Lift Station
B3	Existing Cleveland Avenue Sanitary Sewer, North of CR W 400 N (Kieffer Road) (including B1 and B2)	1,191	None
C	**South (Woodland) Portion of Planning Area**		
C1	Future Lift Station on Woodland Avenue, North of Interstate 94	116	Provide for future local development
C2	Future Lift Station on CR W 400 N (Kieffer Road), North of Interstate 94	148	Provide for future local development
C3	Existing Woodland Avenue Sanitary Sewer, South of Pahs Road (including C1 and C2)	547	Provide additional capacity if the existing sanitary sewer reaches full capacity
C4	Existing Woodland Avenue Sanitary Sewer, North of Pahs Road (including C3)	663	
D	**South of Interstate 94 Portion of Planning Area**		
D1	Future Lift Station at U.S. Highway 421 and CR 300 N.	1,785	Presently being considered by the LaPorte County Regional Waste District
E	**Southeast Portion of Planning Area**		
E1	Future Lift Station at Johnson Road and U.S. Highway 20	283	Provide for future local development

Note: The numbers in this table are based on average daily water usages which have been converted to peak hourly wastewater flow rates using a peak/average flow factor of 4.0 for residential wastewater flow only and 2.5 for all other sources of wastewater flow.

TFC Table 17B, Summary of Estimated Additional Peak Wastewater Flows from Future Population Growth and Land Use Areas and Future Additional Flow Capacity Recommendations			
Map Designation No.	Tributary Wastewater Facility Descriptions and Locations	Estimated Additional Peak Hourly Wastewater Flows (gal/min) in the Year 2040	Future Additional Flow Capacity Recommendations
F	**East Portion of Planning Area**		
F1	Existing U.S. Highway 35 Sanitary Sewer and Existing U.S. Highway 20/35 Lift Station	355	None for existing U.S. Highway 35 sanitary sewer. Provide larger pumps in U.S. Highway 20/35 lift station.
F2	Future Lift Station at Meer Road, North of Warnke Road	113	Provide for future local development
F3	Future Lift Station at U.S Highway 20/ Meer Road (including F2)	457	Provide for future local development, west of Interstate 94
F4	Future U.S. Highway 20 Sanitary Sewer south of SR 212 Intersection	217	Provide for future local development
F5	Existing Michigan Boulevard Sanitary Sewer west of U.S. Highway 20/SR 212 Intersection (including F1, F3 and F4)	1,149	None
F6	Existing Golf View Lift Station	56	None
F7	Existing Michigan Boulevard Sanitary Sewer and Menke Road Lift Station (including F5 and F6)	1,205	None for existing Michigan Boulevard sanitary sewer. Provide larger pumps in Menke Road lift station.
G	**Northeast Portion of Planning Area**		
G1	Existing Michiana Shores Lift Station	116	None
G2	Existing Freyer Road Lift Station (including G1)	172	None
G3	Existing U.S. Highway 12 Lift Station (including G2)	172	None
G4	Existing Tryon Road Sanitary Sewer	176	None
G5	Existing Karwick Road Sanitary Sewer and Krueger Lift Station (including G3 and G4)	391	None
G6	Existing U.S. Highway 12 Sanitary Sewer	187	Future development flows should discharge into the existing sanitary sewer on the south side of U.S. Highway 12.
H	**North Portion of Planning Area**		
H1	Existing Beachwalk Lift Station	29	None
H2	Existing Trail Creek Sewer	11	None
H3	Existing 4th Street Lift Station	59	None
H4	Existing 4th Street Relief Sewer (including H3)	158	None

Note: The numbers in this table are based on average daily water usages which have been converted to peak hourly wastewater flow rates using a peak/average flow factor of 4.0 for residential wastewater flow only and 2.5 for all other sources of wastewater flow.

LEGEND

- City Limits
- Comprehensive Plan Area

Existing Wastewater Collection and Treatment System

- ≤ 16 " Pipe
- 18" Pipe
- 20" Pipe
- 21" Pipe
- 24" Pipe
- 27" Pipe
- 30" Pipe
- 36" Pipe
- 42" Pipe
- 66" Pipe
- 72" Pipe
- Sanitary MH
- Lift Station
- Force Main
- FM Flow Direction

Wastewater Collection and Treatment System Improvements

- Sanitary Sewer Pipe
- Lift Station

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

PORTER COUNTY
LA PORTE COUNTY

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

MOMENTUM: MICHIGAN CITY 2040
THE FUTURE CITY

TFC Map 11, Wastewater Collection and Treatment System Improvements

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

sanitary sewer to the north on Johnson Road, if it is constructed for the Town of Trail Creek. This Johnson Road sanitary sewer could be oversized for the lift station E1 flow and Trail Creek flow. This oversized sanitary sewer would extend north on Johnson Road to Greenwood Avenue and then west on Greenwood Avenue, to an existing 30" dia. sanitary sewer just west of the CSX railroad crossing. All of the oversized sewer would also serve the Town of Trail Creek. As a result, the costs of these oversized sewers would be shared by the Town of Trail Creek and the MCSD. The costs of the sanitary sewers in Trail Creek would be the Town's responsibility, either as a Town project or a MCSD project which is paid for by Town residents.

The estimated peak wastewater flow from a Town of Trail Creek sanitary sewer system is calculated as follows:

2,500 Existing Population
x 100 gal / day / person
250,000 gal / day / average daily flow
x 4.0 peak hour / average daily flow
1,000,000 gal / day = 700 gal/min peak hourly flow

The existing Greenwood Avenue sanitary sewer and the north end of the existing Cleveland Avenue sanitary sewer were designed and constructed with adequate capacity to receive the future wastewater flow from the

Town of Trail Creek.

F. East Portion of Planning Area

As indicated on *Future Land Use Map*, this portion of the Planning Area is projected to have considerable residential development on the east side of Interstate 94 and considerable residential, business and commercial development on the west side of Interstate 94 by 2040. The anticipated peak wastewater flows for these developments are listed in TFC Table 17A-B, indicated on TFC Map 11 and are discussed as follows:

1. The existing U.S. Highway 20/35 lift station (F1) will receive all of the flow from the future developments on the east side of Interstate 94. Note: There will be additional lift stations for the future sanitary sewers in this area, due to the local terrain all of which will pump into the existing U.S. Highway20/35 lift station. This estimated future additional peak wastewater flow of 355 gal/min will require larger pumps in the existing U.S. Highway 20/35 lift station. The existing 12" dia. inlet sanitary sewer and the existing 8" discharge force main and 10" and 12" dia. receiving sewer for the U.S. Highway 20/35 lift station have adequate capacity for the additional future flow. Estimated Project Cost; for U.S. Highway 20/35 lift station capacity increase: $50,000.
2. A future wastewater lift station (F2) with an estimated capacity of 113 gal/min, will be required on Meer Road, north of Warnke Road, for the future additional peak wastewater flow from this portion of the development area. The force main for this lift station will extend to the south and discharge into a new sanitary sewer on Meer Road. Estimated Project Cost; for lift station, sanitary sewer and force main along Meer Road: $550,000.
3. A future wastewater lift station (F3), with an estimated capacity of 457 gal/min, will be required on Meer Road at U.S. Highway 20, for the future additional peak wastewater flow from the majority of the development area east of Interstate 94. The force main for this lift station will extend to the east and discharge into the existing 24" dia. sanitary sewer along Michigan Boulevard, west of the SR 212 interchange. Estimated Project Cost; for lift station, sanitary sewer along Meer Road and force main: $1,500,000.
4. A future sanitary sewer (F4) along U.S. Highway 20, south of the SR 212 interchange, will receive an estimated 217 gal/min of future additional peak wastewater flow from this portion of the development area. The future sanitary sewer will discharge into the existing 24" sanitary sewer along Michigan Boulevard, west of the SR 212 interchange. Estimated Project Cost; for sanitary sewer along U.S. Highway 20: $550,000.
5. The existing 24" dia. sewer (F5) along Michigan Boulevard, west of the SR 212 interchange will receive an estimated 1149 gal/min of future additional peak wastewater flow from this development. There is adequate available capacity in this existing sanitary sewer for this estimated future flow.
6. The existing Golf View Lift Station (F6) will receive an estimated future additional peak wastewater flow of 56 gal/min. The existing lift station has available capacity for this future additional flow.
7. The existing 24" dia. sanitary sewer on the south side of the Michigan Boulevard corridor and the existing Menke Road Lift Station (F7) will

receive an estimated future additional peak wastewater flow of 1205 gal/min from all of the future developments in this area. The existing 24" dia. sanitary sewer has sufficient capacity, but the three pumps in the existing Menke Road Lift Station will have to be replaced with larger pumps. The existing discharge force mains (three at 8" dia. into one at 16" dia.) for the Menke Road Lift Station have adequate capacity for the 1205 gal/min additional future flow. The 21" dia. sanitary sewer that receives the flow from the 16" dia. force main also has available capacity for the additional future flow. Estimated Project Cost; for Menke Road lift station capacity increase: $100,000.

G. Northeast Portion of Planning Area

As indicated on *Future Land Use Map,* this portion of the Plan area is projected to have scattered residential, business and some mixed use development by 2040. The anticipated future additional peak wastewater flows from these developments are listed in TFC Table 17A-B, indicated on TFC Map 11 and are discussed as follows:

1. The existing Michiana Shores Wastewater Lift Station (G1) will receive a future additional future peak flow of 116 gpm, for which the station has available capacity. The station's discharge force main and receiving sanitary sewer also have available capacity for this additional future flow.
2. The existing Freyer Road Wastewater Lift Station (G2) will receive a future additional peak wastewater flow of 172 gal/min, for which the station has available capacity. The station's two discharge force mains and receiving sanitary sewer also have available capacity for this additional future flow.
3. The existing U.S. Highway 12 Wastewater Lift Station (G3) will also receive a future additional peak wastewater flow of 172 gal/min, for which the station has available capacity. The station's discharge piping and receiving sanitary sewer also have available capacity for this additional future flow.
4. The existing 18" dia. sanitary sewer on Tryon Road (G4) will receive a future additional future peak wastewater flow of 176 gal/min, for which it has available capacity.
5. The existing 24" dia. sanitary sewer on Karwick Road and the existing Krueger Wastewater Lift Station (G5) will receive a future additional peak wastewater flow at 391 gal/min, for which both the 24" dia. sanitary sewer, lift station, two discharge force mains and the separate lift station receiving sanitary sewers all have available capacity.
6. The existing U.S. Highway 12 sanitary sewer (G6) will receive a future additional peak wastewater flow of 187 gal/min. As this existing sanitary sewer does not have adequate available capacity for this future additional flow, the following option should be considered; discharge this future flow into the larger sanitary sewer on the south side of U.S. Highway 12 with flows into the existing Karwick Road sanitary sewer and Krueger Wastewater Lift Station (G5), which have adequate capacity for this future additional flow also. Estimated Project Cost; for sanitary sewer crossing beneath U.S. Highway 12: $100.000.

LAKE MICHIGAN COMMUNITIES

In addition to the previously discussed future development in the Northeast Portion of the Planning Area, the following Lake Michigan communities are located in this area and have the following unsewered residences:

1. Town of Long Beach with approximately 1030 unsewered single-family residences.
2. Unincorporated Community of Duneland Beach with approximately 190 unsewered residences.
3. Town of Michiana Shores with approximately 220 unsewered residences.

Each of these communities is a governmental (Town) or semi-governmental (Homeowners Association) entity and therefore, any sanitary sewer system projects in these communities would be the community's project and paid for by the community residents. As a result, there is no certainty that any of these communities will ever install a sanitary sewer system. Nevertheless, consideration of these possibilities is appropriate at this time.

If these three communities each install sanitary sewer systems, the peak wastewater flows are anticipated to be the following amounts and with the following discharge points, see TFC Table 18, *Lake Michigan Communities Anticipated Peak Wastewater Flows and Discharge Points.*

If these preceding peak wastewater flows from the three communities are received by the MCSD sanitary sewer

TFC Table 18, Lake Michigan Communities Anticipated Peak Wastewater Flows and Discharge Points.

Community	Estimated Peak Wastewater Flow Rate*	Anticipated Discharge Location and Details
Long Beach; West	155 gal/min	Existing sanitary sewer on Lake Shore Drive and existing Smith Valley Wastewater Lift Station
Long Beach; Central	552 gal/min	Existing sanitary sewer and Tinker's Dam Wastewater Lift Station on Karwick Road
Long Beach; East	239 gal/min	Existing sanitary sewer and Shoreland Hills Wastewater Lift Station on Moore Road
Duneland Beach	164 gal/min	Shoreland Hills Subdivision sanitary sewer system and existing wastewater lift station on Moore Road
Michiana Shores	189 gal/min	Existing Michiana Shores Wastewater Lift Station

*Based on 310 gal/day/residence x 4.0 peak/average flow factor.

system, the following revisions to TFC Table 17A-B peak wastewater flows would result; as indicated in TFC Table 19 on the following page.

The following improvements to the existing MCSD facilities listed in TFC Table 17A-B will be required due to future flows including the communities of Long Beach, Duneland Beach and Michiana Shore:

G1. Existing Michiana Shores Lift Station: Larger pumps will be required for the additional future peak wastewater flow of 305 gal/min, however the station discharge force main and receiving sanitary sewer have adequate available capacity. Estimated Project Cost; for Michiana Shores lift station capacity increase: $50,000.

G2. Existing Freyer Road Lift Station: This existing station and its discharge force main and receiving sanitary sewer all have available capacity for the additional future peak wastewater flow of 361 gal/min.

G2A. Existing Shoreland Hills Lift Station: Larger pumps and a second discharge force main, one for each pump, will be required for the additional future peak wastewater flow of 403 gal/min. The receiving sanitary sewer has available capacity for the additional future flow. Estimated Project Cost; for Shoreland Hills lift station capacity increase and new force main along Moore Road: $150.000.

G3. Existing U.S. Highway 12 Lift Station: Larger pumps and discharge piping will be required for the additional future peak wastewater flow of 592 gal/min, however the receiving sanitary sewer has available capacity. Estimated Project Cost; for U.S. Highway 12 lift station capacity increase: $50,000.

G3A. Existing Tinker's Dam Lift Station: Larger pumps and a second discharge force main, one for each pump, will be required for the additional future peak wastewater flow of 552 gal/min. Also, both the existing and the new force mains will have to be extended to the existing sanitary sewer on the south side of U.S. Highway 12, as the existing receiving sanitary sewer on the north side of U.S. Highway 12 does not have available capacity for the additional future flow. Estimated Project Cost; for Tinker's Dam lift station capacity increase, new force main and existing force main extension both to the south side of U.S. Highway 12: $300,000.

G5. Existing Karwick Road Sanitary Sewer and Krueger Lift Station: An additional force main will be required at this station to allow 3 pumps to each have a separate force main. This will result in adequate capacity for the additional future peak wastewater flow of 1722 gal/min. The additional force main will have to extend to the railroad crossing on Springland Avenue as the two existing receiving sanitary sewers for the two existing force mains do not have adequate available capacity for the future additional force main flow. Estimated Project Cost; for additional force main: $300,000.

G5A. Existing Smith Valley Lift Station: Larger pumps will be required for the additional future peak wastewater flow of 155 gal/min. The existing sanitary sewers which carry flow to the lift station and receive flow from the station have available capacity for the additional future flow. Estimated Project Cost; for Smith Valley lift station capacity increase: $30,000.

TFC Table 19, Revised Estimated Peak Wastewater Flows Including Future Sanitary Sewer Systems in Long Beach, Duneland Beach and Michiana Shores.				
Map Designation No.	Tributary Wastewater Facility Descriptions and Locations	Estimated Additional Future Peak Wastewater Flows (gal/min)		
		Future Population Growth and Land Use	Existing Community Future Sewers	Total
G1	Existing Michiana Shores Lift Station	116	189 (Michiana Shores)	305
G2	Existing Freyer Road Lift Station	172	189 (G1)	361
G2A	Existing Shoreland Hills Lift Station	---	239 (Long Beach East) 164 (Duneland Beach) 403	403
G3	Existing U.S. 12 Lift Station	72	403 (G2A) 189 (G2) 592	592
G3A	Existing Tinker's Dam Lift Station	---	552 (Long Beach Central)	552
G5	Existing Karwick Road Sanitary Sewer	391	187 (HI) 592 (G3) 552 (G3A) 1331	1722
G5A	Existing Smith Valley Lift Station	---	155 (Long Beach West)	155

H. North End of Planning Area

As indicated on *Future Land Use Map*, this portion of the Planning Area is only projected to have isolated mixed use and residential development by 2040. The estimated future additional peak wastewater flows from the isolated areas are presented in TFC Table 17A-B, indicated on TFC Map 11 and are discussed as follows:

1. The existing Beachwalk Wastewater Lift Station will receive a future additional peak wastewater flow from projected residential development of 29 gal/min, for which the existing lift station has adequate capacity, as does the discharge force main and receiving sanitary sewer.
2. Existing Trail Creek sanitary sewer; existing capacity is available for additional future peak wastewater flow = 11 gal/min.
3. Existing Fourth Street wastewater lift station; existing capacity is available for additional future peak wastewater flow = 59 gal/min.
4. Existing Fourth Street relief sanitary sewer; existing capacity is available for additional future peak wastewater flow = 158 gal/min.

I. West Side of Planning Area

TOWN OF PINES

The Town of Pines is located along U.S. Highway 12, just west of the Porter/LaPorte County line. The Town has a population of approximately 800. The Town is almost completely served by an extension of the Michigan City potable water distribution system. Wastewater disposal in the Town is by individual on-site septic systems for each developed property. If the Town of Pines were to construct a sanitary sewer system the flow would be pumped into the existing MCSD Woodland wastewater lift station. The peak wastewater flow from this future sanitary sewer system is calculated as follows:

800 Existing Population
x 100 gal / day / person
80,000 gal / day / average daily flow
x 4.0 peak hour / average daily flow
320,000 gal / day = 222 gal/min peak hourly flow

The existing Woodland lift station would have to be increased in capacity and a second force main provided,

one for each pump, for this additional future peak wastewater flow of 222 gal/min from a future sanitary sewer in the Town of Pines. Estimated Project Cost; for Woodland Avenue lift station capacity increase and second force main for the pumps: $100,000.

WASTEWATER TREATMENT PLANT FUTURE ADDITIONAL FLOWS

The existing Michigan City wastewater treatment plant will receive all of the future additional flows estimated in the preceding Wastewater Collection System information. The future additional wastewater treatment plant flows are summarized in TFC Table 20, *Estimated Future Additional Wastewater Treatment Plant Flows*.

The preceding estimated future additional wastewater treatment plant flows should be compared with the existing wastewater treatment plant capacity of 12.0 MGD and the plant's present available capacity which is assessed by MCSD officials to be 2.0 MGD. Based on this assessment, an additional plant capacity of 3.842 – 2.0 = 1.842 MGD will be required if all of the estimated future additional wastewater flows happen.

Wastewater Treatment Plant Capacity Increase for Future Additional Flows

The previously determined 1.842 MGD of additional wastewater treatment plant capacity is 15 percent of the existing plant capacity of 12.0 MGD. This 15 percent capacity increase for the wastewater treatment plant is considered for each plant unit, as follows:

1. **Plant Headworks; 3 bar screens, 4 inlet pumps and 2 grit removal tanks**: The plant headworks capacity is much greater than the other plan units as its capacity includes high wet weather flows which are diverted to the combined sewer storage basin (CSSB) for return to the plant when the wet weather flows subside. As a result, no increase in plant headworks capacity is required.
2. **Primary settling tanks**: There are four existing tanks, all of equal capacity. A 15 percent plant capacity increase would require one more primary settling tank, with bottom sludge and surface skimmings removal facilities.
3. **Aeration tanks**: There are six existing tanks, all of equal capacity and with double-pass flow design.

TFC Table 20, Estimated Future Additional Wastewater Treatment Plant Flows.

Flow Service	Estimated Future Additional Average Daily Flow
A. Future Population Growth in the Planning Area	**1,035,000 gallon/day**
B. Future Land Use in the Planning Area;	
B.1 General Commercial	329,000 gallon/day
B.2 Mixed Use	464,000 gallon/day
B.3 Business Park	920,000 gallon/day
B.4 Industrial	318,000 gallon/day
A. and B. SubTotal	**3,066,000 gallon/day**
C. Future Sanitary Sewer Systems in Adjacent Communities;	
C.1 Town of Trail Creek	250,000 gallon/day
C.2 Town of Long Beach	319,000 gallon/day
C.3 Duneland Beach Community	59,000 gallon/day
C.4 Town of Michiana Shores	68,000 gallon/day
C.5 Town of Pines	80,000 gallon/day
C. Subtotal	**776,000 gallon/day**
A., B. and C. Grand Total	**3,842,000 gallon/day = 3.842 MGD**

A 15 percent plant capacity increase would require one more aeration tank with fine-bubble diffuser aeration. The existing aeration blowers at the plant have more than 15 percent excess capacity.

4. **Secondary settling tanks:** There are eight existing tanks, all of equal size. A 15 percent plant capacity would require two more aeration tanks, including return and waste sludge pumping facilities.
5. **Sand filter cells**: There are ten existing filter cells, all of equal size. A 15 percent plant capacity increase would require two more cells.
6. **Chlorine contact tanks:** There are two existing tanks of equal size. These existing tanks have more than 15 percent excess capacity.
7. **Post-aeration tanks**: There are two existing tanks of equal size. These existing tanks have more than 15 percent excess capacity.
8. **Anaerobic sludge digester tanks**: There are two existing primary tanks, one existing secondary tank and one digester sludge storage tank. Based on a recent analysis of the anaerobic sludge digestion tanks, they have more than 15 percent excess capacity.

Based on the preceding items, the following additional plant units are required for a 15 percent plant capacity increase; one primary settling tank, one aeration tank, two secondary settling tanks and two sand filter cells. There is no available space at the existing treatment plant for these additional plant units except for the two sand filter cells, which could be added to the west end of the sand filter building, which would allow the existing sand filter facilities to also be used for the two additional cells. The other additional plant units would have to be located off of the existing plant site, hopefully close enough to operate in conjunction with the existing plant units, and thus maintain the efficiencies of a single wastewater treatment plant. A suggested site for the other additional plant units is the two existing north sludge lagoons, across Trail Creek for the plant site. These sludge lagoons are no longer being used and this site is suggested for the following reasons:

1. This site is part of the existing wastewater treatment plant facilities and it could be converted for the additional plant units without any governmental approvals regarding land use changes.
2. The following pipelines could be conveniently installed beneath Trail Creek, for the additional plant units:
   a. Primary settling tank influent pipe (gravity flow) from the existing primary settling tank division structure.
   b. Primary sludge pump pipe to the anaerobic digesters.
   c. Aeration tank fine bubble diffuser air supply pipe from the existing aeration tank main air supply pipe.
   d. Secondary settling tanks effluent pipe (gravity flow) to the existing secondary settling tanks effluent collector pipe.
   e. Secondary settling tank return sludge pump pipe to the existing final clarifier effluent channel.
   f. Pump station discharge pipe to the plant inlet sewer for primary and secondary surface skimmings and tank drain-down.
3. Quick access to the additional plant units, by walking or vehicles, could be provided via (1) a prefabricated steel arch bridge placed across Trail Creek, and (2) the existing roadway on top of the dike of the south lagoon sludge storage area, without affecting the south lagoon sludge storage operation.

No wastewater treatment plant expansion should be designed or constructed until the future additional flows to the plant begin to approach the existing plant capacity. An option to additional plant capacity is to regain existing plant capacity by removing groundwater infiltration from existing sanitary and combined sewers and manholes. Such removal has been accomplished by the MCSD in the past by existing sewer replacement, internal lining or joint sealing and existing manhole lining or joint sealing. Besides regaining plant capacity, the removal of infiltration also reduces pumping costs at lift stations and pumping and chemical costs at the wastewater treatment plant.

OBJECTIVE 5.3: Develop, conserve and enhance drainageways to serve multiple functions, including the conveyance and regulation of stormwater runoff; provision of wildlife corridors; and greenways for active transportation and recreation.

Storm Drainage System

The existing storm drainage systems in the area are indicated on TEC Map 27, *Storm Drainage*. Each of these existing storm drainage systems is described as follows, regarding their adequacy, or not, to handle the storm drainage from the projected future developments in the Comprehensive Planning Area indicated on TFC Map 12, *Storm Drainage Improvements* along with recommendations to improve the system, see TFC Table 21, *Storm Drainage Recommendations* (page 1.124).

A. OPEN WATERWAYS

A.1 Trail Creek

Trail Creek and its East and West Branches are the primary drainage system in the Planning Area. Each of these watercourses is natural in creation and they continue to be natural through most of the Planning Area. As such, any occasional flooding of Trail Creek or its branches is into forested lowlands or valleys, without damage to developed property. Upstream of the Michigan City Sanitary District wastewater treatment plant, Trail Creek is a free-flowing stream. Downstream of the wastewater treatment plant, Trail Creek is not free-flowing and is like an estuary of Lake Michigan. As such, this downstream section of Trail Creek is only subject to very minor water level increases during wet weather.

Based on the preceding summary, Trail Creek is considered very adequate to continue to be the primary waterway for the storm drainage that will occur in the Planning Area in the future, provided that the free-flowing section of Trail Creek is kept clear of log jams and other obstructions and the estuary section of Trail Creek is dredged, when needed, for the private pleasure watercraft which are docked on each side of the creek.

A.2 Striebel Arm Ditch, Striebel Pond and Kintzele Ditch

These legal drainage ditches and detention pond of the Michigan City Sanitary District drain the south side and a portion of the west side of Michigan City into Porter County drainage ditches and Lake Michigan, as indicated on TFC Map 12. This storm drainage system is adequate for the drainage from the future development that is projected to occur in this portion of the Planning Area, provided that the ditches and their culvert pipes and the detention pond continue to be maintained free of obstructions and sediment accumulation.

A.3 Carver Ditch

As indicated on TFC Map 12, the southwest corner of the Planning Area is drained by Carver Ditch and its tributary Kemper Ditch, into the Little Calumet River and Lake Michigan. All of these watercourses are in Porter County and are not under the jurisdiction of the Michigan City Sanitary District or the LaPorte County Drainage Board. Both Carver and Kemper Ditches are well maintained by Porter County and should be capable of handling the drainage from the future development that is projected to occur in this portion of the Planning Area, with Porter County's continued maintenance.

Recommendation for A.2 and A.3; A close working relationship between the Michigan City Sanitary District and the Porter County Drainage Board should be established regarding Kintzele Ditch maintenance immediately and the Kemper and Carver Ditches in the future.

A.4 Beck Ditch

As indicated on TFC Map 12, *Storm Drainage Improvements* (page 1.125), the Northeast side of Michigan City is drained by Beck Ditch and its North and South Arms and Otter Creek, all into Trail Creek. Otter Creek and the west section of Beck Ditch are natural streams with well-defined forested valleys and surroundings. The east section of Beck Ditch and its North and South Arms are dredged ditches which are under the jurisdiction of the Michigan City Sanitary District. All of these watercourses are considered to have adequate capacity to handle the drainage from the future development that is projected to occur in this portion of the Planning Area, provided the ditch sections are maintained.

Recommendation for A.4: The east ditch section of Beck Ditch contains considerable small tree growth along each side and in the ditch, which should be removed to improve the ditch flow capacity and accessibility.

A.5 White Ditch

As indicated on the TFC Map 12, the Northeast corner of the Planning Area is drained by White Ditch and its tributaries; Lubke Arm from the southeast and Lake Clare and Kimball Ditch from the southwest. The storm drainage in White Ditch into Lake Michigan is through several Lake Michigan communities in Indiana and Michigan. As such, the ditch is a scenic benefit and is well maintained for this purpose and to maintain flow capacity to prevent flooding of nearby homes.

In Indiana, the Town of Long Beach maintains Lake Clare and Kimball Ditch to Moore Road, the Michigan City Sanitary District maintains White Ditch from Moore Road to the City Limit and LaPorte County maintains the ditch to the Michigan state line. As a result, the storm drainage in the White Ditch system from projected future development in this portion of the Planning Area will require multiple approvals from Indiana and Michigan governmental authorities. These approvals should be obtained as a "first-step" by any future developer.

Recommendation for A.5: A close working relationship between the Michigan City Sanitary District and the LaPorte County Drainage Board, the Town of Long Beach and the municipal and county drainage authorities in the State of Michigan should be established regarding maintenance of White Ditch and its tributaries.

A.6 South of CR W 400 N (Kieffer Road).

The area south of CR W 400 N (Kieffer Road), from Ohio Street to Cleveland Avenue is presently being developed. This area is outside of the city limits and is under the jurisdiction of LaPorte County. The construction of a new hospital is almost completed between Ohio Street and U.S. Highway 421. East of U.S. Highway 421 to Cleveland Avenue, a new motel and several medical buildings have recently been constructed and new roads and sanitary and storm sewers have been constructed to accommodate additional developments. The storm drainage for these areas is described as follows; two stormwater detention basins for the new hospital site will be located on the west side of the site and will discharge and flow to the west, via existing overland flow routes. A third stormwater detention basin for the new hospital site will be located on the east side of the site and will discharge and flow north along U.S. Highway 421 and then east along CR W 400 N (Kieffer Road), primarily in storm sewer, with discharge into the West Branch of Trail Creek, east of Cleveland Avenue, as indicated on TFC Map 12. Drainage ditches and detention basins for the existing roadways and developments east of U.S. Highway 421, drain into this CR W 400 N (Kieffer Road) system. All of the future developments in this area will also flow into the CR W 400 N (Kieffer Road) system. As this area south of CR W 400 N (Kieffer Road) is outside of the corporate limits of Michigan City, storm drainage is under the jurisdiction of LaPorte County.

A.7 U.S. Highway 20 East

The existing drainage for U.S. Highway 20 from Woodland Avenue to Johnson Road, is via side ditches. The large undeveloped area south of this section of U.S. Highway 20 drains toward U.S. Highway 20 and runoff from this area has caused flooding problems on and along the highway in the past.

Recommendation for A.7: This entire large area is projected to be developed residentially by 2040, the storm drainage for this development should include a storm sewer system to transport drainage to Johnson Road and into Trail Creek, rather than into the U.S. Highway 20 side ditch.

B. STORM SEWERS

B.1 Fourth Street Box Storm Sewer System

The Fourth Street Box system serves the north and northwest areas of Michigan City, with discharge into Trail Creek just south of the U.S. Highway 12 bridge. The only flow capacity problem in this system is at the west end, on U.S. Highway 12. This system will serve new developments that are occurring or anticipated in the downtown area and a proposed study of the system is presently being considered to determine the structural condition and flow capacities of the system components.

Recommendation for B.1: A Fourth Street box storm sewer system study should be conducted and all structural and flow capacity problems should be corrected.

B.2 Cheney Run Storm Sewer System

The Cheney Run system serves the central portion of the City and also the Cleveland Avenue corridor

to the south, with discharge into Trail Creek, approximately 1/3 of a mile north of Michigan Boulevard. The existing drainage problems on this system which are indicated on TFC Map _, could be solved by the design and construction of the previously mentioned Lafayette Barker Storm Sewer Improvements project. This project would eliminate drainage problems in the project area and also reduce the flow in the existing Cheney Run system which would eliminate drainage problems at the west end of the system on Garfield Street.

Recommendation for B.2: Implement the Lafayette Barker Storm Sewer Improvements project, at an estimated total project cost of $25,000 to provide another outfall sewer and thus relieve the storm drainage problems in the Cheney Run Storm Sewer system and also provide sewer separation by removing storm drainage from the existing combined sewers in the drainage area.

B.3 Forest Manor Storm Sewer System

The Forest Manor Storm Sewer System serves an area on the west side of the City which is bounded by the CSX Railroad on the north, Ohio Street on the east, Earl Road on the south and Striebel Arm Ditch on the west. The system drains into the Henry Street stormwater pump station at the northwest corner of the area, which pumps the stormwater flow into Striebel Arm Ditch. The only system problem is access for maintenance of a drainage ditch in the CSX Railroad right-of-way, for the properties on the north side of Henry Street. The CSX Railroad's requirements to obtain access for ditch maintenance are very cumbersome.

Recommendation for B.3: The Michigan City Sanitary District and the CSX Railroad should establish an agreement regarding regular maintenance of the drainage ditch in CSX right-of-way.

B.4 Ohio Street Storm Sewer System

The Ohio Street system serves the southwest corner of Michigan City. The system receives the overflow from Lake Henry and drains both sides of Ohio Street from the Westwind Drive alignment to the north, into Striebel Arm Ditch. The storm sewer on Ohio Street is presently being improved, along with its connection to the Lake Henry overflow sewer, as part of an Ohio Street widening and improvements project. Existing drainage problems on Crestview Drive, the next street east of Ohio Street, are also being considered for elimination via the Ohio Street improvements.

Recommendation for B.4: Implement storm drainage improvements on Crestwood Drive.

B.5 Franklin Street South of U.S. Highway 20

This business area contains numerous detention basins for shopping center parking lots. The overflows from these detention basins drain to the north and into Striebel Arm Ditch, either directly or via storm sewers along U.S. 20. The drainage from Franklin Street (U.S. Highway 421) also drains into Striebel Arm Ditch via storm sewers. A natural wetland on the southeast side of the U.S. 20 and 421 intersection provides natural detention for all of this drainage. To relieve the occasional flooding of this wetland detention area onto U.S. 20, the Michigan City Sanitary District constructed a high water relief sewer for the wetland which drains into the Cleveland Avenue storm sewer which drains into the Cheney Run storm sewer system. As a result of the preceding, adequate storm drainage capacity exists for future developments in this business area.

C. OTHER STORM DRAINAGE SYSTEM RECOMMENDATIONS

In addition to the preceding recommendations, the following items are also recommended regarding future storm drainage in the Planning Area:

1. The City of Michigan City should coordinate with the Indiana Department of Transportation (INDOT) to correct the existing drainage problems (a) under the U.S. Highway 20/SR 212 interchange bridge, (b) on U.S. Highway 12 at the west edge of town and (c) on U.S. Highway 20 at Ohio Street.
2. The Michigan City Sanitary District should consider the use of their recent investigation and inventory of all stormwater detention basins in their service area to establish (a) operation and maintenance regulations for these basins and (b) an inspection program to assure compliance with the regulations.
3. The Michigan City Sanitary District should consider the enactment of a requirement that all new developments provide storm sewer laterals to each property for the connection of roof downspouts and foundation drain sump pumps, to prevent the connection of these items to sanitary sewer laterals in the future.

TFC Table 21, Storm Drainage Recommendations		
Map Designation No.	Descriptions	Recommendations
A	**Open Waterways**	
A.1	Trail Creek	Nothing Specific
A.2	Kintzele Ditch	Coordinate with Porter County
A.3	Carver Ditch	Coordinate with Porter County
A.4	Beck Ditch	Clear tree growth from and along ditch for improved flow and accessibility.
A.5	White Ditch	Coordinate with LaPorte County and State of Michigan drainage authorities regarding ditch maintenance.
A.6	South of CR W 400 N (Kieffer Road)	Nothing specific
A.7	U.S. Highway 20	Provide storm sewer to Johnson Road for the drainage from future developments to the south.
B	**Storm Sewers**	
B.1	Fourth Street Box Storm Sewer System	Perform study of existing system and implement necessary improvements.
B.2	Cheney Run Storm Sewer System	Design and construct Lafayette Barker Storm Sewer System Improvements project.
B.3	Forest Manor Storm Sewer System	Execute agreement with CSX Railroad regarding regular maintenance of drainage ditch.
B.4	Ohio Street Storm Sewer System	Implement storm drainage improvements on Crestwood Drive.
B.5	Franklin Street South of U.S. Highway 20	Nothing Specific

LEGEND

- City Limits
- Comprehensive Plan Area

Existing Storm Main

- 8′ x 10′
- 12′ x 6′
- 15″
- 21″
- 24″
- 33″
- 36″
- 42″
- 48″
- 54″
- 66″
- 84″
- 96″
- 108″
- Open Channel
- Storm Sewers
- Tributaries
- Location Pernnial Street Flooding

Lake Michigan

Storm Sewer discharges onto Esplanade in Sand Dunes

Lake Kai (DETENTION)

A.1 Trail Creek

B.1

B.2

B.3

B.4

B.5

A.2

A.3

A.4

A.5

A.6

A.7

Striebel Arm Ditch

Kintzele Ditch

Brown Ditch

Monon Storm Lift Station

STREIBEL POND (DETENTION)

Kintzele Ditch

Carver Ditch

Kiefer Gruenke Ditch

West Branch Trail Creek

Natural Wet Lands (DETENTION)

Lake Henry (DETENTION)

North Arm Beck Ditch

Otter Creek

Beck Ditch

Trail Creek

Waterford Creek

White Ditch

Lubke Arm

South Arm Beck Ditch

Brown Ditch

Bull Ditch

East Branch Trail Creek

East Branch Trail Creek

Bosserman Creek

West Branch Trail Creek

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

MOMENTUM: MICHIGAN CITY 2040

THE FUTURE CITY

TFC Map 12, Storm Drainage Improvements

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

OBJECTIVE 5.4: Support well-planned improvements to the private utility and communications networks that provide redundancy, efficiency, and security.

STRATEGY 5.4.1: ***Develop a phased program to extend fiber-optic cable, via micro-trenching to existing and proposed business opportunity areas.***

As depicted on TFC Map 13, *New Fiber Optic Routes*, the City's Sanitary District is planning to extend fiber optic cable in an elongated loop, that extends from 10th Street southward along Ohio Street to CR W 400 N (Kieffer Road); eastward to Cleveland Avenue; and northward to E. Michigan Boulevard. The Sanitary District is also planning to run fiber optic cable southeastward along E. Michigan Boulevard to Sullair and the Woodruff Business Park; and then due east along Warnke Road.

LEGEND

- City Limits
- Comprehensive Plan Area

Michigan City Fiber Project

- Vaults

Anticipated Installation Year of Fiber Routes

- 2017
- 2018
- 2019
- 2020
- 2021
- Fiber Routes to New FLU Centers
- Future Development Centers
- Commercial Nodes

Pahs Road

County Line Road

CR W 400 N (Kieffer Road)

CR W 300 N

12 20 94 212 35 421

Client: City of Michigan City

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MOMENTUM: MICHIGAN CITY 2040

THE FUTURE CITY

TFC Map 13, New Fiber Optic Routes

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

GOAL 6.0:

Public services and facilities adequately serve the needs of residents and businesses within the Michigan City, and that such services and facilities are adaptable to future growth.

OBJECTIVE 6.1: Ensure that public services and facilities adequately serve the needs of residents and businesses within the City of Michigan City, and that such services and facilities are adaptable to future growth.

STRATEGY 6.1.1: ***Provide for the ongoing needs of the Fire Department to ensure adequate protection of the population, see TFC Map 14, Fire Service Area and Growth Sequencing.***

ACTIONS AND INITIATIVES

1. Continue to adequately fund training and certification opportunities for fire personnel to improve job-related skills and departmental capabilities.
2. Periodically review the MCFD personnel needs and ability to accommodate increased calls for service concurrent with population growth.
3. To keep pace with state-of-the-art fire rescue technology and capabilities, establish a formalized replacement and procurement program for vehicles and equipment that is informed by the current City Capital Improvements Program (CIP). At a minimum, this should include a replacement schedule as follows:
   - Engines: 20 years;
   - Ladder trucks: 25 years; and
   - Command vehicles: 10 years.
4. Continue MCFD participation in the City's plan review process so that water supply and other emergency response considerations are incorporated into plans and plats for new development/ redevelopment.
5. Develop a method of review and consultation with City Planning Department staff about proposed annexations and their potential impact to MCFD's current ISO rating of 3.
6. Determine the requirements necessary for the City to achieve an ISO rating of 2. Prepare financial estimates of likely cost savings (to government, businesses, and citizens) and compare to projected system upgrades to determine return on investment.

STRATEGY 6.1.2: ***Provide for the ongoing needs of the Police Department to ensure adequate Police protection for the projected population.***

Work with the Michigan City Police Department to plan for growth. The anticipated growth of over 11,000 residents will require reorganizing how the Police Department patrols areas within the City. Additional staffing and equipment will be required.

ACTIONS AND INITIATIVES

1. As growth occurs re-delineate all Police patrol districts. Plan to add a seventh patrol district to cover areas destined for new growth.
2. Plan for relocate the City Jail to a more central location within the City.
3. Expand the Police force to ensure the general ratio of 1.5 officers per 1,000 citizens.

LEGEND

- City Limits
- Comprehensive Plan Area
- Existing Development
- Rural / Undeveloped Land

Growth Sequencing

- 2017 - 2025
- 2025 - 2030
- 2030 - 2035
- 2035 - 2040
- Michigan City Fire Stations
- Michigan City Fire Stations 2 mile Service Area (4 minute response time)
- Town and Township Volunteer Fire Stations
- Town and Township Volunteer Fire Stations 2 mile Service Area (4 minute response time)

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Dunelands Beach
Michiana Shores
Michiana Shores Fire
Long Beach Fire
Long Beach
Lake Michigan
MC Fire Station 2
Michigan Township
Pottawattamie Park
Springfield Township
MC Fire Station 1
MC Fire Admin Offices and Training Center
Michigan City
MC Fire Station 3
Springfield Twp Fire
PORTER COUNTY
LA PORTE COUNTY
Trail Creek
Town of Pines
Beverly Shores
Pine Twp Fire
MC Fire Station 4
Beverly Shores Fire
Pine Township
Coolspring Twp Fire
Center Township
Coolspring Township

12 20 94 212 421 35

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

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MOMENTUM: MICHIGAN CITY 2040

THE FUTURE CITY

TFC Map 14, Fire Service Area and Growth Sequencing

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Policies

Utilities Infrastructure (U)

U Policy 1: Infrastructure should be designed for the efficient integration of multiple programs and uses. Infrastructure should be designed efficiently in order to provide for a multiplicity of uses within a single area. This technique of hybridization can contribute to the activation of urban areas that would otherwise be vacated, and provides for the continuous use of urban space for diverse programs and events.

U Policy 2: Evaluate non-residential development proposals according to the types of uses proposed, their compatibility with surrounding uses, and the ability of existing or planned infrastructure to provide adequate services to these uses.

U Policy 3: The City shall coordinate with the Michigan City Water Department to ensure that projected developments within the Planning Area are incorporated into the Water Department's long-range plans for water supply and delivery.

U Policy 4: Water efficiency. Reduce the need for additional water facility capacity and maintain compliance with state water resource regulations by encouraging efficient use of water by customers within the city.

U Policy 5: Use green infrastructure where feasible as an alternative to traditional grey infrastructure systems. Encourage projects which optimize runoff capture and treatment by incorporating features such as bioswales, infiltration areas, vegetated filter strips, porous paving, and rain gardens that enhance stormwater infiltration and reduce peak runoff.

U Policy 6: All sanitary sewer system and storm drain system improvements shall be designed in conformance with applicable City of Michigan City Sanitary District design and construction standards.

U Policy 7: Treatment. Provide adequate wastewater treatment facilities to ensure compliance with effluent standards established in regulatory permits.

U Policy 8: Stormwater as a resource. Manage stormwater as a resource for watershed health and public use incorporating ways to protect and restore the natural hydrology, water quality, and habitat of Michigan City's watersheds.

U Policy 9: Waste management. Ensure land use programs, rights-of-way regulations, and public facility investments allow the City to manage waste effectively and prioritize waste management in the following order: waste reduction, recycling, anaerobic digestion, composting, energy recovery, and then landfill.

U Policy 10: Outdoor lighting should be fully shielded and direct light down where it is needed, not into the sky.

Focus Area 4:

Transportation Infrastructure

Guiding Principles

Transportation Principle 1: Connectivity and Public Realm. The street and public right-of-way network should be used to connect various public realm amenities so that a range of inter-modal activities (walking, biking, driving, etc.) support how neighborhood residents travel to and from destinations such as schools, parks/open space, shops and businesses.

Transportation Principle 2: Sustainable Transportation Systems. Michigan City's transportation network provides and enables the basic access and development needs of individuals, companies, and society to be met safely and in a manner consistent with human and ecosystem health, and promotes equity within and between successive generations.

Transportation Principle 3: Transportation Choices. Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.

Transportation Principle 4: Integrated Planning. An integrated approach to land use decisions, economic development, environmental conservation and transportation investments should be used to achieve a balanced transportation system. Transportation choices should be integrated into all new development and redevelopment projects.

Transportation Principle 5: Inclusive Public Transit. Public transit planning must be inclusive, taking into account all residents and users - the old, the young, the poor, etc.

Transportation Principle 6: Reduce VMT. Reduce the rate of increase, rather than attempt to accommodate the predicted doubling of vehicle miles traveled (VMT) in the Planning Area over the next twenty years.

Introduction

Mobility includes a multitude of components that collectively create a system that facilitates the movement of goods and people to, and throughout, the community. These components include not only roadways for motorized vehicles, but also sidewalks, bike lanes, multi-purpose pathways and transit facilities. A comprehensive and efficient transportation system provides for the ease of circulation within a community, and enhances the community's environmental, economic and social environs. People of all ages, abilities and modes of movement must have the ability to circulate throughout the community, from their home to their workplace, and to engage in shopping, dining and entertainment activities. To achieve this end, an integrated and multi-faceted strategy must be implemented that addresses the interconnections between land uses and mobility demands.

Informed and anticipatory transportation planning and thoroughfare development will help prepare the City of Michigan City for future traffic demands and create a safe and efficient transportation system. A well-balanced and comprehensive transportation system should offer a choice of travel modes for residents, businesses, and visitors. It should also be appropriately designed for both safety and visual appeal for multiple modes. The *Transportation Infrastructure* element of the Comprehensive Plan establishes the framework for such a system to accommodate local and regional travel demand through the year 2040 and beyond.

The purpose of this element is to plan for the long-range transportation needs of the community. This involves the preservation of rights-of-way for thoroughfare system development, as well as coordinating improvements and initiatives for all other modes of transportation. This element addresses the means for developing an adequate street network to collect, distribute, and convey traffic within and through the community, while also providing for development of pedestrian and bicycle infrastructure, public transportation, and systems for the movement of goods.

On Mobility

TRANSPORTATION AS A DRIVER OF URBAN FORM

Traffic congestion, street maintenance, and safety along roadways are often the most prevalent and most talked about issues when addressing current and future community needs. As with many other communities, increased congestion brought about by new development, confusing intersections, lack of connectivity, and lack of sidewalks and trails are all issues that have been expressed by the citizens of Michigan City during the public engagement process. Residents' inability to move with relative ease throughout their community leads to frustration and detracts from local quality of life. Likewise, retaining and attracting businesses requires having adequate roadway, rail, air and other facilities to move people and goods to and from this area in an effective and efficient manner.

Much of the emphasis of this plan element is placed on the roadway system as it connects the entire region and is the most predominant form of mobility in Michigan City. However, while traveling by car is the most common mode of travel, this plan recognizes that building and widening roadways will not fully address future transportation needs in the community. With continued growth, high costs of developing infrastructure, escalating fuel costs, and impacts to air quality and the environment, planning for all of the future travel needs in the City requires looking at transportation as an integrated and interconnected system with multiple options for traveling within the community and around the region.

Options should apply not only in terms of offering different modes of transportation but also in offering multiple connections and choices of route. Part of providing multiple options and enhancing mobility in the community will include promoting development patterns that encourage alternative land uses and efficient trips (i.e., mixed-use developments, compatible commercial uses within close proximity to

neighborhoods). The transportation system has a strong influence on the quality and type of growth, the character of development, and should therefore be closely coordinated with the community's overall land use goals and policies.

Transportation and Land Use

To foster a sustainable community, planners must consider the effect of projected transportation improvements on future land use patterns as transportation improvements spur economic growth and development, and influence housing choices. Transportation and land use participate in a reciprocal relationship. Activity related to land uses generates the need for transportation infrastructure and good transportation supports increases in land use activities. As will be discussed, transportation modeling efforts undertaken as part of this multi-modal plan measure existing traffic flow patterns and attempt to model future transportation needs based on projected land uses.

COORDINATED PLANNING

Transportation planning is closely related to other elements of *Michigan City Momentum 2040* Comprehensive Plan including *Growth Capacity and Economic Performance; Environmental Management and Green Infrastructure; Utilities Infrastructure and Public Services*; *Housing and Neighborhoods;* and *Land Use and Community Character*. For instance, the future land use and overall development patterns help determine the transportation infrastructure necessary to meet future mobility needs. Additionally, the transportation system is vital to the movement of goods, thereby having direct influence on the community's economic development. Businesses seeking to locate or expand are interested in their access to and circulation within the community and, in the case of a major industry, the proximity to a freeway. Transportation arteries also provide opportunities for linear connections via sidewalks and/or bicycle routes, which complement the City's parks and recreation system. Clearly, the location, design and capacity of roadways also determine the type and character of development.

A coordinated planning approach was utilized in developing the *Transportation Infrastructure* element, ensuring the plan and its recommended policies and strategies are compatible with the community's land use goals and economic development objectives.

ISSUES AND CHALLENGES

While vehicular circulation is the primary mode of transportation within the Planning Area, it is important that alternative modes of transportation, including pedestrian and bicycle facilities and public transit be considered in order to decrease the load on infrastructure, reduce emissions, and increase livability.

This chapter provides a 20-year (and beyond) policy framework for the future development of Michigan City's multi-modal transportation network, addressing:

Regional Multi-modal Mobility. Engaging the full spectrum of transportation assets and facilities for the movement of citizens, goods and services.

Thoroughfare Development. Preservation of rights-of-way both within the City and Urban Growth Boundary (UGB) and development of "complete streets," with respect to suitability for all modes of transportation.

Traffic Management. In order to provide for an efficient movement of vehicles, the traffic carrying capacities of area roadways must be preserved. This relates to the use of land adjacent to the City's thoroughfares, as well as their means of access. It also relates to the design of roadways.

Active Transportation. There must be an increased emphasis on pedestrian mobility improvements to safeguard the community's small-town feel and quality of life, and provide healthy and safe alternatives to vehicular travel. This includes sidewalks along area roadways, safe and accessible crossings, and provisions for on-street bike lanes and off-street recreational trails.

Corridor Appearance. The community's corridors offer an opportunity to establish a positive first impression of Michigan City. The design and appearance of the roadway, as well as the properties that abut it, are of essential importance to enhance community aesthetics and contribute to a quality visual environment.

Traffic Calming. Neighborhood design that calms traffic and encourages slower speeds, including narrower streets where appropriate (which can also reduce impervious surface and resulting storm water runoff).

Increased Connectivity. Connectivity between neighborhoods and commercial and public areas through the roadway system, sidewalks, and trails.

Compatibility. Thoroughfare development that is compatible with and complements community and neighborhood character.

In developing a major transportation plan that will serve the City of Michigan City, it is imperative that these alternative transportation networks should be interconnected and integrated with vehicular thoroughfares into one comprehensive system. The previously listed guiding principles and following goals inform the strategies and recommendations within this element.

GOAL 7.0:

A network of safe, connected, high-quality, attractive transportation corridors.

OBJECTIVE 7.1: Ensure a well-connected and high-quality street network.

THOROUGHFARE DEVELOPMENT

The basic transportation system is formed by a network of streets, each having a different functional role and designed traffic carrying capacity. Each street segment contributes to the interconnectivity of the network. Without a continuous system, there are unnecessary interruptions that divert traffic movements onto streets that are not designed to carry an increased volume, which quickly become congested and unsafe. For a network to operate efficiently, it is essential for there to be a hierarchical system including highways (such as Interstate 94), arterial streets (such as E. Michigan Boulevard, U.S. Highway 421 / S. Franklin Street), collector roadways (including Wabash Street, Cleveland Avenue, Ohio Street and Woodland Avenue), and local residential streets. Each link in the system is intended to function according to its design capacity; in effect, distributing traffic from the lowest (e.g., local streets) to the highest (e.g., arterial streets and highways) functional classification. Connectivity is essential for providing an efficient, safe, and convenient roadway network.

MindMixer Results

What's your big idea for the future of Michigan City?

A Super Interconnected Infrastructure

"It would be great to design a transportation infrastructure that will make travel (other than car) easy and convenient. Connecting ideas such as bike lanes, bus stops, sidewalks, and train stations to one super interconnected infrastructure would make MC ahead of most cities in the region. Most cities in LaPorte, Porter, and Lake counties live and die by the car. It would be great to be able to ride a bike to a train stop or a bus hub and lock it down. Or it would be cool to get off the bus to find a "rent-a-bike" waiting to get me the rest of the way."

An optimum street network is composed of a grid of streets, with parallel and perpendicular arterial streets spaced uniformly, forming neighborhood superblocks. Within the superblock, collector roadways should be spaced at roughly equal intervals in each direction. While Michigan City's street network generally follows this arrangement, growth and development within Michigan City has happened incrementally and without adherence to the adopted thoroughfare plan. As a result, the street network is typically constructed in a piecemeal fashion, often resulting in a pattern of discontinuous and disconnected streets.

Therefore, a primary purpose of this plan is to avoid perpetuating these circumstances in the developing areas of the City and the Planning Area. As will be discussed, subdivision regulations that stipulate roadway design criteria and capacities are necessary to accomplish an efficient street network.

The amount of development within and adjacent to the City strongly warrants the development and implementation of a *Thoroughfare Plan*. Over time, a complete grid of thoroughfares is needed to provide an efficient local system that may be integrated into the larger metropolitan transportation plan.

At the time of land subdivision, the City must ensure conformance with the adopted *Thoroughfare Plan* and compliance of the street and lot layout consistent with the subdivision design standards. The subdivision regulations must, therefore, have definitive rules relating to street continuity, rights-of-way and pavement cross sections, intersections and street offsets, lot access, medians and entranceways, traffic calming, and provisions regarding cul-de-sacs and alleys, among others. It is imperative for each subdivision to provide connection to the adjacent land as a means for continuing development of the street pattern established by the *Thoroughfare Plan*. Whether the development is small or large or constructed in one or more phases, it must adequately tie into to the planned roadway network.

CORRIDOR CONDITIONS: TRAFFIC VOLUMES / LEVELS OF SERVICE

The assessment of traffic volumes includes a connectivity analysis of travel patterns, vehicle miles traveled (VMT), travel times and/or trip length, and level of service (LOS).

To understand local traffic patterns and the operating conditions of City streets, a level of service (LOS) analysis was performed. A LOS is a letter designation that describes a range of operating conditions on a particular type of facility. The 1994 *Highway Capacity Manual* defines levels of service as, "qualitative measures that characterize operational conditions within a traffic stream and their perception by motorists and passengers."[1] Within a LOS analysis, several key measures are used to describe service quality, including:

- speed and travel time - one of the most easily perceived measures of service quality is speed, or its inverse, travel time;
- density - describes the proximity of vehicles to each other in the traffic stream, and reflects ease of maneuverability in the traffic stream;
- delay - the excess or additional travel time due to traffic conditions or controls.

For the purposes of this chapter, the LOS was based on an analysis of traffic volume relative to the design capacity (vehicles per day) of each street. LOS is represented by letter designations along a continuum from "A" to "F," with "A" meaning free flow conditions and "F" indicating heavy congestion. General descriptions of each are as follows:

LOS "A" - Free flow traffic conditions with very little delay;

LOS "B" - Good traffic flow and signal progression with some delays at intersections (higher than A);

LOS "C" - Stable operating conditions with average traffic delays;

LOS "D" - Rating conditions result in lower travel speeds and higher delays at intersections;

LOS "E" - Unstable flow, poor signal progression, traffic near or at roadway capacity; and

LOS "F" - Roadway operations are over capacity with extreme delays at intersections.

A Volume to Capacity (V/C) less than 1.0 indicates that a roadway is operating relatively smoothly and corresponds to a LOS of A, B, or C. Any V/C ratio greater than 1.0 indicates congestion and recurring delays. LOS for thoroughfares within the Planning Area is depicted on TEC Map 17, *Existing Level of Service*.

STRATEGY 7.1.1: *Utilize the Thoroughfare Plan map and functional classification of roadways to achieve adequate mobility within the community and preserve rights-of-way.*

ACTIONS AND INITIATIVES

1. Periodically conduct signal warrant studies as area travel volumes increase with new development. In areas that are already managed by traffic signals, signal timing should be reviewed, particularly in congested areas, to determine if timed traffic signals are appropriate relative to the volume and peaks in traffic flow. Adjustments should be made to traffic signals so they are timed accordingly. Pedestrian- and bicycle-actuated traffic signals should be installed at intersections near schools, parks, and other areas with high pedestrian traffic.

1 *Highway Capacity Manual*. Transportation Research Board, National Research Council (U.S.). Washington, D.C.. 2000. ISBN 0-309-06681-6.

ACCESS MANAGEMENT

Access management refers to managing the number interruptions that impede even traffic flow, which is essential to preserving the capacities of major / minor arterials and collector streets. The capacity and level of service (LOS) of the thoroughfare is affected by the following:

- Number of access points (streets and driveways);
- Impedance of traffic flow by vehicles entering and exiting properties;
- Number of intersections;
- Lane width;
- Synchronization of traffic control devices;
- Allowances for deceleration and/or acceleration at ingress/egress points; and
- The presences or void of a center turn lane or median.

Traditionally, the majority of residential uses in the City developed on gridded local streets. More recently, however, residential uses have deviated from this traditional pattern of development, where consecutive, individual lots, each with their own point of access / egress, have been developed along roadways which are now, or will be in the future, used as collectors, or worse, minor arterials.

Likewise, convenient access can make or break a commercial corridor. Too many access points can exacerbate traffic congestion and lead to unsafe driving conditions. The primary benefit of having an access management plan is that it lays the foundation for correcting existing access management problems, while preventing others from occurring in the future. Too many curb cuts are inefficient and dangerous for drivers and pedestrians alike. In order to accommodate access to existing and future development in a safe and efficient manner, the following objectives should be implemented. Objectives include:

- managing the location, design, and type of property access in order to reduce traffic congestion and frequency of crashes;
- preserving the flow of traffic and existing road capacity;
- supporting economic growth;
- improving access to businesses and homes;
- maintaining or improve property values; and
- preserving the public investment in the transportation infrastructure.

Access management is critical to maintaining safety, improve mobility and access, and to improve travel conditions by minimizing conflicts between through vehicles and slower, turning vehicles.

ACCESS MANAGEMENT PRINCIPLES

The following principles should guide and direct the development of access management plans for specific thoroughfares in and around the City of Michigan City:

1. **Provide a Specialized Roadway System.** Design and manage roadways according to the primary functions that they are expected to serve. Roadway operations can be improved by achieving the proper balance between traffic flow and access to abutting property.
2. **Limit Direct Access to State Highways and Other Major Roadways.** "Reasonable access" is required by Indiana State law. However, direct access is not required if other access options are available.
3. **Promote Intersection Hierarchy.** The higher a roadway's functional classification the higher the degree of access management that should be applied so that the roadway continues to perform according to the function it was designed to serve.
4. **Locate Signals to Favor Through Movements.** Failure to carefully locate access connections or median openings that may later become signalized can cause substantial increases in arterial travel times.
5. **Preserve the Functional Area of Intersections and Interchanges.** Access driveways located too close to intersections or interchange ramps can cause serious traffic conflicts that impair the function of the affected facilities.
6. **Limit the Number of Driveways and Other Conflict Points.** Simplifying the driving task - by limiting the number of conflict points a motorists is faced with - contributes to improved traffic operations and fewer collisions.
7. **Separate Driveways and Other Conflict Points.** Drivers need sufficient time to address one potential set of conflicts before facing another. Separating conflict areas helps to simplify the driving task and contributes to improved traffic operations and safety.

8. **Remove Turning Vehicles from Through Traffic Lanes.** Turning lanes allow drivers to decelerate gradually out of the through lane and wait in a protected area for an opportunity to complete a turn, thereby reducing the severity and duration of conflict between turning vehicles and through traffic.
9. **Use Non-Traversable Medians to Manage Left-Turn Movements.** Medians channel turning movements on major roadways to designated locations. Non-traversable medians and other techniques that minimize left-turns or reduce the driver workload can be especially effective in improving roadway safety.
10. **Provide a Supporting Local Street System and On-Site Circulation System.** Interconnected local street systems and on-site circulation systems provide alternative routes for bicyclists, pedestrians, and drivers alike.
11. **Match Driveway Design with Operational and Safety Needs.** Driveways accommodate a wide range of vehicle types, traffic volumes, and vehicle turning speeds. Consequently, driveway design should be tailored to meet the needs of the vehicles using the driveway.
12. **Coordinate Actively with Other Agencies regarding Transportation and Land Use.** To optimize the benefits of access management, coordination and cooperation with all the appropriate transportation agencies is essential when introducing design techniques along a roadway or preparing an *Access Management Plan*.

BENEFITS OF ACCESS MANAGEMENT

Research indicates that a well-designed and effectively administered access management plan can result in the following tangible benefits:

- Accident and crash rates are reduced.
- Roadway capacity and the useful life of transportation facilities are prolonged.
- Travel time and congestion are decreased.
- Better coordination between access and land use is accomplished.
- Economic activity is enhanced by a safe and efficient transportation system.
- Urban design and transportation objectives are reconciled.
- The character and livability of the community is preserved through the coordination of land use and transportation.

Thoroughfare efficiency and convenience can be ensured through adoption and enforcement of specific access management regulations.

TRANSPORTATION SYSTEM MANAGEMENT (TSM)

In addition to access management, the Transportation Systems Management (TSM) approach to congestion mitigation seeks to identify improvements to enhance the capacity of existing systems through better management and operation of existing transportation facilities. These strategies are low-cost but effective in nature, which include, but are not limited to:

- Intersection and signal improvements;
- Thoroughfare bottleneck removal programs;
- Data collection to monitor system performance; and
- Special events management strategies.[1]

STRATEGY 7.1.2: *Preserve traffic capacity by implementing access management and other Transportation Systems Management (TSM) provisions in the City.*

ACTIONS AND INITIATIVES

1. In conjunction with INDOT, implement access management planning recommendations for U.S. Highway 421 / S. Franklin Street, as described in the *U.S. Highway 421 / S. Franklin Street "South Gateway" Corridor Redevelopment Plan*.
2. The Michigan City Redevelopment Commission should consider sponsoring the development of a corridor redevelopment plan for U.S. Highway 12, from County Line Road, west the western City limits. A significant element of this plan should be the preparation of an access management plan for the corridor.
3. For predominantly commercial corridors within the City, consider the applicability and benefit of implementing the following access management improvements:
    - For major and minor arterial class thoroughfares, consolidate driveways and

1 North Central Texas Council of Governments (NCTCOG)

interconnect parcels through cross access easements wherever possible so that automobile and pedestrian circulation is possible without going out onto an arterial thoroughfare. Studies indicate that halving the number of access points results in about a 30 percent decrease in the vehicular accident rate.

- Regulate the design and spacing of driveways. Locate driveways away from intersections. Within the Michigan City Appendix C, Joint Zoning Ordinance, amend Section 18.04, *Driveway Access Management*, Part (d) (3) *Number of Driveways*, to prohibit a second driveway onto the same road per property, irrespective of the length of roadway frontage. Additional driveway access points to frontage/rearage access roads and other municipal streets is permitted and encouraged.
- Design intersections and access points to simplify and coordinate signal sequences and to minimize congestion.
- Limit curb cuts to avoid excessive turning motions that snarl traffic; manage this process through zoning ordinances, design requirements, or comprehensive codes.
- Integrate raised medians and appropriate median breaks to limit potential conflicts.
- Within the Michigan City Appendix C, *Joint Zoning Ordinance*, amend Section 18.04, *Driveway Access Management* to require commercial property owners of developed

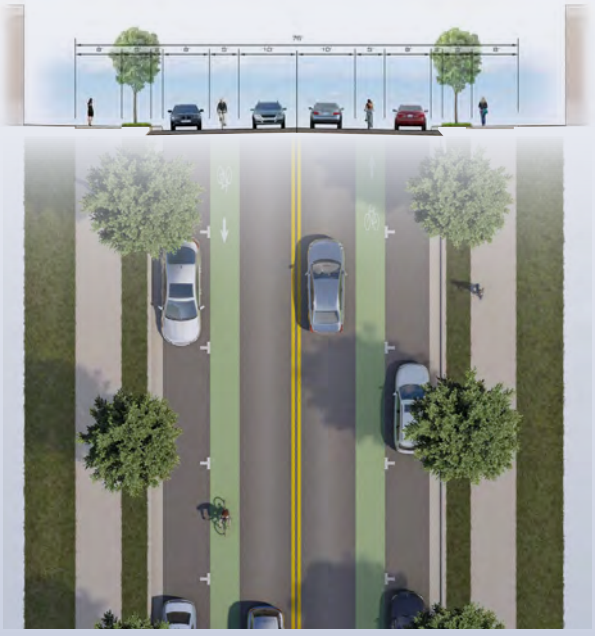
TFC Figure 5A, *U.S. Highway 421 / S. Franklin Street "South Gateway" Corridor Redevelopment Plan* Street Typology

Five street types are utilized within the various redevelopment areas. All street types are two-way and are flanked with planting strips and sidewalks. Medium-story street trees are recommended to be planted 30 feet on center, as per the City of Michigan City standards.

STREET TYPE A, Access Road

Access Road, requires a 46 foot right-of-way and is composed of two 12 foot wide travel lanes, which are flanked by two five foot wide planting strips and two five foot wide sidewalks to provide safe pedestrian mobility.

STREET TYPE B, Residential Street with Bike Lanes and On-Street Parking



Residential Street with Bike Lanes and On-Street Parking, requires a 76 foot right-of-way and is composed of two 10 foot wide travel lanes; two five foot wide, on-street bicycle lanes; room for parallel parking on both sides of the street; flanked by step-offs, planting strips, and sidewalks.

STREET TYPE C, Commercial Street with Angled On-Street Parking

Commercial Street with Angled On-Street Parking, requires a 78 foot wide right-of-way and is composed of two 10 foot wide travel lanes flanked by angled parking on either side of the street with plantings strips and sidewalks. Bulb-outs are provided for crosswalks and to calm traffic.

parcels to comply with recommended access point closures, based on the following triggers:

- if there is a change in ownership of said property;
- if there is a zoning change or re-platting;
- if the property owner applies for a development application or building permit to expand a building by 30 to 70 percent of the gross floor area, or increase the parking requirements by 20 percent;
- contingent on there being a minimum of two points of access / egress remaining after the recommended access point closure.

STRATEGY 7.1.3: ***Incorporate additional street types into Michigan City's Code of Ordinances, Appendix B - Subdivision Ordinance, Section 06.04. - Streets.***

ACTIONS AND INITIATIVES

1. Based on the *U.S. Highway 421 / S. Franklin Street South Gateway Corridor Redevelopment Plan*, incorporate Street Types A through E and the right-of-way width, pavement width, parking, and associated frontage Zone amenities see TFC Figure 5A-B.
2. Encourage alleys in compact, walkable residential districts, but with a narrower paved widths (usually 10 to 12 feet) and an easement for utilities (usually 20 feet overall). In a residential grid, alleys should

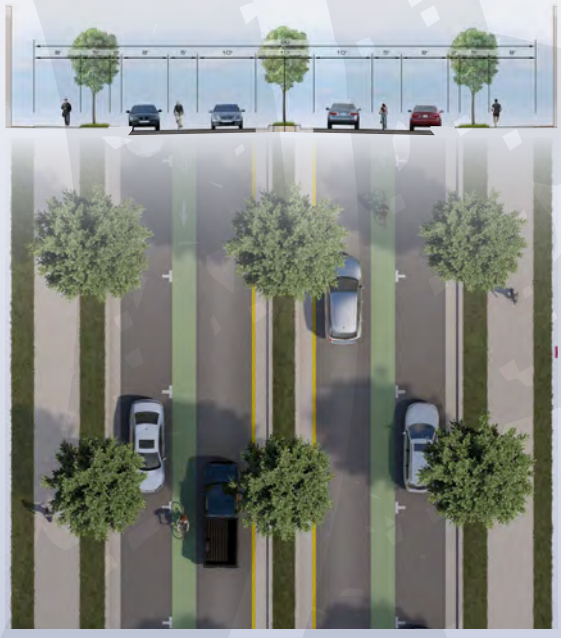
TFC Figure 5B, *U.S. Highway 421 / S. Franklin Street "South Gateway" Corridor Redevelopment Plan* Street Typology

Five street types are utilized within the various redevelopment areas. All street types are two-way and are flanked with planting strips and sidewalks. Medium-story street trees are recommended to be planted 30 feet on center, as per the City of Michigan City standards.

STREET TYPE D, Single Lane Boulevard with Bike Lanes and On-Street Parking

Single Lane Boulevard with Bike Lanes and On-Street Parking, requires an 86 foot wide right-of-way and consists of a 10 foot wide central median (including curb and gutter), two 10 foot wide travel lanes with on-street bicycle lanes and parallel parking in both directions, flanked by step-offs, planting strips, and sidewalks.

STREET TYPE E, Single Lane Boulevard with Bike Lanes



Single Lane Boulevard with Bike Lanes, requires a 70 foot wide right-of-way with a 14 foot wide center median separating two 10 foot wide travel lanes with on-street bicycle lanes on the outside, and flanked by planting strips and sidewalks.

connect across blocks to make garbage pickup easier. In commercial areas, most communities that have alleys require them to be at least 24 feet wide to allow dumpster access and deliveries.[1]

STRATEGY 7.1.4: *Implement the U.S. Highway 421 Access Road Plan.*

As depicted in TFC Figure 6, *Access Road Plan*, and described in the *U.S. Highway 421 / S. Franklin Street South Gateway Corridor Plan, i*mplement an internal system of supporting access / frontage roads for the 421 Gateway District that adheres to the existing street grid system and existing signalized intersections, and enables opportunities for parallel movement along the corridor. Create a secondary street pattern where appropriate, and modify setback requirements to pull retail and restaurant facilities close to the arterial and secondary streets. Access, parking and service-related functions would be organized to the rear of the parcel.

ACTIONS AND INITIATIVES

1. As development and redevelopment occurs along the U.S. Highway 421 corridor, partner with local developers to incrementally install portions of the access road plan (Street Type A).
2. Consider Michigan City Redevelopment Commission capital participation in the preparation of construction documents, specifications, cost estimates and project schedules for access roads proposed within the 421 Gateway District, as per TFC Figure 6, *Access Road Plan.*

1 North Central Texas Council of Governments (NCTCOG).

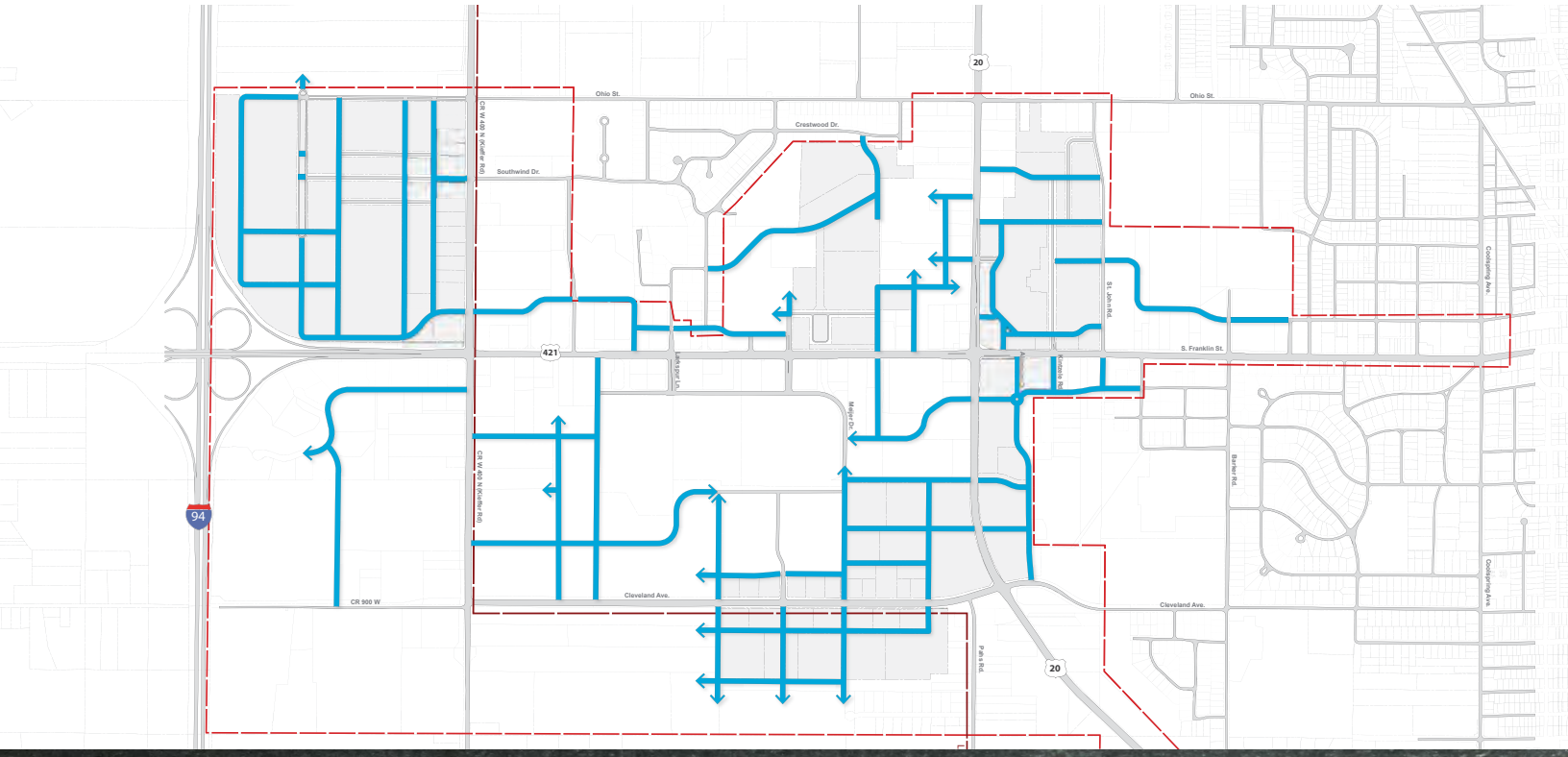
STRATEGY 7.1.5: *Partner with LaPorte County to develop an access management plan for CR W 400 N (Kieffer Road).*

With the completion of the Franciscan Health South Campus the properties along CR W 400 N (Kieffer Road), between Ohio Street and CR N 950 W will likely be redeveloped into what has been termed, Michigan City's "Medical Mile;" a corridor containing medical related uses such as doctors offices, satellite clinics, medical equipment supply stores, and pharmacies.

ACTIONS AND INITIATIVES

1. Ensure that proposed access management provisions are consistent with the provisions outlined within Strategy 7.1.2 (page 1.138).

TFC Figure 6, *U.S. Highway 421 / S. Franklin Street "South Gateway" Corridor Redevelopment Plan* Access Road Plan

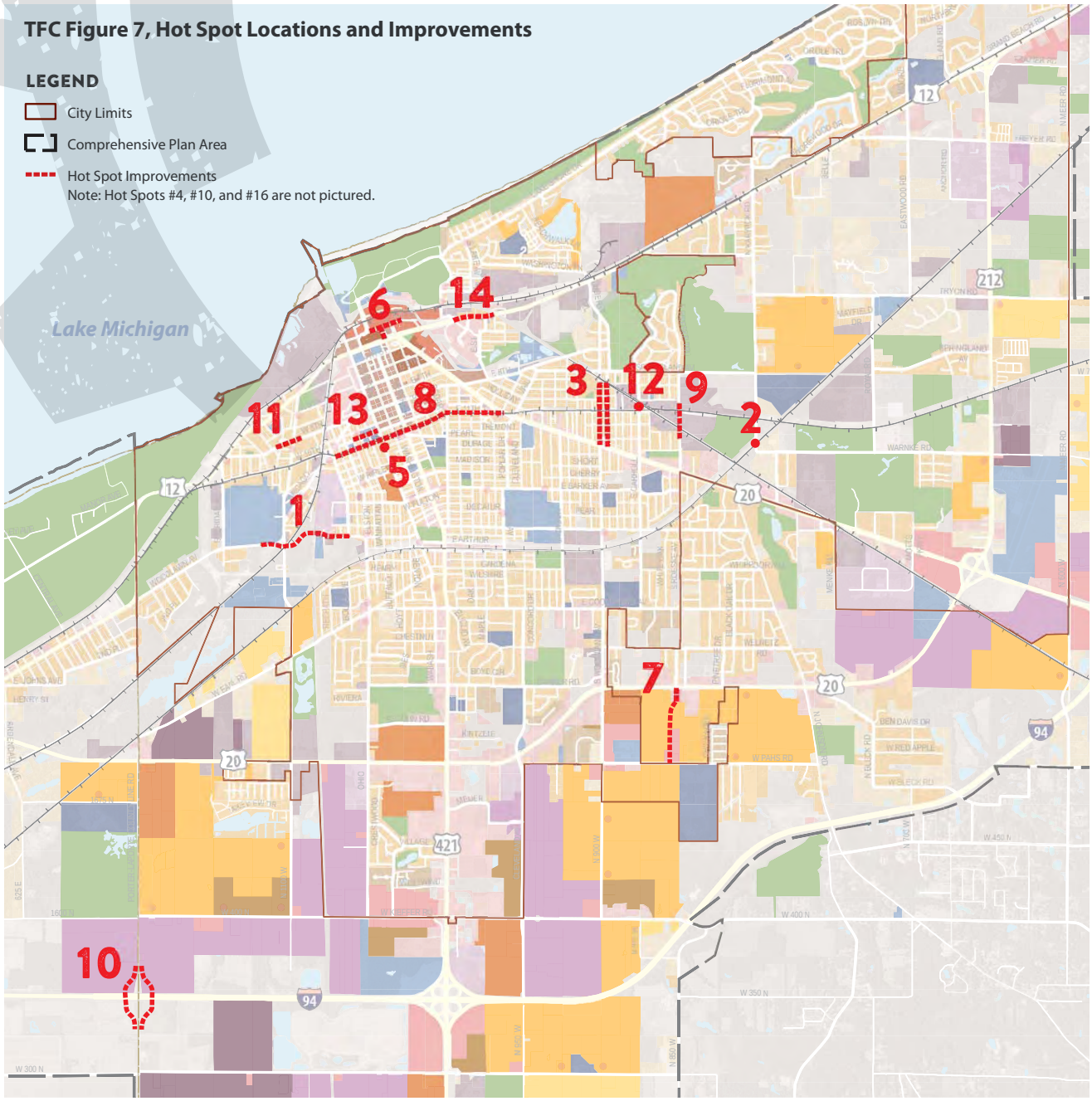


Source: Bing Maps

OBJECTIVE 7.2: Promote intra-city transportation efficiency.

The City is interested in improving the functionality of several north-south, and east-west transportation corridors. Fourteen areas, or "hot spots," have been identified as contributing to traffic congestion or impeded traffic flow. The following strategies and actions are intended to address each of these hot spots. See TFC Figure 7, *Hot Spot Locations and Improvements.*

TFC Figure 7, Hot Spot Locations and Improvements



STRATEGY 7.2.1: ***Extend Garfield Street to Woodlawn Avenue and CR 1100 W (Hot Spot #1, TFC Figure 8).***

Motorists accessing the City from the west side via U.S. Highway 12 and Woodlawn Avenue are not provided with a direct route into the downtown area or to areas south of downtown. An extension of Garfield Street to the intersection of Woodlawn Avenue and CR 1100 W would provide a direct route to Ohio Street and Wabash Street, both of which provide direct routes to the aforementioned areas.

ACTIONS AND INITIATIVES

1. Involve utility companies and local residents.
2. Conduct a traffic study to further develop the need for project and expected benefits.
3. Identify right-of-way impacts (land parcels, ownership).
4. Identify funding sources, which may include funds administered by NIRPC, local funds or TIF funds.
5. Determine the proposed cross-section for Garfield Street, and the lane configuration for the Garfield Road and CR 1100 W intersection.
6. Anticipated improvements:
   a. Construct a two-lane urban typical section with sidewalk on one side.
   b. Facility Type: Minor collector.
   c. Right of Way Needs: 50 feet (min) for length of corridor.
   d. Estimated length of improvement: 2,800 feet.

1 TFC Figure 8, Extend Garfield Street to Woodlawn Avenue and CR 1100 W

STRATEGY 7.2.2: ***Reconstruct Karwick Road Railroad Underpass (Hot Spot #2, TFC Figure 9).***

Karwick Road is grade separated from the South Shore Railroad. The bridge that carries Karwick Road under the railroad allows for a single travel lane under the railroad. Motorists are directed to honk to alert motorists approaching from the opposite direction. This bridge is considered to be both a safety concern and a pinch point in terms of the capacity of Karwick Road.

ACTIONS AND INITIATIVES

1. Involve CSX Transportation to determine if underpass replacement is in the near future.
2. Conduct an assessment study to identify the need for bridge replacement and reconstruction of the railroad underpass.
3. Identify funding sources, which may include safety funds administered by NIRPC or local funds.
4. Anticipated improvements:
   a. Signalize both northbound and southbound approaches to the underpass and operate the underpass as a one-lane, two-way roadway.
   b. Right of Way Needs: For installation of traffic signal equipment.

2 **TFC Figure 9, Reconstruct Karwick Road Railroad Underpass**

STRATEGY 7.2.3: ***Woodland Avenue and Pleasant Avenue one-way Couplets (Hot Spot #3, TFC Figure 10).***

Woodlawn Avenue and Pleasant Avenue function as a one-way pair of streets between Michigan Boulevard and the South Shore Railroad. This configuration causes motorists to travel additional distances to reach their destinations. The Woodlawn Avenue and Pleasant Avenue one-way pairs pass through residential areas where traffic flow should not be the primary concern.

ACTIONS AND INITIATIVES

1. Involve local residents, Fire Department, Emergency Department, and Police Department.
2. Conduct engineering analysis to evaluate the need for two-way conversion, and the obstacles to implementation.
3. Inventory on-street parking and amend parking policy as needed.
4. Identify funding sources, which may include NIRPC or local funds.
5. Anticipated improvements:
   a. Restripe both Woodlawn Avenue and Pleasant Avenue between Michigan Boulevard and South Shore Railroad as two-way streets.
   b. Right of Way Needs: None.
   c. Estimated length of improvement: 4,300 feet.

3 **TFC Figure 10, Woodland Avenue and Pleasant Avenue One-Way Couplets**

STRATEGY 7.2.4: ***Address crime at Grace Street and Walker Street intersection (Hot Spot #4 not mapped).***

High levels of crime have been experienced in the vicinity of the Grace Street and Walker Street intersection. This limits the attractiveness of this area of the City and should be addressed.

ACTIONS AND INITIATIVES

1. Involve Police Department, and local residents.
2. Evaluate the severity, type and frequency of crimes.
3. Create and implement an action plan for crime prevention.
4. Increase police patrolling.
5. Anticipated Improvements:
   a. Installation of a CCTV system at the intersection.
   b. Modernization of the existing street lights.

STRATEGY 7.2.5: ***Address safety concerns at Wabash Street and Green Street intersection (Hot Spot #5, TFC Figure 11).***

Safety concerns have been raised regarding the intersection of Wabash Street and Green Street. Eight reported crashes have occurred at this intersection in the previous three years.

ACTIONS AND INITIATIVES

1. Involve Police Department, and adjacent property owners.
2. Perform a road safety audit (RSA) to determine the safety mitigations and serve as a the basis of design project.
3. Anticipated improvements:
   a. Pavement restriping along Wabash Street.
   b. Elimination of on-street parking on Green Street within 75 feet of the intersection.
   c. Installation of warning signs along northbound Wabash Street upstream of the intersection.

5 TFC Figure 11, Address safety concerns at Wabash Street and Green Street Intersection

STRATEGY 7.2.6: ***Evaluate the feasibility of a 2nd Street Extension between Pine Street and Spring Street (Hot Spot #6, TFC Figure 12).***

An extension of 2nd Street to Spring Street would provide a more direct route between Franklin Street and Michigan Boulevard. This connection would shift traffic volumes from turning movements to through movements at the Pine Street and Spring Street intersections with U.S. Highway 12, which is expected to ease congestion in this area.

ACTIONS AND INITIATIVES

1. Involve utility companies and local residents.
2. Conduct an engineering study to identify the need for project, and to determine the expected costs and benefits.
3. Identify right-of-way impacts (existing buildings, vacant land parcels, ownership).
4. Identify funding sources, which may include funds administered by NIRPC or local funds.
5. Determine the proposed cross-section of 2nd Street, and the lane configurations for the intersections along 2nd Street.
6. Anticipated improvements:
   a. Construct 2nd Street as a 2-lane urban typical section with sidewalk on both sides.
   b. Realign Pine Street to intersect 2nd Street at a right angle.
   c. Facility Type: Minor collector.
   d. Right of Way Needs: 45 feet (min) for length of corridor.
   e. Estimated length of improvement: 1,000 feet.

6 TFC Figure 12, Evaluate the feasibility of a 2nd Street Extension between Pine Street and Spring Street

STRATEGY 7.2.7: ***Evaluate the feasibility of an Access Road between Pahs Road and U.S. Highway 20 (Hot Spot #7, TFC Figure 13).***

The need for a new connection between Pahs Road and U.S. Highway 20 has been recognized by the City. This north-south roadway would reduce traffic volumes along Woodlawn Avenue and would improve access to the Michigan City High School.

ACTIONS AND INITIATIVES

1. Involve Indiana Department of Transportation (INDOT), NIRPC, Michigan City High School, MC Transit, utility companies, and local residents.
2. Conduct a feasibility study to evaluate the need for this new access road, and determine the expected costs.
3. Identify right-of-way impacts (vacant land parcels, ownership)
4. Identify funding sources, which may include funds administered by NIRPC, local funds, TIF Funds.
5. Determine the proposed cross-section of the access road, and the lane configurations for the intersections with U.S. Highway 20 and Pahs Road.
6. Anticipated Improvements:
   a. Construct a two-lane urban typical section with sidewalk on one side.
   b. Facility Type: Minor collector.
   c. Right of Way Needs: 50 feet (min) for length of corridor.
   d. Estimated length of improvement: 2,500 feet.

7 **TFC Figure 13, Evaluate the feasibility of an Access Road between Pahs Road and U.S. Highway 20**

STRATEGY 7.2.8: ***Evaluate options to ensure safe and efficient mobility along 11th Street, between Kentucky Street and Michigan Boulevard (Hot Spot #8, TFC Figure 14).***

The South Shore Railroad line currently travels along the center of 11th Street. The Northern Indiana Commuter Transportation District (NICTD) is currently developing plans to add a second track to the 11th Street corridor. This additional track will reduce 11th Street to a one-way eastbound facility and will sever connections for numerous minor roadways that cross the track. The proposed changes to 11th Street and the numerous severed connections will alter mobility in the vicinity of the track.

ACTIONS AND INITIATIVES

1. Involve Northern Indiana Commuter Transportation District, Chicago South Shore and South Bend Railroad, MC Transit, utility companies and local residents.
2. Evaluate concerns of residents, and determine possible solutions.
3. Identify funding sources, which may include local funds and Community Crossing Funds.
4. Anticipated Improvements:
   a. Enhance pedestrian crossings at key locations to improve pedestrian safety.
   b. Address deficiencies in sidewalks leading to the proposed train stations.

8 TFC Figure 14, Evaluate Options to ensure safe and efficient mobility along 11th Street between Kentucky Street and Michigan Boulevard

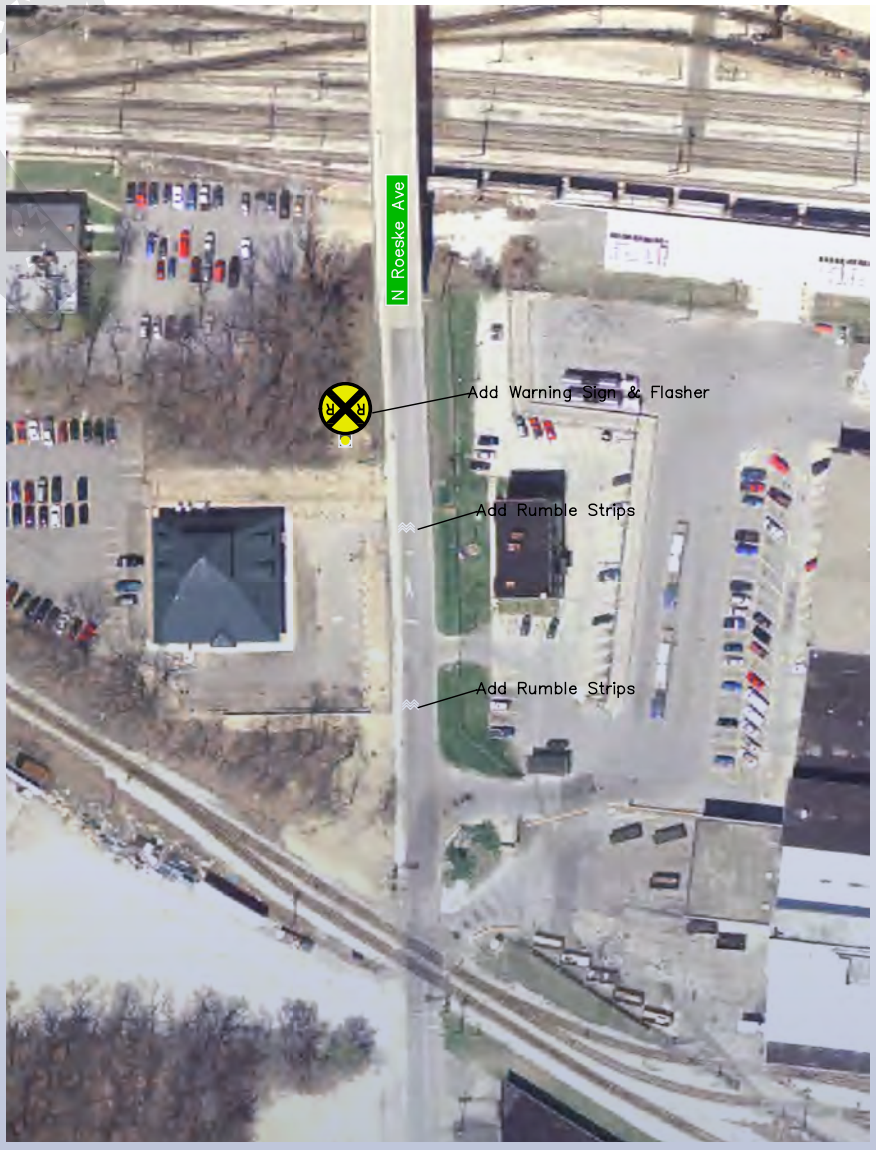
STRATEGY 7.2.9: ***Improve traffic flow at Roeske Avenue railroad crossings (Hot Spot #9, TFC Figure 15).***

Roeske Avenue crosses two tracks owned and operated by the Chicago South Shore and South Bend Railroad. According to the Federal Railroad Administration (FRA), these tracks carry two trains per day, both of which traverse the rail line between 6:00 pm and 6:00 am. Safety at this crossing is currently enhanced through the use of overhead gantries and gates. Visibility of this at-grade crossing is limited for motorists traveling southbound due to the vertical crest curve of the Roeske Avenue overpass bridge, located approximately 650 feet north of this crossing.

ACTIONS AND INITIATIVES

1. Involve Chicago South Shore and South Bend Railroad and local residents.
2. Evaluate the railroad signal operation.
3. Anticipated Improvements:
   a. Install advance yellow flasher warning signal and new railroad crossing warning sign to alert motorists.
   b. Install transverse rumble strips to slow down traffic upstream of the railroad crossing.
4. At the foot of the Roeske Bridge add a signal to indicate whether the railroad crossing is blocked.

9 **TFC Figure 15, Improve traffic flow at Roeske Avenue railroad crossings**



STRATEGY 7.2.10: ***Evaluate the feasibility of an interchange at County Line Road and Interstate 94 (Hot Spot #10, TFC Figure 16).***

County Line Road is another logical location for an interchange with Interstate 94. This interchange can reduce congestion along U.S. Highway 421/ S. Franklin Street and the associated interchange by attracting traffic from the west seeking the Downtown area, Casino, and/or the Lighthouse Place Premium Outlets.

ACTIONS AND INITIATIVES

1. Involve Indiana Department of Transportation (INDOT), Northwestern Indiana Regional Planning Commission (NIRPC), Federal Highway Administration (FHWA), LaPorte County, utility companies, and local residents.
2. Conduct a study to evaluate the feasibility of a new interchange at County Line Road.
3. Identify right-of-way impacts (vacant land parcels, ownership).
4. Identify funding sources, which may include funds administered by NIRPC, local funds, TIF Funds, INDOT funds.
5. Encourage development and annexation of parcels adjacent to the future interchange such that the Urban Area Boundary (UAB) can be extended to cover this area (refer to TFC Map 3, *Michigan City Urbanized Area*).

10 TFC Figure 16, Evaluate the feasibility of an interchange at County Line Road and Interstate 94

STRATEGY 7.2.11: ***Develop 8th Street Alignment (Hot Spot #11, TFC Figure 17).***

8th Street is largely discontinuous between U.S. Highway 12 and Chicago Street, which limits the ability of this roadway to carry traffic to/from Downtown and the Lighthouse Place Premium Outlets. Realigning 8th Street to create a more attractive route to Downtown is expected to reduce traffic volumes along 10th Street and U.S. Highway 12.

ACTIONS AND INITIATIVES

1. Involve MC Transit, utility companies and local residents.
2. Conduct engineering analysis for realignment of 8th Street, and to develop costs.
3. Identify right-of-way impacts (existing buildings, green space, ownership).
4. Identify funding sources, which may include local funds and funds administered by NIRPC.
5. Determine the proposed lane configurations and traffic control for intersections along 8th Street.
6. Anticipated improvements:
   a. Realignment of 8th Street between Lincoln Avenue and Willard Avenue.
   b. Estimated Right of Way Requirements: 55 feet (min) width for the length of the corridor.
   c. Approximate length of improvement: 450 feet.

11 **TFC Figure 17, Develop 8th Street Alignment**

STRATEGY 7.2.12: ***Consider mobility alternatives to mitigate the Carroll Avenue Closure (Hot Spot #12, TFC Figure 18).***

The South Shore Line rail yards will be expanded as part of the double tracking project. This expansion will result in the closing of the Carroll Avenue at-grade railroad crossing. This closure will restrict mobility in the area.

ACTIONS AND INITIATIVES

1. Involve Northern Indiana Commuter Transportation District, Chicago South Shore and South Bend Railroad, MC Transit and local residents.
2. Conduct a traffic study to evaluate the mobility impacts of Carroll Avenue closure on the adjacent roadway system.
3. Identify potential diversion routes (e.g. Roeske Avenue, Pleasant Avenue).
4. Identify potential bottlenecks along the diversion routes and determine capacity improvements to facilitate efficient traffic flow.
5. Potential improvements:
   a. Install guide signs along Carroll Avenue to alert motorists of the closure and prepare for diversion routes.

12 TFC Figure 18, Consider mobility alternatives to mitigate the Carroll Avenue Closure

STRATEGY 7.2.13: ***Ensure adequate and safe traffic flow along10th Street between Wabash Street and Elston Street (Hot Spot #13, TFC Figure 19).***

The proposed NICTD double track project will convert 11th Street to a one-way facility. This is expected to increase the traffic volume along 10th Street, which borders Marquette High School. This increase in vehicular traffic is expected to create additional conflicts between students/pedestrians and vehicles. This segment of 10th Street should be monitored to ensure that vehicular speeds remain at or below the posted school zone speed limit of 15 mph.

ACTIONS AND INITIATIVES

1. Involve Marquette High School, MC Transit and local residents.
2. Conduct a traffic study to evaluate the existing pedestrian and vehicular demand along 10th Street in the vicinity of the school.
3. Record existing school traffic control policy, school events curriculum, drop-off/pick-up locations and traffic circulation.
4. Determine safety and capacity improvements to facilitate efficient traffic flow of vehicular and pedestrian traffic.
5. Anticipated improvements:
   a. Install additional warning signs to alert motorists of the school crossings.
   b. Enforce school zone speed limit during school hours, with the help of Patrol Officers.
   c. Enhance pedestrian crossings to improve pedestrian safety.

13 TFC Figure 19, Ensure adequate and safe traffic flow along 10th Street between Wabash and Elston Streets

STRATEGY 7.2.14: ***Widen U.S. Highway 12 near Blue Chip Drive (Hot Spot #14, TFC Figure 20).***

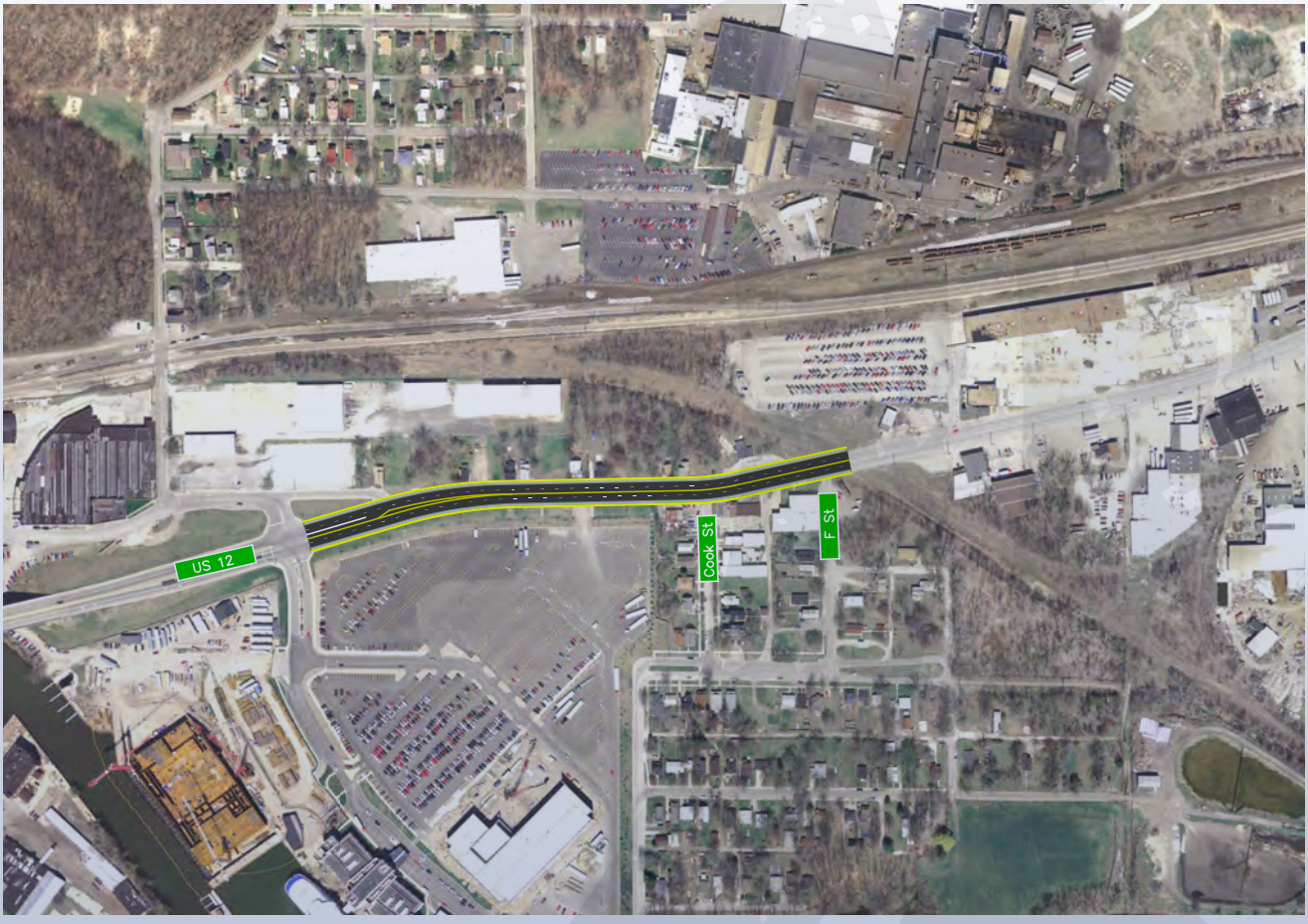
1. U.S. Highway 12 is a four-lane facility within the City. The exception to this statement is the 0.2 mile segment of U.S. Highway 12 located east of Blue Chip Drive where the roadway narrows from four lanes to two lanes. This two-lane segment should be widened to four lanes to maintain consistency and to eliminate unnecessary lane drops.

ACTIONS AND INITIATIVES

1. Involve Indiana Department of Transportation (INDOT), Blue Chip Casino, and Utility companies.
2. Study the intersection of U.S. Highway 12 and Blue Chip Drive and the roadway segment of U.S. Highway 12 between Blue Chip Drive and F Street.
3. Identify right-of-way impacts, and construction costs.
4. Identify funding sources, which may include local funds or NIRPC administered funding.
5. Anticipated improvements:
   a. Reconstruct U.S. Highway 12 as a 4-lane urban typical section with sidewalk on both sides between Blue Chip Drive and F Street.
   b. Facility Type: Major arterial.
   c. Right of Way Needs: 70 feet (min) for length of corridor.
   d. Estimated length of improvement: 1,500 feet.

STRATEGY 7.2.15: ***Ensure that Michigan City's thoroughfares are designed and constructed according to complete streets principles and policies.***

14 TFC Figure 20, Widen U.S. Highway 12 near Blue Chip Drive



OBJECTIVE 7.3: Develop a phased transportation infrastructure improvement program to meet the traffic demand of the Future City.

Multiple vacant land parcels and existing land-uses within the City are anticipated to be developed/repurposed by the year 2040. This is will result in a significant increase in traffic volumes. Improvements to several major thoroughfares will be needed to mitigate this additional traffic. Refer to TFC Map 15, *Thoroughfare Plan* (page 1.161).

STRATEGY 7.3.1: *Franklin Street from CR W 300 N to St. John Road.*

Franklin Street is a north-south corridor that provides motorists a direct route into the downtown area, from south side of the City, and Interstate 94. Franklin Street is currently a four-lane divided roadway between CR W 300 N and the Downtown area. Traffic volumes along Franklin Street are expected to occur as a result of Marquette Mall redevelopment and other anticipated developments that lie south of U.S. Highway 20.

ACTIONS AND INITIATIVES

1. Implement a six-lane typical section from CR W 300 N to CR W 400 N.
2. Implement right turn lanes at all major intersections between CR W 400 N and U.S. Highway 20.
3. Implement access management and active transportation recommendations outlined within the *U.S. Highway 421 / S. Franklin Street Corridor Redevelopment Plan*, including narrowing thoroughfare lanes, constructing adjacent sidewalks and planting areas, and constructing center lane broken medians.

STRATEGY 7.3.2: *SR 212 from Michigan Boulevard to Warnke Road.*

SR 212 is a north-south corridor that provides an eastern connection between U.S. Highway 20 (Michigan Boulevard) and U.S. Highway 12. Currently, SR 212 is a four-lane undivided roadway between Michigan Boulevard and Warnke Road.

ACTIONS AND INITIATIVES

1. Provide dedicated left turn lanes or a two-way left turn lane from Michigan Boulevard to Warnke Road.
2. Add dedicated turn lanes at the intersection of SR 212 and Warnke Road.

STRATEGY 7.3.3: *Michigan Boulevard – Poplar Street/Vail Street to Interstate 94.*

Michigan Boulevard is an east-west major thoroughfare that provides a direct route to the Downtown area from the southeast portion of the City. Michigan Boulevard is a currently a four-lane divided facility from the downtown area to Johnson Road and a five-lane facility between Johnson Road and Interstate 94. Substantial development is expected along Michigan Road in the vicinity of the Interstate 94 interchange. This will result in additional traffic along the Michigan Boulevard corridor.

ACTIONS AND INITIATIVES

1. Add dedicated right-turn lanes along Michigan Boulevard to the following intersections:
   a. Poplar Street/Vail Street
   b. Cleveland Avenue
   c. Carroll Avenue
   d. Roseke Avenue
   e. Johnson Road

STRATEGY 7.3.4: *Meer Road from Michigan Boulevard to Warnke Road.*

Meer Road is a north-south collector that extends from U.S. Highway 20/Michigan Boulevard to U.S. Highway 12, and primarily provides access to several single-family residential units. Currently, Meer Road is a two-lane undivided roadway between Michigan Boulevard and Warnke Road. Residential development is expected to occur along Meer Road, which results in the need to improve this facility.

ACTIONS AND INITIATIVES

1. Implement a four-lane divided typical section along Meer Road from Michigan Boulevard to Warnke Road.
2. Add dedicated turn lanes at the intersections of Meer Road and Michigan Boulevard, and Meer Road and Warnke Road.
3. Signalize the intersection of Meer Road and Michigan Boulevard. Consider realigning Meer Road to the west to lessen impacts to the I94 and Michigan Boulevard interchange.

STRATEGY 7.3.5: *U.S. Highway 12 – East of the City – Cook Street to Indiana/Michigan State Border.*

U.S. Highway 12, east of Michigan Boulevard, is an east-west corridor that provides an alternate route to Interstate 94 for motorists traveling to/from east. Currently, U.S. Highway 12 is a four-lane undivided roadway between F Street and the Indiana/Michigan State Border. West of F Street, the roadway is a two-lane undivided facility between Cook Street and F Street.

ACTIONS AND INITIATIVES

1. Implement a four-lane typical section from Cook Street to F Street.
2. Add dedicated left and right turn lanes at intersections along U.S. Highway 12 between SR 212 and Shady Oak Lane.

STRATEGY 7.3.6: *U.S. Highway 20 – County Line Road to N 525 W.*

U.S. Highway 20 is an east-west major thoroughfare that connects County Line Road to Michigan Boulevard and SR 212. U.S. Highway 20 is currently a five-lane facility from County Line Road to Woodland Avenue and a four-lane undivided facility between Woodland Avenue and Michigan Boulevard. U.S. Highway 20 is also a four lane undivided facility from U.S. Highway 35 to the east.

ACTIONS AND INITIATIVES

1. Add right-turn lanes at the following intersections:
   a. County Line Road.
   b. CR 1100 W.
   c. Ohio Street.
2. Implement a six-lane typical section from Cleveland Avenue to Michigan Boulevard.
3. Implement a six-lane typical section from U.S. Highway 35 to CR 525 W.

STRATEGY 7.3.7: *Interchange at U.S. Highway 20/ Michigan Boulevard and SR 212.*

The interchange at U.S. Highway 20/Michigan Boulevard and SR 212 currently configured as a quasi-interchange with stop controlled ramps. Development in the vicinity of this interchange is expected to result in failing operations for the ramp terminals of the existing configuration. Consideration was given to addressing capacity issues by means of providing an additional interchange at Johnson Road; however, an interchange at Johnson Road is not recommended due to anticipated impacts to adjacent residences and the costs associated with multiple crossings of Wolf Run Creek.

ACTIONS AND INITIATIVES

1. Reconfigure the interchange to a traditional diamond-type interchange. This reconfiguration is expected to involve the following:
   a. Evaluate the need for elimination of the existing loop ramp.
   b. Adding auxiliary lanes along U.S. Highway 20 and SR 212 to allow for merge and diverge movements.
   c. Implementation of access management along U.S. Highway 20 and SR 212 to prohibit turning movements across opposing lanes of traffic.
   d. Adding left turn lanes along U.S. Highway 20/ Michigan Boulevard.
   e. Signalization of the ramp terminals.

STRATEGY 7.3.8: *County Line Road – CR W 400 N (Kieffer Road) to CR W 300 N.*

County Line Road is a two-lane undivided roadway. Substantial development is expected to occur along this corridor. Access to this development is limited unless an interchange with Interstate 94 is constructed.

ACTIONS AND INITIATIVES

1. Construct an interchange with Interstate 94.
2. Implement a six-lane typical section between CR W 400 N (Kieffer Road) and CR W 300 N.
3. Implement a four-lane typical section – between U.S. Highway 20 and CR W 400 N (Kieffer Road).

STRATEGY 7.3.9: *Interchange at Interstate 94 and U.S. Highway 20/Michigan Boulevard.*

The interchange at Interstate 94 and U.S. Highway 20/Michigan Boulevard is currently a full cloverleaf configuration. The projected volumes for this interchange indicate three of the four existing loop ramps will be over-capacity.

ACTIONS AND INITIATIVES

1. Reconfigure the interchange to a single point urban interchange to provide additional capacity for movements between Interstate 94 and U.S. Highway 20.

STRATEGY 7.3.10: ***Interchange at Interstate 94 and U.S. Highway 421.***

The interchange at Interstate 94 and U.S. Highway 421 is currently a full cloverleaf configuration. The projected development south of this interchange is expected to create capacity issues at the interchange. The projected traffic volumes for U.S. Highway 421 also indicate that U.S. Highway 421 should be widened to a six-lane facility through the interchange.

ACTIONS AND INITIATIVES

1. Reconstruct the interchange to a single point urban interchange to provide additional capacity for movements between Interstate 94 and U.S. Highway 421. The additional capacity provided by a single point urban interchange may provide the opportunity to maintain the existing 4-lane bridge over Interstate 94.

OBJECTIVE 7.4: Update Michigan City's *Thoroughfare Plan*.

Thoroughfare Plan

Thoroughfare system planning is intended to facilitate the development of the most efficient and appropriate street system necessary to meet existing and future travel needs. The primary objective of the *Thoroughfare Plan* is to ensure that adequate right-of-way is preserved on appropriate alignments to allow the orderly and efficient expansion and improvement of the street system.

The *Thoroughfare Plan* is a long-range plan that identifies the location and type of roadway facilities that are needed to meet projected long-term growth within the area. The *Thoroughfare Plan* is not a list of construction projects but rather serves as a tool to enable the City to preserve future corridors for transportation system development as the need arises. The *Thoroughfare Plan* will affect the growth and development of Michigan City as it guides the future development of the City's street network. While other elements of the plan examine foreseeable changes and needs over a 20-year horizon, thoroughfare planning requires a much longer-range perspective.

Future changes in transportation technology, cost structure, service demand, and long-term shifts in the economy and urban growth patterns require a farsighted approach to thoroughfare planning decisions.

As depicted in TFC Map 15, *Thoroughfare Plan*, the proposed general conceptual future alignments for new and existing arterial and collector streets are illustrated for the Planning Area based on anticipated growth within this 20-year planning horizon (refer to TFC Map 1, *Growth Sequencing,* and TFC Map 22, *Future Land Use*). The location and alignment of thoroughfares within proposed future residential and nonresidential developments should generally conform to the *Thoroughfare Plan*, but actual alignments will be determined at the time of development in consideration of topography, existing development, logical and orderly development layout, thoroughfare connectivity, and other considerations. Any proposed significant change in thoroughfare alignment should be reviewed to ensure it will not adversely impact the function and connectivity of the street system.

Some elements of the thoroughfare system may require new or wider rights-of-way; and depending on need, may be developed as two-lane or multi-lane roadways with various cross sections. Some streets identified as Community or Commercial Collectors on the plan may not ever be widened due to physical constraints and right-of-way limitations. Instead, the collector designation signifies its traffic-handling role in the overall street system and the importance of maintaining it in good condition.

The *Thoroughfare Plan* does not show future Residential Sub-Collectors, or Local streets because they function to provide access to individual sites and parcels and their future alignments will vary depending upon individual land development plans. Local street alignment can be determined by the City in conjunction with landowners and developers as part of the subdivision development process. Likewise, collectors are required with new development, but may not all be reflected on the *Thoroughfare Plan*, since their alignments will depend on the surrounding street system and the particular development concept. They are, nevertheless, vital to an efficient and viable transportation network and must, therefore, not be overlooked during the subdivision development review process.

Thoroughfare planning requires coordination with other plans for the future of the Planning Area, including comprehensive plans and long range, major transportation plans. A community vision and goals must be known, or developed, for the thoroughfare plan. Technical analysis of road network performance and a public review of the proposed plan and design standards are both necessary components of thoroughfare planning.

LEGEND

- City Limits
- Comprehensive Plan Area
- Road additions and improvements

Number of Lanes

- 2 Lanes
- 3 Lanes
- 4 Lanes
- 6 Lanes
- 8 Lanes
- New or Reconstructed Interchange

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Dunelend Beach
Michiana Shores
Long Beach
Lake Michigan
Pottawattamie Park
Michigan Township
Michigan City
Trail Creek
Springfield Township
Beverly Shores
Town of Pines
Pine Township
Coolspring Township
Center Township

PORTER COUNTY
LA PORTE COUNTY

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

MOMENTUM: MICHIGAN CITY 2040

THE FUTURE CITY

TFC Map 15, Thoroughfare Plan

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

ANALYSIS APPROACH

A systematic and analytical process was employed to develop the proposed *Thoroughfare Plan*. This process involved evaluation of the following factors:

- **Hierarchical Connections** - As a general rule, higher classified facilities should not end at lower classified facilities; the principal exception being when a roadway facility extends into increasingly rural areas, as well as when collectors are allowed to end at a local road, typically in a neighborhood setting. Ideally, where possible, roadway facilities should only connect to facilities that are either the next higher or lower classification, so as not to skip a functional category.
- **Thoroughfare Length** - In order to promote the development of metropolitan routes, the desired length of major arterials was considered to be at least five miles. Lengths for minor arterials and collectors in existing and projected suburban and urban areas were aimed at two miles and three miles, respectively.
- **Thoroughfare spacing** - A concerted effort was made to build the thoroughfare network using conventional planning criteria for spacing between thoroughfares. In general, spacing for major arterials was sought to be between two and four miles; while minor arterials were targeted to be spaced between 0ne and two miles apart. These spacing requirements were slightly relaxed when dealing with extremely rural portions of the planning area.
- **Rural Collectors** - Because the *Thoroughfare Plan* has a very long-term planning horizon, existing rural roads were sought to provide the alignment for future arterials, major and minor.
- **Jogs and Offsets** - To maintain the capacity of higher classified facilities as well as maintain route continuity of the lower classified facilities, some jogged intersections were replaced with typical four-way intersections. Similarly, facilities with sharp, angular turns were replaced with gentler, more smoothed-out turns.
- **Parcel Boundaries** - To the extent possible, conceptual, proposed thoroughfares were aligned to follow existing parcel boundaries.
- **Constraints, Environmental and other** - Special care was given to minimize the traversal of critical natural environmental features including lakes, rivers, creeks and steep terrain. Additionally care was taken to utilize existing railroad crossings when considering the alignment of proposed thoroughfares.

STRATEGY 7.4.1: *Balance changes in land use with the capabilities of the transportation system.*

ACTIONS AND INITIATIVES

1. Adopt and implement the *Future Land Use Map* contained in this Plan.
2. Continue to evaluate the capacity of the existing and proposed transportation system in Comprehensive Plan amendments, rezoning requests, and site plan reviews.
3. Continue to collect and monitor transportation data including vehicle miles traveled, traffic counts, levels of service, transit ridership, and pedestrian and bicycle facility usage, crashes.
4. Require traffic impact analyses for all development proposals anticipated to generate significant volumes of traffic.
5. Develop and adopt street connectivity regulations for new development areas.[1]

OBJECTIVE 7.5: Improve the Design and Appearance of Michigan City's Transportation Corridors.

The overall quality and appearance of the City's thoroughfare corridors can be a major asset or liability; one which improves the overall quality of life and economic competitiveness of the City; or one that detracts from it. In fact, streets were once the center of public life for a city. Today, and since the 1950s, good street design, construction, and maintenance have been undermined by the ever-growing demands of the automobile. Planners, engineers, and the government sector focused solely on creating an efficient and safer system of moving the automobile through an area (i.e., creating wider and faster streets and intersections, improving visibility by removing trees and other vegetation, etc.). This was often at the expense of all other considerations, including pedestrian safety, walkability, and overall quality of appearance of the built and natural environment. Developers, builders, and property owners followed suit, relocating to the edges of town, creating bigger and more expansive parking lots, and larger, more auto-oriented scaled signage, etc. Now, after a half century of implementation, many jurisdictions are starting to realize that our street system is often degrading

1 Nelson, Kevin, 2012. Essential Smart Growth Fixes for Rural Planning, Zoning, and Development Codes. EPA, Office of Sustainable Communities.

the very destinations they were meant to connect. They are starting to re-realize that the street system is an integral part of overall community fabric and it needs the same attention and consideration as developing other parts of community life, like public safety. This new respect for viewing streets as part of the overall community fabric, will, over time, play a critical role in creating and maintaining a unique sense of place, in addition to improving community identity, fostering a healthy business environment, and creating public spaces for citizens to use and enjoy.

Green Streets

A green street is a stormwater management approach that incorporates vegetation (perennials, shrubs, trees), soil, and engineered systems (e.g., permeable pavements) to slow, filter, and cleanse stormwater runoff from impervious surfaces (e.g., streets, sidewalks). Green streets are designed to capture rainwater at its source, where rain falls. Whereas, a traditional street is designed to direct stormwater runoff from impervious surfaces into storm sewer systems (gutters, drains, pipes) that discharge directly into surface waters, rivers, and streams.

Green streets protect water quality in rivers and streams by removing up to 90 percent of pollutants. They replenish groundwater supplies, absorb carbon, improve air quality and neighborhood aesthetics, and provide green connections between parks and open space. Vegetated curb extensions improve pedestrian and bicycle safety, and calm traffic.

Streets comprise a significant percentage of publicly owned land in most communities, and thereby offer a unique opportunity to incorporate green street elements that will not only protect the environment, but can improve community health and prosperity.

Green streets incorporate a wide variety of design elements including street trees, permeable pavements, bioretention, and swales. Successful application of green techniques will encourage soil and vegetation contact and infiltration and retention of stormwater. Although the design and appearance of green streets will vary, the functional goals are the same:

– Minimize stormwater impacts on the surrounding area through a natural system approach that incorporates a variety of water quality, energy-efficiency, and other environmental best practices;

Sidebar

Greenroads

Bagby Street, Houston, Texas. The Bagby Street Reconstruction Project is the first Greenroads-certified project in Texas, recognized for improvements to pedestrian and parking facilities and access to local businesses and the Midtown Park. Notable features include rain gardens, artistic elements, installation of cool pavements, use of regional and recycled materials, and wayfinding to the local park. (Source and Images: Design Workshop).

- Integrate green stormwater management features to increase infiltration and/or filtration of runoff, reduce flows, and enhance watershed health;
- Reduce the amount of water that is piped and discharged directly to streams and rivers;
- Make the best use of the street tree canopy for stormwater interception, as well as temperature mitigation and air quality improvement;
- Mitigate or prevent localized flooding;
- Encourage pedestrian and/or bicycle access;
- Improve the aesthetics of a community; and,
- Increase community health and livability.[1]

STRATEGY 7.5.1: *Implement a Green Streets program for thoroughfares within the Planning Area.*

Rainwater that washes over pavement carries pollutants such as motor oil and grease directly into streams, rivers, and lakes. These pollutants can come into contact with humans and other animals through drinking water and in other ways. A green street uses natural landscaping to collect, filter, and cleanse polluted runoff by mimicking natural hydrological processes. Green streets also improve air quality by intercepting small particles of air pollutants and reducing the harmful effects of urban heat islands that occur when concrete and asphalt are heated during hot weather. Green streets can beautify neighborhoods and calm traffic, making walking and biking safer and more enjoyable. Green streets can also reduce the risk of localized flooding and the need for more costly traditional "grey infrastructure – such as expanded sewer systems and water treatment facilities – to handle stormwater runoff.

Almost any type of street can be greened, including main arterial roads, residential streets, and alleys. Green streets can incorporate a variety of elements, including rain gardens, sidewalk planters, vegetated swales, landscaped medians, and pervious paving.

ACTIONS AND INITIATIVES

1. Identify and produce a map of all of the existing surface swales and drainage ways, and subsurface storm drains that drain into the Trail Creek watershed. Refer to TEC Map 27, *Storm Drainage*.

1 Environmental Protection Agency, Learn about Green Streets. Available at: https://www.epa.gov/G3/learn-about-green-streets

Parking

Parking is an integral component of the vehicular transportation system. During public meetings, citizens expressed concerns about the lack of adequate parking in Downtown Michigan City. On-street parking within Downtown is typically angled.

STRATEGY 7.5.2: *Maximize parking availability in Downtown Michigan City.*

ACTIONS AND INITIATIVES

1. Inventory all of the available on-street parking in Downtown Michigan City. Utilize the boundaries of the City's Main Street District.
2. Identify the times when there is greatest demand for parking and compare to on-street parking availability.
3. Work with property owners to determine the potential availability of and physical renovation requirements for on-site parking.
4. Conduct a professional study to determine whether regulation and metering of on-street parking may be the most effective means of controlling parking and increasing turnover on the highest volume streets.
5. Require shared parking for commercial businesses, public and community facilities, and downtown developments. Update parking management plan to take advantage of existing supply; and reduce parking requirements for redeveloped areas.[2]

Streetscape

TREES

Trees are highly visible elements within any streetscape. As a dominant element, they define spatial volume and rhythm along the length of the streetscape. They provide spring bloom, summer shade, fall foliage color, winter branching, and an opportunity for holiday lighting and decorating during the winter.

2 Environmental Protection Agency, Learn about Green Streets. Available at: https://www.epa.gov/G3/learn-about-green-streets

Trees provide more than just a decorative element in a streetscape. In addition to softening an otherwise hard urban environment, trees increase storm water retention, provide a defense against the "urban heat island effect," and protect residents from harsh summer conditions. Trees and plantings improve air quality by producing oxygen and removing carbon dioxide and particulate matter. For example, 13 mature trees remove the particulate matter generated by a car driven 12,000 miles a year.

When selecting street tree species for Michigan City's roadways it is important to select species that are drought-tolerant, have minimal die-back in winter, minimal vegetative litter (i.e., seed pods, berries, sap) maintain an upright branching pattern, and do not drop seed pods that can damage automobiles.

STRATEGY 7.5.3: ***Work with the Michigan City Tree Board to identify transportation corridors in need of enhancement.***

ACTIONS AND INITIATIVES

1. Using the City's Tree Inventory, evaluate the quality and condition of street trees planted along principal gateway / entrances into the City.
2. Develop a prioritized plant list, identifying locations, types, and sizes of trees to be planted.
3. Identify additional means of providing legibility through the planting of specific types of trees along key east-west, and north-south corridors.

FURNISHINGS

Michigan City's streets play an important role in the livability, vitality, and character of its neighborhoods and commercial areas. They form the grid that weaves the quilt of the City into a whole fabric. Through renovating and improving the quality of Michigan City's streetscapes, the City can promote the economic and social development of neighborhood commercial areas, thereby beautifying the City and creating a greener, friendlier environment in which citizens live, work, and play. Just as rooms within a house are not complete without furniture - tables, chairs, a couch, decorative wall treatments, etc.; streets are not complete without proper furnishings which are provided for the comfort of pedestrians.

Source: Planned Environment Associates, Inc. Photo by Stuart Franzen

Source: Planned Environment Associates, Inc. Photo by Stuart Franzen

As discussed, drought-tolerant street trees are very beneficial in providing shade and human scale to a busy thoroughfare; but additional elements are needed to complete the pedestrian dimension. Indeed, corridors are designed to assist in traveling from one place to another, but there can be several nodes, or resting points along the way. At these nodes, a bench or arrangement of seating, in combination with street trees, can transform an area traditionally for movement, into an area for temporary relaxation. Additional streetscape furnishings may include a drinking fountain, a waste receptacle and ornamental street lighting. These elements serve the basic needs of pedestrians. Where the pedestrian corridor expands to become a plaza or public square, additional elements may include drought-tolerant landscape ("xeriscape") planting treatments, a decorative fountain, a kiosk where information can be displayed, interpretative signage that may explain the significance of the plaza, and tables and chairs that provide places for people to have lunch.

PUBLIC ART

As will be discussed in the *Downtown* element, cities gain value through public art – cultural, social, and economic value. Public art is a distinguishing part of civic history and an evolving culture. Public art humanizes the built environment and invigorates public spaces and streetscapes, place and identity. [1]

STRATEGY 7.5.4: ***Create and implement a comprehensive streetscape improvement plan for major commercial corridors, so as to improve access for public transit, bicyclists, and pedestrians.***

Refer to *U.S. Highway 421 / S. Franklin Street "South Gateway" Corridor Redevelopment Plan*, Figure 3.5, *Recommended Streetscape Furnishings* (p. 3-08),[2] see TFC Figure 21, *Recommended Streetscape Furnishings*.

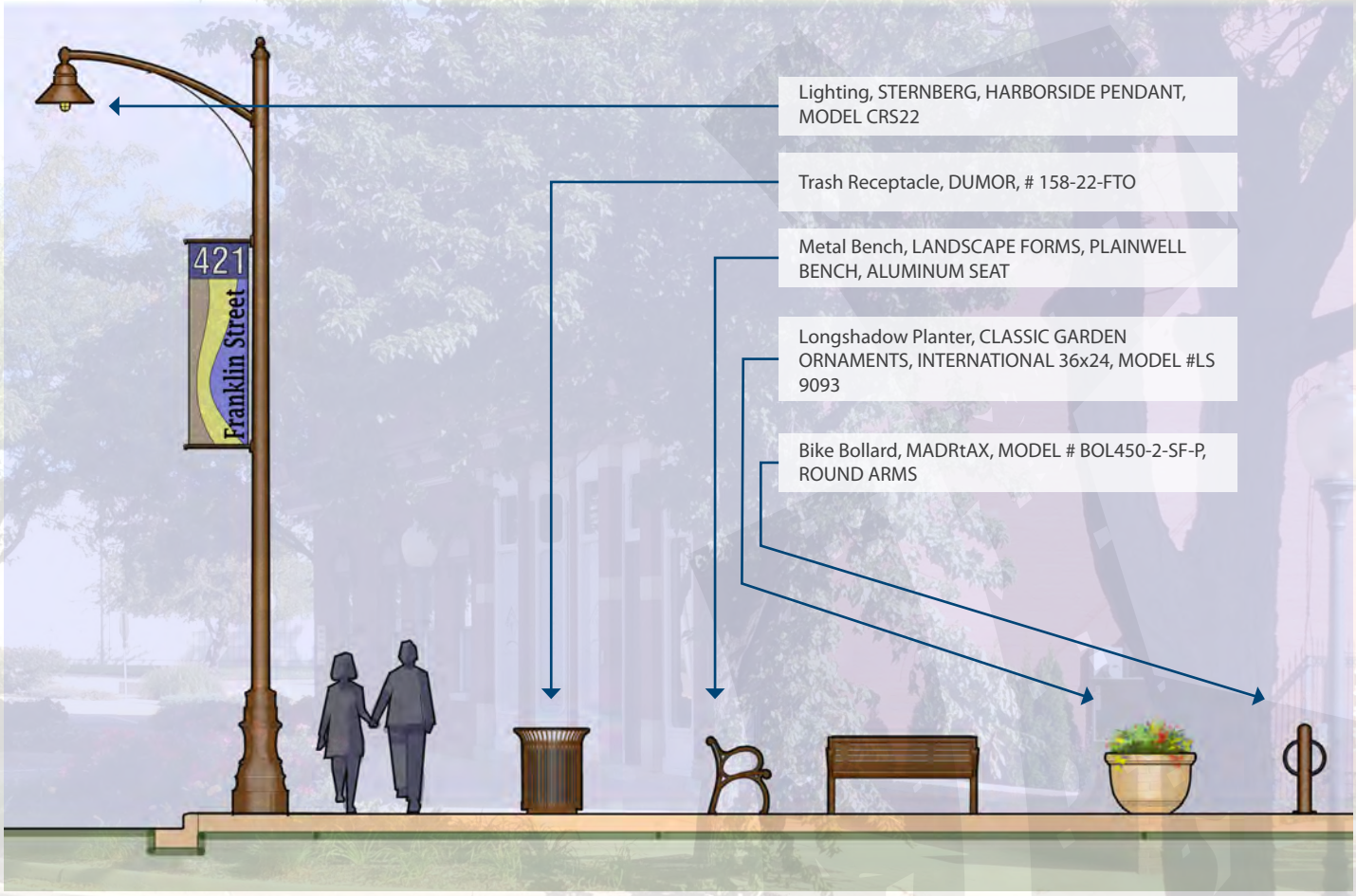
STRATEGY 7.5.5: ***Establish gateway entrance features for the principal entrance corridors into Michigan City.***

Create an appropriate sense of arrival and departure into and from the City. Entrances include U.S. Highway 12 eastbound, U.S. Highway 20 eastbound, U.S. Highway 421, E. Michigan Boulevard (U.S. Highway 20 westbound),

1 Americans for the Arts: Public Art Network Council - Green Paper. Available at: https://www.americansforthearts.org/sites/default/files/PublicArtNetwork_GreenPaper.pdf

2 Americans for the Arts: Public Art Network Council - Green Paper. Available at: https://www.americansforthearts.org/sites/default/files/PublicArtNetwork_GreenPaper.pdf.

TFC Figure 21, Recommended Streetscape Furnishings



Light Fixture

Trash Receptacle

Metal Bench

Planter

Bike Bollard

Source: Planned Environment Associates, Inc. Photo by Stuart Franzen

and U.S. Highway 12 westbound. Refer to TFC Map 16, *Gateway Corridors*.

Michigan City's residents would like to portray a positive first impression on those who visit or pass through the community. The City's principal entrances offer opportunities to establish an image, communicate community values, and attract attention to local attractions and tourist destinations. Michigan City should ensure a high level of design quality for its major community corridors, allowing them to serve as attractive gateways into the City while enhancing positive business and community environments. Formal points of entry – or gateways – define a City's boundaries so as to distinguish it from other jurisdictions These visual cues stimulate the sense of arrival at a distinguishable place that is notable in more ways than a City Limit sign.

Gateway Entrance Enhancements

GUIDING PRINCIPLES

In an effort to assist in the design of gateway entrances, the following principles may serve as a starting point to guide citizens and officials in the design process. Other principles may be added to further define the desired design of the entrances.

Guiding Principle 1: As each entry point is unique, gateway designs should also be unique. No one design will work for each entry; although the gateway designs should bear a familial resemblance.

Guiding Principle 2: The size and scale of the gateway entrance is important in comparison to the road size and right-of-way width.

Guiding Principle 3: Branding should be consistent for all gateways into Michigan City.

Guiding Principle 4: If used, landscape plantings should be very low-maintenance.

Guiding Principle 5: Lighting is encouraged in order to maintain nighttime visibility, and may include a solar power source. The level of illumination and lamp type should be part of a comprehensive lighting program.

SITING CRITERIA

Selection of locations around Michigan City for proposed gateway enhancement features should be based on five major criteria. Additional factors such as existing development, land availability, and safety should be considered.

1. **Average Daily Traffic (ADT) Counts**

   When selecting roadways for gateway enhancements, only roads with greater than 5,000 average daily trips (ADT) should be considered.

2. **Natural Features**

   Michigan City has lush vegetation, waterways, and tree coverage. Locations should be selected in order to display these features with only minor modifications, such as entry signage.

3. **City/Public-Owned Land**

   Land and/or properties which are currently owned by the City of Michigan City were given priority consideration, as this would reduce capital expenses.

4. **Pedestrian Access**

   Areas along roadways which could serve as points of interest, had access to a recreational amenity or trail, or other pedestrian accessible features. Interactive gateway entrances and enhancements can improve visitor experience in Michigan City. Interactive gateways can be described as sited locations with pedestrian amenities including – but not limited to – walking trails, natural features, fountains, etc., where pedestrians can safely venture around the gateway enhancement away from free flowing traffic.

5. **Proximity to City Limits**

   As these entrances would be utilized by visitors driving into Michigan City, locations as close as possible to existing City Limits were considered.

GATEWAY IMPROVEMENT TYPES

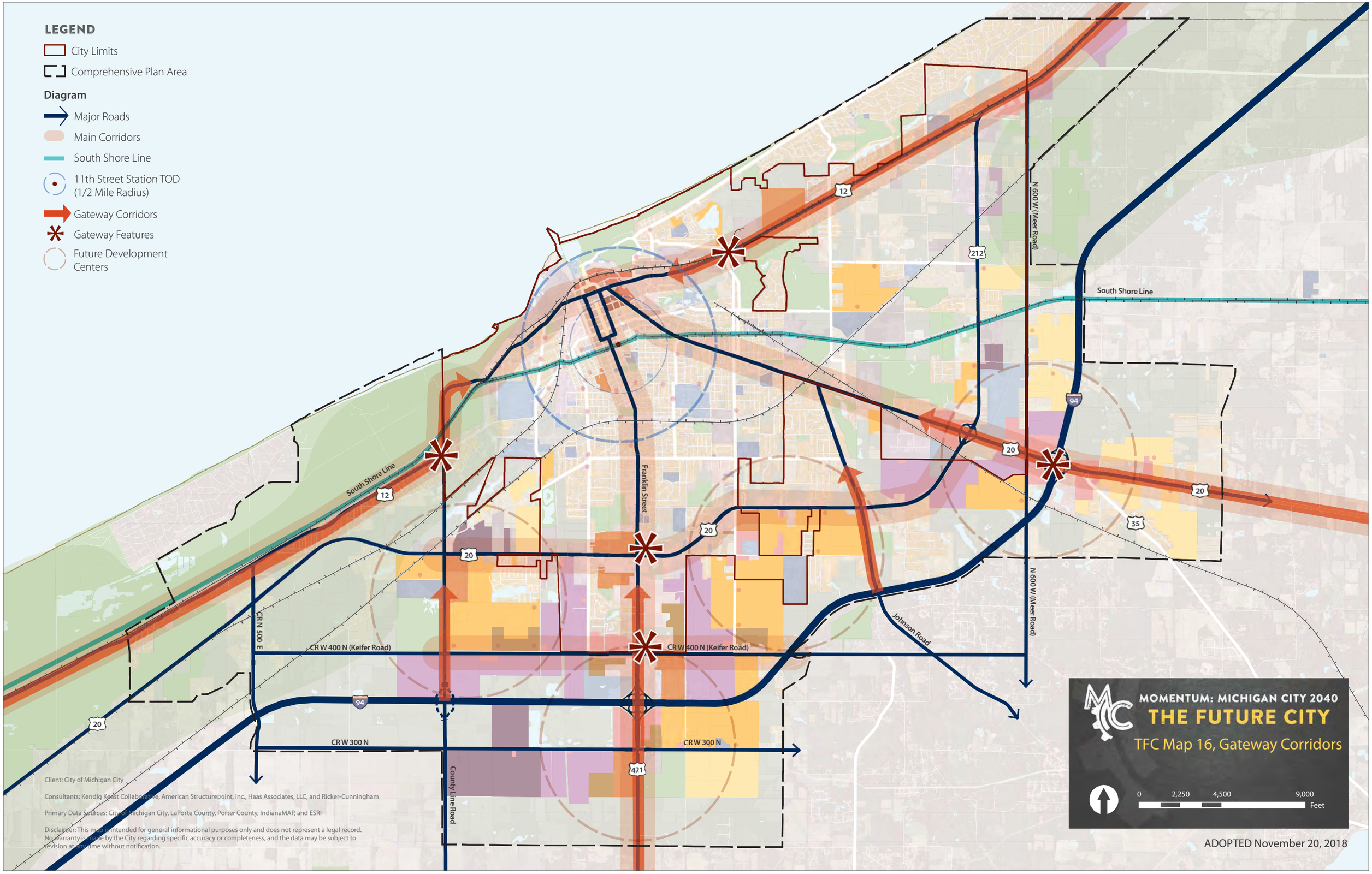
Gateway improvements have been broken down into three types to serve as a guide for the development of gateway entrances. As depicted in TFC Table 22, P*roposed Gateway Enhancements*, some corridors will have different types of entrance enhancements and none will be identical.

LEGEND

- City Limits
- Comprehensive Plan Area

Diagram

- Major Roads
- Main Corridors
- South Shore Line
- 11th Street Station TOD (1/2 Mile Radius)
- Gateway Corridors
- Gateway Features
- Future Development Centers



Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

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MOMENTUM: MICHIGAN CITY 2040

THE FUTURE CITY

TFC Map 16, Gateway Corridors

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

RANKING OF GATEWAY ENTRANCES

Just as roadways differ in functional classification and number of travelers, the gateway enhancements cannot be a "one size fits all" type of improvement. Priority should be given to entrances which receive the most traffic and have the highest visibility and potential amenities. Listed are the proposed gateway corridors with their rank, based on the above mentioned criteria, and their proposed improvement type. Improvement types are described in TFC Table 22, P*roposed Gateway Enhancements*.

The following corridors should be considered for enhanced gateway / entrance treatment, including (clockwise):

- U.S. Highway 12, westbound
- U.S. Highway 20 (E. Michigan Boulevard), westbound
- U.S. Highway 421 northbound
- U.S. Highway 20 eastbound
- U.S. Highway 12, eastbound,

The entrances in these areas require better definition through infrastructure enhancements and design elements that denote a formal entry. Enhancements may include landscaped medians, preservation of natural features and vegetation, and special pavement treatments; significant entry monuments; liberal open space and well-designed streetscape treatments; upgraded lighting standards; way-finding signage; integration of public art, fountains, and monuments; and well-maintained and attractive adjacent properties.

ACTIONS AND INITIATIVES

1. Identify locations around the City limits boundary demarcation for a gateway entrance feature. As outlined within the *MAC Public Art Master Plan*, consider locations for public art along U.S. Highway 12, east and west of Downtown.
2. Work with local artists to develop site selection criteria and develop elements that will ensure a familial resemblance between features. Ensure consistency with the City's branding program.

TFC Table 22, Proposed Gateway Enhancements

Type 1: Interactive Welcome.	
Interactive Welcome. A place where visitors can stop, exit their vehicles, and interact with the amenities available at the gateway entrance. This is considered a highly visible improvement.	– Large monument signage constructed of stone, brick, or similar materials (>100 square feet); – Branding/symbology; – Incorporation of artistic elements; – Lighting (safety, ornamental, landscape); – Native landscaping treatments; and – Parking for pedestrian access to trails, creeks, rivers, and other amenities (if available).
Type 2: Welcome Message.	
Signage that welcomes visitors to Michigan City and enables pedestrian access if amenities are available. Smaller than an interactive welcome, still considered highly visible.	– Medium monument signage constructed of stone, brick, or similar materials (>50 square feet); – Branding/symbology; – Incorporation of artistic elements; – Lighting (safety, ornamental, landscape); – Native landscaping treatments; and – Parking for pedestrian access to amenities (if available).
Type 3: Viewing Only Welcome.	
To be viewed from a passing vehicle. The location of this type of improvement is not conducive to accommodate pedestrian traffic, pedestrian amenities are not available, but the gateway is well traveled.	– Small monument signage or pillar signage constructed of stone, brick, or similar materials (<50 square feet); – Branding/symbology; – Lighting (safety, ornamental, landscape); – Limited native landscaping treatments.

STRATEGY 7.5.6: ***In conjunction with the City's corridor redevelopment program for U.S. Highway 421, consider developing a demonstration gateway entrance feature for the Interstate 94 / U.S. Highway 421 interchange.***

The installation of both permanent and temporary public art along U.S. Highway 421, in front of the big box stores, the chain restaurants, and in the spaces between them, would make the progression to Downtown and the civic area more welcoming, attractive, and exciting. Much thought has to go into this area, and innovative mechanisms for tapping into the corporate owners of those businesses will call for the greatest cooperation between the MAC, City Government, the Chamber of Commerce and other entities.

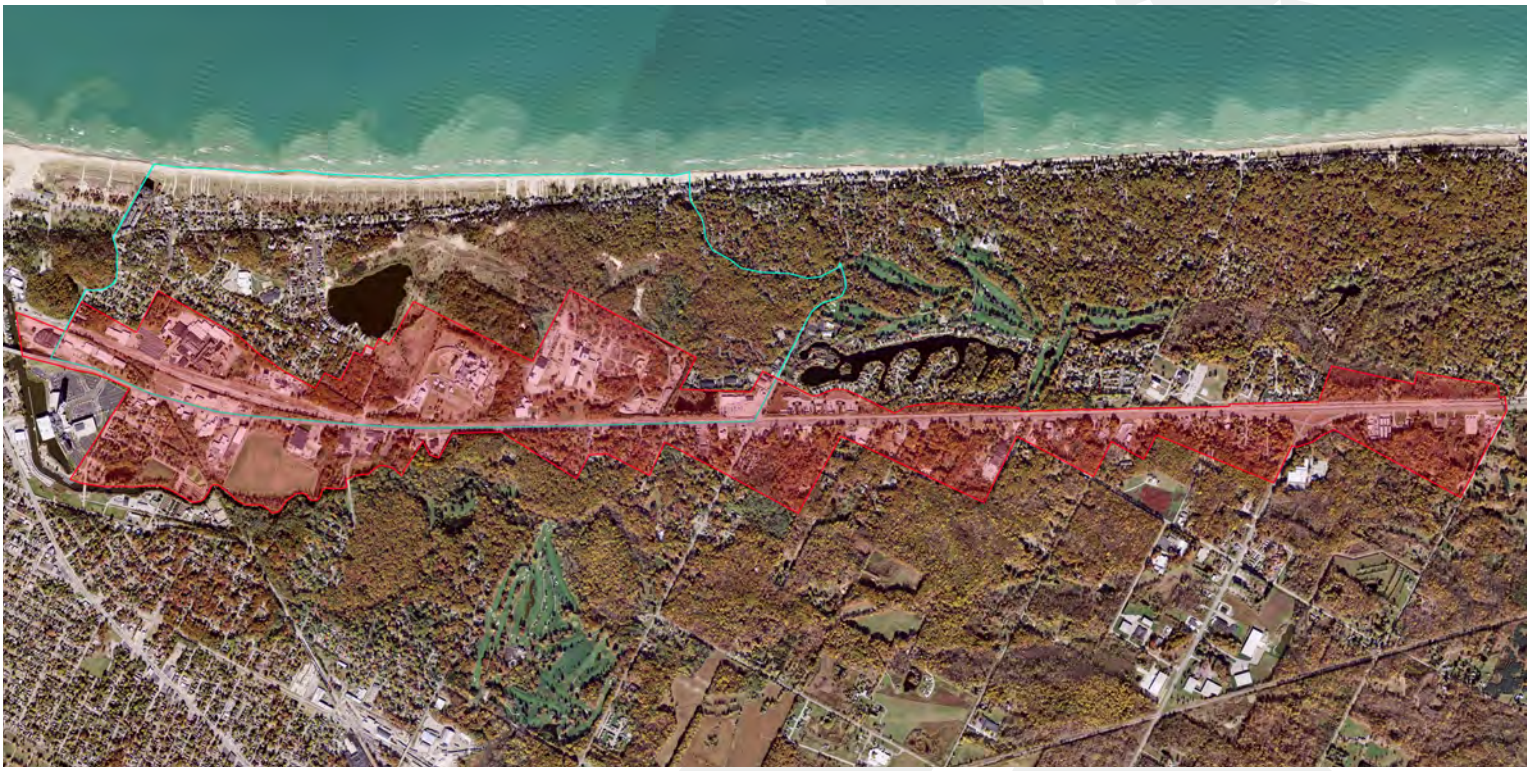
ACTIONS AND INITIATIVES

1. Prepare corridor and small area enhancement plans. Simultaneously, amend the zoning ordinance to include special district design standards relating to building height and scale, building form (articulation, fenestration, etc.), signage, landscape and streetscape treatment, and, optionally, an architectural theme or palette.
2. Identify and acquire open space areas and/or linear corridors within the Planning Area that will buffer future growth from adjoining jurisdictions. Providing permanent open space at City entrances, wherever possible, will enhance the City's image as a freestanding community, rather than as an anonymous component of contiguous development from adjacent communities as growth continues in future decades.

STRATEGY 7.5.7: ***Prepare a corridor redevelopment plan for U.S. Highway 12 (TFC Figure 22, U.S. Highway 12 Corridor Site Area).***

Prepare a corridor redevelopment plan for U.S. Highway 12, within the City limits, from Meer Road westward to County Line Road. Analyze the implications of thoroughfare expansion (refer to Strategy 7.3.5, page 1.159), land use and corridor character, transportation and utilities infrastructure, access management, redevelopment opportunities, gateway enhancements and vegetation management, and guidelines for new development.

TFC Figure 22, U.S. Highway 12 Corridor Site Area



Policies

Vehicular Transportation Infrastructure

VT Policy 1: Promote safety for pedestrians, bicyclists, transit riders, automated vehicle passengers, and all street users within the multi-modal urban context.

VT Policy 2: Rebalance the use of the right-of-way with less space for cars and more space for people walking, cycling, using transit and recreating.

VT Policy 3: Transportation practices and new transportation investments should limit impacts to the natural environment by reducing single-occupancy vehicle (SOV) travel, limiting long commute distances, reducing the reliance on fossil fuels, and increasing transit, biking, and walking.

VT Policy 4: Public transportation health equity: Ensure equal access to essential goods and services, jobs and economic opportunities, and healthy foods and places.

VT Policy 5: When planning new thoroughfares, employ context-sensitive solutions to ensure that the street enhances and reinforces the character of its immediate context.

VT Policy 6: Use Traffic Demand Management (TDM) Strategies. Encourage traffic demand management strategies and institutional arrangements to anticipate and mitigate traffic congestion.[1]

VT Policy 7: Avoid Exceeding Thoroughfare Capacity. Discourage the expansion of existing or the inclusion of new light industrial/business park development in areas where, even with street and traffic signal improvements, the additional traffic generated by such development would exceed the handling capacity of the street system.

VT Policy 8: Develop efficient public transit networks at the local and regional scale, which are supported by location-efficient development practices, such as Transit Oriented Development (TOD), affordable housing, functional public space, and equitable access and service to health care facilities.

VT Policy 9: Promote greater utilization of public transit services to support employment opportunities.

VT Policy 10: Thoroughfare design standards should promote and support the use of public transit and non-motorized transportation modes, including walking and biking, especially to accommodate and promote the implementation of Complete Streets policies and plans.

VT Policy 11: Prioritize transportation investments to promote efficiency, mobility, reduced congestion, decreased greenhouse gas emissions and improved air quality; with an emphasis on transit, to reduce single occupancy vehicle use and vehicle miles traveled.

VT Policy 12: Link transportation and land use planning in order to achieve efficient development patterns that limit infrastructure costs and environmental impacts.

1 City of Overland Park, Kansas

Active Transportation

OBJECTIVE 7.6: Provide Enhanced Pedestrian and Bicycle Mobility Options.

INTRODUCTION

While the vehicle is the primary mode of transportation in Michigan City, alternative modes of transportation decrease the load on infrastructure, reduce emissions, and increase livability. Alternative transportation modes include pedestrian facilities, bicycling facilities and public transportation facilities. To optimize ease of utilization, alternative transportation networks should be interconnected and integrated with vehicular thoroughfares and public transit routes. In this transportation element of *Michigan City Momentum 2040* Comprehensive Plan, importance has been placed on linking modes of transportation as one comprehensive system.

NATIONAL TRENDS

Many jurisdictions across the country are increasing their focus on improving the quality of life for their current and future residents and at the same time increasing the City's economic competitiveness, through improved active transportation (pedestrian and bicycle) networks. Trails and bicycling are the second most popular activity in the United States[1] and over 47 percent of Americans say they want more facilities in their communities.[2] Further, studies have shown that homes closer to bike paths are more valuable,[3] and that more than 35 percent of Americans have stated that availability of bikeways, walking paths, and sidewalks was important to choosing a place to live.[4] Particularly important for Michigan City, an improved non-vehicular, pedestrian mobility system (e.g., sidewalks, trails, and enhanced public transit) may be of the greatest help to disadvantaged and low income individuals and families in the community - those who cannot afford to own a vehicle and must rely on pedestrian facilities and public transit to get around.

A transportation system is not complete unless it meets the needs of all travelers. Indeed, modes of active transportation are a critical element of the overall transportation network. Moreover, "complete streets" (refer to Complete Streets sidebar on page 1.176) are designed equally for vehicles, bicyclists, and pedestrians. The ultimate goal should be accessibility, where residents have the ability to reach desired goods, services, and activities safely. Whether as a mode of transportation or as a recreational activity, bicycling and walking is beneficial to the community in many ways, including diverting traffic from existing roadways; facilitating the mobility of multi-generational communities, including those without access to an automobile; providing an enhanced climate for business development; supporting the environment (i.e., reduction in greenhouse gases); and promoting health and livability.

Today, changing conditions call for increased attention on the City's active transportation system. Overall, the population is aging and younger generations are getting behind the wheel later and driving less.[5] Being able to walk and bike in one's own neighborhood, as well as to and from schools and commercial centers promotes a sense of community and as a result, makes a place feel safer and friendlier to citizens and visitors. Active transportation choices are not only good for residents, but can also attract businesses, workers, and tourism. A visible bicycling and walking culture builds on the reputation of Michigan City within the region as a livable community and attractive place to do business. This was acknowledged by comments received through the public engagement process (listening sessions and online discussion forum) regarding the need for sidewalks within and between neighborhoods, a desire for a City-wide trail system, and concerns for the safety of pedestrians. To abide by the premise of "complete streets," the pedestrian system must not be overlooked in the City's capital improvement program (CIP). While there are many streets within Michigan City that do not have adjacent sidewalks or ADA compliant ramps and crosswalks, there is a strong desire on behalf of the City to enhance street, sidewalk, and trail systems for increased use by pedestrians and bicyclists.

Pedestrian Mobility

So the question remains, *how can Michigan City's pedestrian mobility system be improved and made safer?*

1 Outdoor Recreation Participation Report 2011. Outdoor Foundation, 2011.
2 National Survey of Bicyclist and Pedestrian Attitudes and Behavior, National Highway Traffic Safety Administration. Royal, D., and D. Miller-Steigner, 2008.
3 "Walking the Walk: How walkability raises home values in U.S. cities," CEOs for Cities.
4 Pedestrian Pathways, A Planning Guide for the Houston-Galveston Region. Houston-Galveston Area Council (H-GAC).
5 This is supported by recent findings of the U.S. Department of Transportation and a new report from the U.S. Public Interest Research Group Education Fund and the Frontier Group. Both sources indicate that young people are "decreasing the amount they drive and increasing their use of transportation alternatives."

This can be accomplished by installing sidewalks where they do not currently exist and fixing the sidewalks that are in disrepair or are not Americans with Disabilities Act (ADA)-compliant. Attention and resources will be needed to complete the missing sections of sidewalks in areas of the City that lack a continuous, connected sidewalk system.

Similar to street connectivity provisions, pedestrian connections also provide a great many benefits, including the promotion of increased exercise and alternate forms of transportation. Within subdivision reviews, likely current and future pedestrian destinations (such as parks, schools, Downtown, nearby shopping and dining establishments, etc.), should be carefully examined; and pedestrian pathways should be required in mid-block and cul-de-sac locations, to provide more direct and efficient pedestrian route opportunities. Promoting a culture of active transportation in Michigan City will require an effort to educate residents on the benefits and processes of utilizing bicycle and pedestrian facilities.

This Plan element suggests a three tiered approach to promote the use of pedestrian systems:

- provide facilities;
- build supporting policies; and
- educate and encourage the public regarding available transportation choices.

This Plan's objectives and strategies support and encourage the development of a multi-modal transportation plan. The first two primary objectives of which are to:

1. Promote the increased usage of existing pedestrian facilities (sidewalks and recreational trails); and the construction of new greenways trailheads and access points by identifying personal and community needs; and benefits relating to quality of life, health, economics, and sustainability.
2. Present strategies leading toward a transformational attitude of Michigan City's residents and workers in which active transportation is regarded as a viable travel option for all.

MULTI-MODAL STREETS (COMPLETE STREETS)

The Complete Streets movement aims to develop integrated, connected networks of streets that are safe and accessible for all people, regardless of age, ability, income, ethnicity, or chosen mode of travel. Complete Streets make active transportation such as walking and bicycling more convenient; provide increased access to employment centers, commerce, and educational institutions; and allow greater choice in traveling so that transportation doesn't drain a family budget.

The term Complete Streets means much more than the physical changes to a community's streets. Complete Streets means changing transportation planning, design, maintenance, and funding decisions. A Complete Streets policy ensures that, from the start, projects are planned and designed to meet the needs of every community member, regardless of their age, ability, or how they travel. Doing so allows a community to save money, accommodate more people, and create an environment where every resident can travel safely and conveniently.

According to the National Complete Streets Coalition, typical elements that make up a complete street include sidewalks, bicycle lanes (or wide, paved shoulders), shared-use paths, designated bus lanes, safe and accessible transit stops, and frequent and safe crossings for pedestrians, including median islands, accessible pedestrian signals, and curb extensions.

STRATEGY 7.6.1: *Consider adopting a "Complete Streets" policy and ordinance.*

ACTIONS AND INITIATIVES

1. Commit to designing and constructing "Complete Streets" in the areas of new development (and in any area undergoing revitalization and/or redevelopment), which will provide for the mobility and safety of all users of the system, rather than just vehicular traffic. A "Complete Streets" approach may be more difficult to apply to already established thoroughfares, although it should be able to be incorporated during road reconstruction and/or streetscape improvement projects. On thoroughfares that are constrained by narrow rights-of-way, only some "Complete Street" features, such as wider sidewalks or streetscape enhancements, may be feasible through a redesign and retrofitting process.
2. Draft and adopt a Complete Streets policy guide and ordinance for adoption. A listing of Best Complete Streets Policies can be found at: https://smartgrowthamerica.org/resources?resource_type=andauthors=andcategory_name=ands=best+complete+streets.

Source: Smart Growth America

Complete Streets

The streets of our cities and towns are an important part of our communities. They allow children to get to school and parents to get to work. They help to organize and orient our built environment – our neighborhoods, centers of commerce and public institutions. As such, these streets ought to be designed for everyone – whether young or old, on foot or on bicycle, in a car or in a bus – but too often they are designed only for speeding cars or creeping traffic jams.

Now, in communities across the country, a movement is growing to "complete" the streets. States, cities, and towns are requesting their planners and engineers to build roads that are safer, more accessible, and easier for everyone. In the process, they are creating better communities for people to live, play, work, and shop. Complete Streets are streets for everyone. Pedestrians, bicyclists, motorists, and public transportation users of all ages and abilities are able to safely move along and across a Complete Street.

According to the National Complete Streets Coalition, instituting a complete streets policy ensures that transportation planners and engineers consistently design and operate the entire roadway with all users in mind – including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities.

An ideal complete streets policy includes:

- a vision for how and why the community wants to complete its streets;
- specifies that 'all users' includes pedestrians, bicyclists and transit passengers of all ages and abilities, as well as trucks, buses and automobiles;
- applies to both new and retrofit projects, including design, planning, maintenance, and operations, for the entire right-of-way;
- makes any exceptions specific and sets a clear procedure that requires high-level approval of exceptions;
- encourages street connectivity and aims to create a comprehensive, integrated, connected network for all modes;
- is adoptable by all agencies to cover all roads;
- directs the use of the latest and best design criteria and guidelines while recognizing the need for flexibility in balancing user needs;
- directs that Complete Streets solutions will complement the context of the community;
- establishes performance standards with measurable outcomes; and
- includes specific next steps for implementation of the policy.[1]

1 Smart Growth America, National Complete Streets Coalition. http://www.smartgrowthamerica.org/

SIDEWALK AND CROSSWALK FACILITIES

Sidewalk policies for future planned development will ensure sidewalks are constructed as part of new development. The need for increased pedestrian amenities was mentioned within this Comprehensive Plan's online discussion forum (MindMixer). Public input during the community workshop and listening sessions revealed a desire for more sidewalks in existing neighborhoods, and better pedestrian amenities such as signalized intersections, crosswalks, and ADA compliant sidewalks in existing dense areas.

A complete sidewalk network is essential to provide adequate and safe connections within neighborhoods and to nearby recreational trails, bike lanes, parks, public institutions (e.g., libraries and schools) and retail shopping areas. In many of the well-established neighborhoods, there are no sidewalks, or the condition of existing sidewalks have deteriorated to the point where they are hazardous to use.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

A critical component of pedestrian mobility is the provision of equal access and use of the pedestrian network irrespective of age or ability. In accordance with the federal Americans with Disability Act (ADA) requirements, all new sidewalk and pathway improvements in the City must comply with ADA accessibility standards. Currently, many of Michigan City's existing sidewalks contain barriers to persons with disabilities due to their poor condition or lack of pedestrian ramps at street intersections.

STRATEGY 7.6.2: *Improve the sidewalk system in Michigan City.*

Identify and prioritize sidewalk improvement projects.

ACTIONS AND INITIATIVES

1. Within future street improvement projects along bus routes, incorporate design provisions relating to sidewalks; curb cuts and handicapped-accessible ramps; non-slip surfaces; marked, signed and/or signaled pedestrian crossings; prevention of obstructions for wheelchair access; and installation of pedestrian-actuated traffic signals.
2. Support efforts to retrofit older neighborhoods with pedestrian transportation facilities.
3. Conduct a detailed inventory and map all existing sidewalk segments in the City, particularly along the local streets and within a one-quarter-mile radius of all parks, schools, and public buildings. The inventory should include a condition index which would facilitate the creation of Pedestrian Level of Service Map and subsequent prioritized improvement program.
4. Earmark a specific amount to be budgeted annually for sidewalk/crosswalk improvements and new construction either as separate projects or in combination with other planned street improvements.
5. Consider narrowing the pavement width of existing residential Minor/Local street pavement widths from 28 feet (Sec. 06.04) to 24 feet, to enable the construction of a four foot wide sidewalk on one side of the street, within the existing 60 foot right-of-way. The same recommendation is feasible with existing Collector streets and Frontage roads that do not have sidewalks or other amenities (i.e., neighborhood-scale street lighting, street trees, etc.). The City's current right-of-way requirements would accommodate required pavement widths while enabling the construction of pedestrian facilities and such amenities.
6. Add provisions to Michigan City's Appendix B - Subdivision Ordinance, Sec. 06.05. - *Sidewalks and Nonmotorized Systems*, to include the following:
    - Require mid-block public access easements when a block length exceeds 750 feet. Similarly, require easements at the ends of cul-de-sacs to improve connectivity. Easements should be a minimum width of 10 feet, improved with a five-foot sidewalk or trail.
    - Where warranted, proactively install medians in the rights-of-way of existing arterial roadways, particularly near public parks and buildings, for use as a pedestrian refuge to shorten the unprotected distance across roadways.
    - Require commercial development to provide sidewalk connections from the front of the commercial establishment to the sidewalk located in the public right-of-way. This is to ensure there is a marked, safe connection from the street, through the parking lot, and into the building.
    - Include pedestrian facilities requirement for large parking areas.

7. Coordinate with Michigan City Area Schools (MCAS) to prepare a "Safe Sidewalks Program," to identify those locations where unsafe conditions and/or poorly maintained sidewalks exist, particularly around, adjacent to, and leading to/away from schools; near and adjacent to public buildings and spaces; and other areas prone to heavy utilization of sidewalks, in accordance with the *Indiana Safe Routes to School Guidebook* (available at: https://www.in.gov/isdh/files/SRTS_Guidebook%202016.pdf). In these priority areas, conduct regular inspections of safety conditions to ensure the walking surface is free from hazards and dangerous obstructions.
    - Organize a public education program to notify the community of the Safe Sidewalks Program, priority pedestrian areas, and the individual responsibilities for care and maintenance. Due to the significant costs of initial construction, maintenance of the existing sidewalk system should be a priority and should be adequately funded in the annual operating budget. Additional grant funding should also be pursued from federal, state, private entities.
    - The City should also remain diligent in submitting grant applications to the Tennessee Safe Routes to School (SRTS) program to secure external funding support.
8. Commission a preliminary engineering report to determine costs of essential streetscape improvement elements such as: sidewalks, crosswalks, trees, curb and gutter, curb extensions, lane striping, etc.

STRATEGY 7.6.3: *Consider initiating a pedestrian signalization improvement program.*

Ensure that street intersections are designed and constructed to provide safe crossing by pedestrians.

ACTIONS AND INITIATIVES

1. Identify intersections in the community that are heavily used by pedestrians and prioritize and implement safety improvements at these intersections. Intersections should be prioritized based on use and pedestrian risk. Improvements could include walk overs; installing accessible ramps for persons with disabilities; marked, signed, and/or signaled pedestrian crossings; and pedestrian-actuated signal detectors.
2. Revise the Michigan City Appendix B - Subdivision Ordinance, Sec. 06-05. - Sidewalks and Nonmotorized Systems, to include striped crosswalk facilities at all new signalized intersections involving at least one street classified as a Community Collector.

STRATEGY 7.6.4: *Implement a formal traffic calming program.*

Periodically conduct travel speed studies to determine appropriate speed restrictions in neighborhood pedestrian areas. Street pavement markings and signage for all school safety zones should be improved and regularly maintained. Raised cross walks should be installed along all streets that front onto public facilities, such as schools, but also including municipal parks and the library.

Perform localized traffic calming studies where there are observed unsafe conditions of cut-through and/or high-speed traffic. Traffic calming is applicable where there are continuous and relatively straight streets (for a distance of 500 feet or more) carrying higher volumes of traffic in excess of 100 vehicles per hour during peak hours; when actual speeds exceed the posted limit on a regular basis; when a local street functions as a collector street, and/or when the street is in close proximity to a school, park, or other location frequented by children. The study should identify the recommended improvements based upon site-specific conditions.

STRATEGY 7.6.5: *Implement a neighborhood streets improvement program that combines elements of traffic calming, streetscape enhancements, and pedestrian interconnectivity.*

Incorporate street layout and design standards into the subdivision regulations to accomplish traffic calming objectives without creating discontinuous streets. See sidebar Traffic Calming on following page. Standards may include collector street offsets or jogs, curves, and narrowed street sections. On-street parking also serves to slow traffic.

ACTIONS AND INITIATIVES

1. Identify neighborhood (principally residential) streets that may be candidates for a targeted City-wide improvement program combining traffic calming, streetscape enhancements, and pedestrian safety. Candidate streets should exhibit the following characteristics:
    - Minor Collector street or Local functional class;
    - Directly adjacent, or in close proximity to a school, park, or other similar activity center;

Traffic Calming

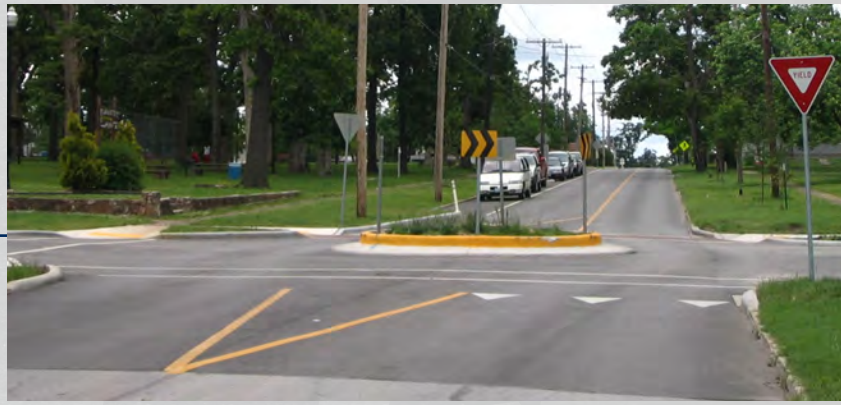
There exist several techniques to calm and slow vehicular traffic, and to reduce traffic volumes. The images on this page illustrate some of the many measures that can be employed including changes in paving materials, curb extension, elevated pedestrian crossings, medians, on-street parking, speed tables, traffic circles, marked gateways, and more. Given this list, it is apparent that traffic calming features can be employed in contrastingly overt and subtle forms. Ultimately however, each traffic calming feature has a specific purpose. Some are meant to specifically slow vehicles, while others are intended to reduce overall traffic volume. The common intent is to improve the safety of roadway users.

Traffic calming is the installation of safety solutions to slow traffic in order to enhance safety for pedestrians and motorists. Traffic calming reduces accidents, collisions, noise, vibration, pollution, and crime. Some examples include changes in paving materials, bulb-outs (which narrow the road for some distance), elevated pedestrian crossings, on-street parking, speed tables, marked gateways and street trees.

SPEED TABLES are flat-topped speed humps often constructed with brick or other textured materials. Speed tables are good for locations where low speeds are desired but a somewhat smooth ride is needed for larger vehicles.

Source: National Association of City Transportation Officials

A **TRAFFIC CIRCLE** calms traffic, is more efficient than a four-way stop, and creates a visual break from a long street segment, while also providing a streetscape opportunity.



By extending the corner sidewalk at an intersection, **PEDESTRIAN BULB-OUTS** shorten the distance at street crossings, improve the visibility of pedestrians by motorists, and slows traffic.

Source: SF Better Streets

- Used as a linkage by pedestrians – particularly special populations (children, elderly, handicapped);
- Sufficient right-of-way and cross-section to allow street tree plantings; and
- On-street parking allowed, but parking lanes not defined.

Bicycle Mobility

Bicycle and pedestrian facilities enhance the quality of life of Michigan City's residents. Not only do these facilities offer important mobility options within the community, but they also help to meet the recreational needs of its citizens. Through the public engagement process, residents articulated their desires for Michigan City to become a more pedestrian-oriented community.

Demand for on-street Bicycle Lanes

Residents at public meetings expressed support for extending this system throughout the City. Incremental and phased implementation of this plan will eventually form a thorough network of non-motorized connections. Recreational trail improvements must remain a funding priority for the City to achieve this objective.

It is important that off-street greenways, greenway connectors and multi-use paths are designed according to AASHTO recreational trail recommendations and INDOT trail design specifications, which recommend horizontal and vertical curve tolerances, intersection and signage requirements, off-trail grading and drainage tolerances, etc. Trails alignments should be designed for effective security and police patrolling practices. Provisions for trail lighting should be considered. Trails should be visible from many different vantage points, including from a patrol car, to ensure efficient surveillance.

Proposed Bicycle Mobility Plan

TFC Map 17, *Recreational Trails and Bikeways Program,* depicts a proposed bicycle mobility plan, including a connected system of on-street bike lanes and off-street recreational trails. Functional objectives included creating linkages between public parks, schools, neighborhoods, and public institutions; as well as developing complete circuits of varying lengths for recreational purposes. A key criterion was to utilize minor arterial streets with generous rights-of-way, wide enough to be able to accommodate the addition of a bike lane.

MindMixer Results

What is your vision for Michigan City?

Walkable and connected downtown, beach and neighborhoods

"Bike and walking paths lined with vegetation like trees, grass and shrubs that crisscross the city making it easy for people to walk to shop, explore Washington Park, and get around in general."

STRATEGY 7.6.6: ***Support cycling culture in Michigan City.***

Support the development of cycling culture in Michigan City by encouraging and adopting policies for the provision of bicycle amenities at trailheads. Provision of bicycle parking at destinations along bike routes and greenways will encourage bicycling habits and provide a secure location for storage of bicycles. In addition, it reduces the need for parking spaces and paved areas. Policies and incentives could include, an option for bicycle parking in lieu of parking spaces; funding for the provision of shower facilities in government and office bathrooms; a requirement for bicycle parking; or the addition of bicycle parking to government facilities.

ACTIONS AND INITIATIVES

1. Identify "champions" of bicycle, pedestrian and public transportation to be present at public meetings involving active transportation policy and facilities.
2. Increase awareness of Indiana's Senate Bill 72, which (as of March 14, 2018) is currently under debate, requiring motorists, when passing a bicycle that is proceeding in the same direction as the vehicle, to maintain a safe distance of at least three feet between the vehicle and the bicycle. (A violation of this requirement is a Class C infraction under IC 9-21-8-49).

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

LEGEND

- City Limits
- Comprehensive Plan Area
- Planned Off-Street Recreational Trails
- Off-Street Recreational Trails
- Michigan City Principal On-Street Bike Lanes
- LaPorte County Principal On-Street Bike Lanes

Lake Michigan
Dunelend Beach
Michiana Shores
Long Beach
Long Beach Country Club
Springfield Township
Sheridan Beach Esplanade
Stockwell Woods
Singing Sands Trail
Michigan Township
Community Connection
Friendship Botanic Gardens
Oak Hills Park
Washington Park
Washington Park to Calumet Trail
Canada Park
Trail Creek Greenway
Peanut Trail
Pottawattamie Park
Krueger Memorial Park
Charles R. Wescott Park
Trail Creek
Hansen Park
Winding Creek Cove Park
Pottawattomie Country Club
Tall Timbers Park
Ridgeland Park
Walker Street Playground
Pullman Field
Michigan City
Water Tower Park
Karwick Nature Park
South Shore Trail
Cleveland Avenue Park
Joe Hawkins Memorial Park
Gill Field
Zilla Park
Michigan City Municipal Golf Course
Mott's Woods
Congdon Park
MC Fish and Game Club
Monon Trail
Ames Field
NIPSCO Greenway
Nelson Park
Trail Creek
Gardena Park
Calumet Trail
NIPSCO Greenway
Indiana Dunes National Lakeshore
Barker Woods Nature Preserve
Michigan City / LaPorte Trail
Community Connection
Beverly Shores
Town of Pines
Striebel Pond Trail
Ruby Woods
Monon Trail
Adams Park
PORTER COUNTY
LA PORTE COUNTY
Indiana Dunes State Park
Dunewood Campground
Father Basil Moreau Nature Preserve
Henry Lake Area
Creek Ridge County Park
Pine Township
Coolspring Township
Center Township
Brincka Crossgardens
Patriot Park
Michigan City Campground

12 20 94 212 35 421

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

MOMENTUM: MICHIGAN CITY 2040

THE FUTURE CITY

TFC Map 17, Recreational Trails and Bikeway Program

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

3. Offer bicycle safety training opportunities for adults and children.
4. Establish developer incentives for inclusion of amenities such as bike racks, lockers, showers, and other facilities in commercial and public building projects.
5. Provide secure bicycle parking and storage at key destinations along bike routes and greenways.
6. Consider amending the Michigan City Code of Ordinances, Appendix B - Sec. 05. 05. - Sidewalks and Nonmotorized Systems to provide A) an option for bicycle parking in lieu of auto parking spaces; B) a bicycle parking requirement; and C) the addition of bicycle parking at all governmental facilities.
7. Create promotional materials to promote walking and bicycling as a safe, healthy, cost effective, environmentally beneficial transportation choice.

OBJECTIVE 7.7: Expanding Public Transit Options.

While community mobility is often primarily focused upon the ability to move and circulate within the community, thoroughfare planning is also concerned with the interactions and interconnections of the local circulation system with broader regional, state and federal, multi-modal transportation facilities. The economic viability of a community is dependent upon the ability for people, products, and goods to circulate to and throughout the community.

Regarding commuting times within the Northwestern Indiana counties, regional average travel times to work of 25.7 minutes was on par with the national average and two minutes longer than the state's average. Lake County commuters took longer to travel at 27.7 minutes compared to Porter County at 26.8 minutes and La Porte County at 22.6 minutes.

For transit service to remain viable it must maintain efficiencies that are on par with individual commuting times; as well as provide the requisite infrastructure at pick-up and drop-off points (parking, transportation modes from drop-off points to destination points). The operational efficiency of local bus and commuter transit systems varies by system; though will undoubtedly improve over time with increased ridership and subsequent investment. In 2014, rural demand response systems and the City of Valparaiso small fixed route system outperformed statewide peers on fare recovery. The City of Gary and Michigan City transit systems operated well but at fare recovery below the statewide average.

CHALLENGES

To summarize the transit issues identified within *The Existing City* report (page A.102), current public transit in Michigan City is inadequate and does not serve the needs of the community's business interests or the citizens' needs. The Michigan City Transit Department (MCT) needs to determine under what conditions:

- service hours can be extended;
- service can be provided on Sundays;
- MCT can acquire and operate more buses, thus decreasing the amount of time between scheduled service, which currently is at least one hour.

STRATEGY 7.7.1: *Increase the number of Michigan City Transit (MCT) Transit Triangle trips.*

ACTIONS AND INITIATIVES

1. Work with Purdue University Northwest, the City of La Porte, and LaPorte County to determine whether there is warrant for expanded bus service, with respect to the number of trips to and from Purdue Northwest University.
2. If there is warrant to increase the number of trips per week, continue to seek capital assistance through federal Congestion Mitigation and Air Quality (CMAQ) grants along with local matching funds.

STRATEGY 7.7.2: *Continue to implement the MCT 2015 Strategic Plan.*

The MCT should continue to work toward implementing the goals and short-term and long-term strategies associated with its *2015 Strategic Plan*.

ACTIONS AND INITIATIVES

1. Identify specific indicators and metrics to quantify the utility and economic importance of the MCT, in providing public transit service to and from places of employment (business and industry) as well as commercial/retail and institutional (hospitals, schools) centers.

STRATEGY 7.7.3: ***Analyze which locations within Michigan City would be best served by extending Michigan City Transit service hours on key routes.***

ACTIONS AND INITIATIVES

1. Determine under what conditions the service hours of MCT Routes 3 and 4 could be extended, in order to provide transit service to employees of Franciscan Hospital and the industrial businesses along Ohio Street.
2. Coordinate with major employers that employ workers with nontraditional hours to understand the need of their staff for public transportation access.
3. Utilize census data to track which neighborhoods are most cost burdened based on housing and transportation costs.
4. Consider the feasibility (cost : benefit) of providing transit service along SR 212, and potential service schedule.
5. Continue to refine the business case and implementation program for the proposed Michigan City Trolley Service, including route alignment and schedule.

STRATEGY 7.7.4: ***Consider the option of privatizing public transit service.***

In an age where both the demand for public transit and the costs of providing reliable service continue to rise; while at the same time, public subsidies for public transit face an uncertain future, several cities are considering a variety of options. From providing bike share programs (Philadelphia) to increased bus express routes (Houston), to investing in water taxis (Chicago), some cities are seriously considering, or have actually launched pilot public transit privatization programs, where the city pays ride-sharing companies, such as Uber or Lyft, to provide transportation service to its citizens within a particular geographic area.

ACTIONS AND INITIATIVES

1. Research the feasibility and cost effectiveness of privatization of public transit service, factoring-in metric such as the number of jobs created, cost saving in operations and maintenance, etc,

STRATEGY 7.7.5: ***Work closely with local, regional, state, and federal agencies to advance the land use and transportation-related policies, strategies and recommendations associated with this Comprehensive Plan.***

Coordinate with the Northern Indiana Regional Planning Commission (NIRPC), the Northwest Indiana Regional Development Authority (RDA), the Indiana Department of Transportation (INDOT), Northern Indiana Commuter Transportation District (NICTD), the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) in promoting regional cooperation, securing capital partnerships, and prioritizing implementation schedules for the implementation of key Plan recommendations.

ACTIONS AND INITIATIVES

1. Encourage consistency between local transportation recommendations and regional infrastructure priorities. Coordinating between local plans and regional infrastructure priorities helps ensure that local investments are in line with regional visions and mobility goals.

Active Transportation (Pedestrian / Bicycle) Infrastructure (AT)

AT Policy 1: Establish, improve, and maintain a Citywide system of local and regional public trails that provide transportation and/or recreation options and are a component of larger network of facilities for bicyclists, pedestrians, and recreational users.

AT Policy 2: Trail diversity. Allow a variety of trail types to reflect a trail's transportation and recreation roles, requirements, and physical context.

AT Policy 3: Develop complete streets that serve a full range of users and means of mobility.

AT Policy 4: A well-designed pedestrian environment increases walking, the success of the neighborhood, and overall comfort and safety. Street, sidewalk, bike, and other pathway interconnectivity should be a high priority in the development of transportation systems and land-use development policies, plans, and projects.

AT Policy 5: Provide Continuous Pedestrian Networks. Provide for safe, continuous pedestrian networks to promote direct pedestrian access to neighboring residential, non-residential, and public uses.

AT Policy 6: Design the furnishing zone as a buffer between the sidewalk and roadway. Align trees and other streetscape features to provide a direct and continuous path of travel.

AT Policy 7: Sidewalk elements should be scaled according to their context, including the intensity of activity, building heights, and noise.

AT Policy 8: Encourage opportunities for both on and off-street bicycle and pedestrian facilities for commuting to work, schools, shopping, between neighborhoods, and/or other destinations by bicycle or walking.

AT Policy 9: Locate bike racks near building entrances and other areas of activity to maximize visibility and convenience.

DOUGH BOYS

Focus Area 5:

Downtown

Guiding Principles

Downtown Principle 1: Downtown is a Reflection of Community Identity. Downtown should serve as the community's living room and priority location for major activities, celebrations. Downtown's future character and improvements should physically reflect Michigan City's unique character, traditional small town design and values.

Downtown Principle 2: Downtown is a Place for People. The Downtown district should be a pedestrian-oriented area. The Historic Downtown, streets, parking and open space areas should be designed to be flexible, attractive and to ensure a safe and pleasant pedestrian environment.

Downtown Principle 3: Institutional Hub. Strengthen Downtown's focus as the hub for community institutions. Downtown Michigan City should remain the civic and cultural heart of the community.

Downtown Principle 4: Quality Urban Design. From storefront design to promotional campaigns to special events, quality must be instilled in programming and design of all things Downtown.

Downtown Principle 5: Incremental Progress. Downtown revitalization is a long-term process, it will not happen overnight. Small projects make a big difference. They demonstrate that 'things are happening" in Downtown Michigan City, and hone the skills and confidence community leaders will require to tackle more complex projects. Frequent visible changes in the look and activities of the Downtown district will reinforce the perception of positive change. Small, but dramatic, improvements early in the process will remind the community that a Downtown revitalization effort is underway.

Downtown Principle 6: Public-Private Partnerships. Successful Downtown development cannot occur unless both the public and private sectors are heavily involved and committed.

Downtown Principle 7: Be Mindful of the Market. Understand and capitalize on Michigan City's strengths, but be realistic about what's possible now. Downtown businesses must satisfy some market demand or Downtown will fail.

Downtown Principle 8: Organization. Downtown economic viability requires a strong public-private partnerships and a strong organizational structure with capacity to support emerging businesses.

GOAL 8.0:

An exciting, mixed-use environment with programmed activities for local residents and visitors alike.

OBJECTIVE 8.1: Enhance the urban character and place qualities of Downtown and adjacent neighborhoods.

STRATEGY 8.1.1: ***Continue to promote and market Downtown assets, activities, and events.***

STRATEGY 8.1.2: ***Improve pedestrian circulation Downtown.***

As depicted on TFC Map 18, *Downtown Improvements*, identify a series of primary and secondary pedestrian corridors that link the principal amenities Downtown, such as the Blue Chip Casino, the Lighthouse Premium Outlet Mall, and Washington Park. Focus on 6th Street, 8th Street and 11th Street as principal pedestrian east-west linkages

ACTIONS AND INITIATIVES

1. Inventory the sidewalks within the Downtown area and analyze condition, width, material, handicapped accessibility, connectivity, etc. Develop a sidewalk improvement program and list of prioritized improvements.
2. Identify potential locations in the Downtown area where parklets may be installed to provide additional seating and outdoor dining areas (refer to Parklets sidebar, pp. 1.190-1.191).
3. As described in the *Trail Creek Plan* (2007) and the *Lake Michigan Gateway Implementation Strategy*, and as depicted on TFC Map 18, *Downtown Improvements*, evaluate proposed locations around the eastern end of 6th Street for a pedestrian bridge across Trail Creek to the Blue Chip Casino.

STRATEGY 8.1.3: ***Develop a program to enhance alleys in Downtown, in order to ensure safe, connected, pedestrian circulation.***

Often alleys and passages are forgotten spaces. Alleys typically function as places for trash collection, serve as utilities corridors (water and sewer, overhead power lines) and storm drainage collection areas, and provide access for deliveries. They are not considered part of the main streetscape, and are typically hidden from view and do not attract visitors other than service providers. However, alleys and passages provide opportunities to create unique urban spaces. In tight urban conditions, alleys and passages provide intimate corridors for pedestrians, and allow for convenient shortcut routes to adjoining streets and destinations. Alleys can be made more vibrant and multi-functional through landscaping enhancements, streetscape furnishings, and ornamental / artistic lighting – to the point where they can be places within which to host events. Encouraging activity to spill out from adjacent buildings into alleys and passages can strengthen retail, provide additional space for outdoor dining and special events, and can expand the pedestrian and bicycle network linking many different areas. Public investment designed to improve the aesthetics of alleys and passages, such as paving upgrades, the addition of furniture, lighting or landscaping, will attract people to these spaces, and will have revitalization benefits for all adjacent properties.[1]

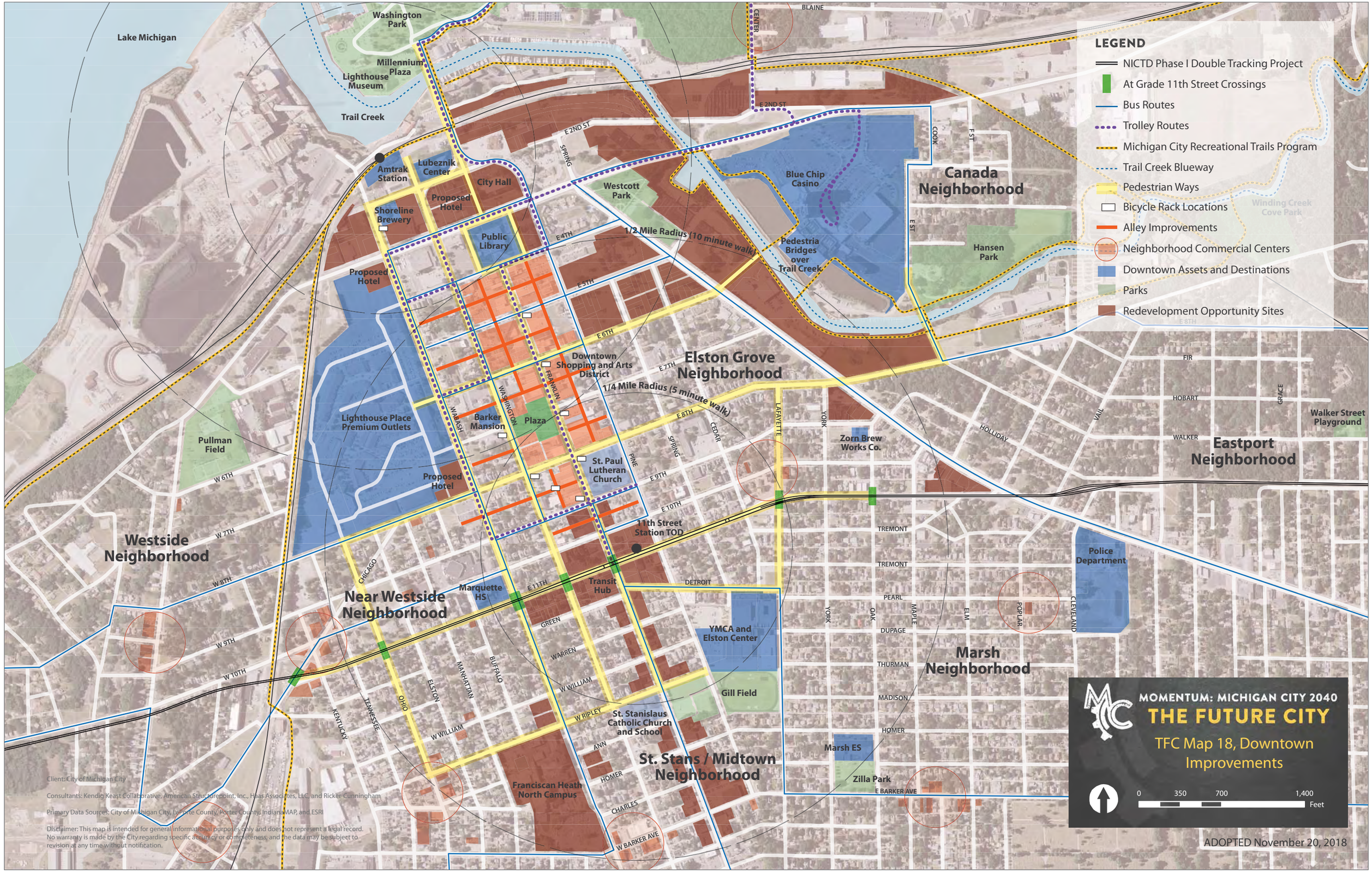
1 2012, City of Birmingham. Activating Urban Space: A Strategy for Alleys and Passages. (Available at: http://www.bhamgov.org/document_center/planning/master_planning_docs/strategy_for_alleys_and_passages.pdf)

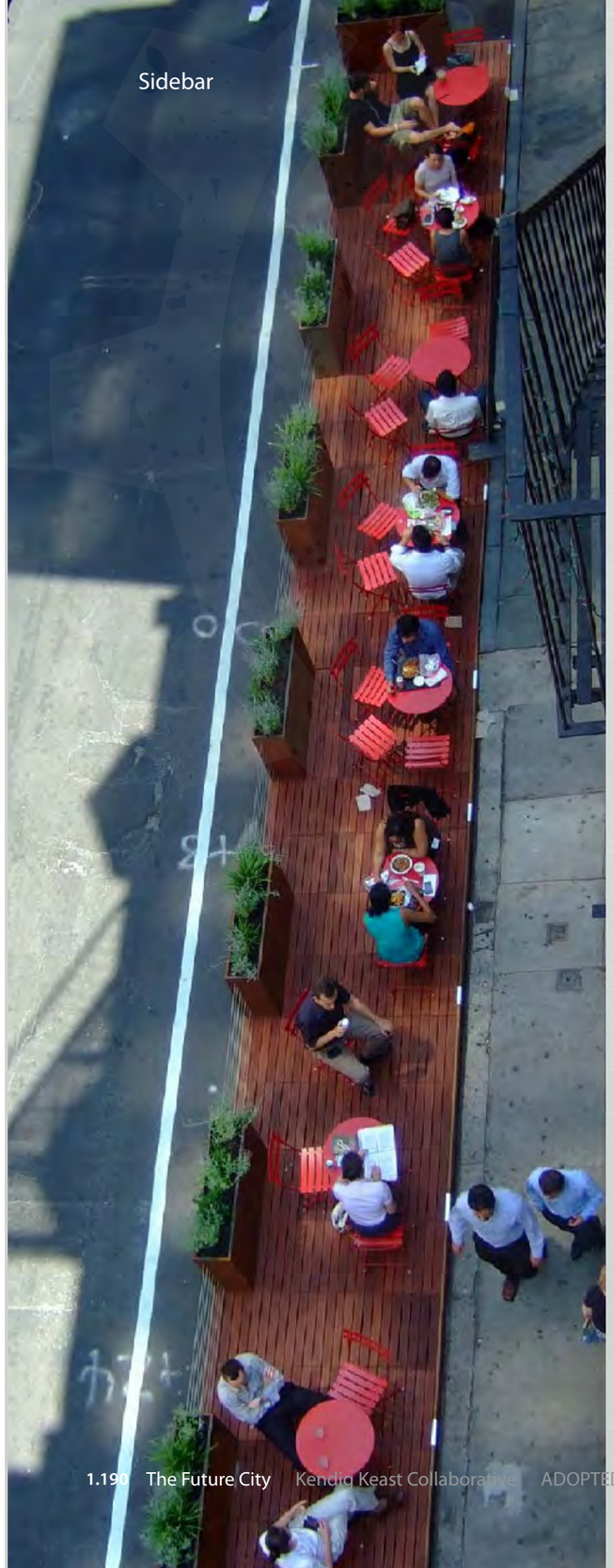
MindMixer Results

What is your vision for Michigan City?

Unify Lake / Marina / Park with Downtown

"Beautify public spaces. Encourage business owners to upgrade facades and signage to be more inviting. Create a visitors center—beneficial to residents AND visitors. Encourage pop-up shops in empty stores and host artisan market / events. Encourage GOOD MIX of food / drinking establishments, retail, services; concentrate these toward north end of Franklin and lakefront. Lakefront and downtown need to be more connected—park/beach/marina is a huge treasure; making it more seamless w/ downtown would be awesome. Wish it could all be more concentrated."


LEGEND
NICTD Phase I Double Tracking Project
At Grade 11th Street Crossings
Bus Routes
Trolley Routes
Michigan City Recreational Trails Program
Trail Creek Blueway
Pedestrian Ways
Bicycle Rack Locations
Alley Improvements
Neighborhood Commercial Centers
Downtown Assets and Destinations
Parks
Redevelopment Opportunity Sites
Lake Michigan
Washington Park
Millennium Plaza
Lighthouse Museum
Trail Creek
Amtrak Station
Lubeznik Center
City Hall
Proposed Hotel
Shoreline Brewery
Public Library
Proposed Hotel
Westcott Park
Blue Chip Casino
Pedestria Bridges over Trail Creek
Canada Neighborhood
Hansen Park
Winding Creek Cove Park
1/2 Mile Radius (10 minute walk)
1/4 Mile Radius (5 minute walk)
Downtown Shopping and Arts District
Elston Grove Neighborhood
Lighthouse Place Premium Outlets
Barker Mansion
Plaza
Pullman Field
Proposed Hotel
St. Paul Lutheran Church
11th Street Station TOD
Zorn Brew Works Co.
Eastport Neighborhood
Walker Street Playground
Police Department
Westside Neighborhood
Near Westside Neighborhood
Marquette HS
Transit Hub
YMCA and Elston Center
Gill Field
St. Stanislaus Catholic Church and School
Marsh Neighborhood
Marsh ES
Zilla Park
Franciscan Heath North Campus
St. Stans / Midtown Neighborhood
BLAINE
CENTER
E 2ND ST
SPRING
COOK
F ST
E ST
E 4TH
E 5TH
E 6TH
E 7TH
E 8TH
E 9TH
E 10TH
E 11TH
FRANKLIN
WASHINGTON
WABASH
LAFAYETTE
YORK
CEDAR
PINE
HOLLIDAY
VAIL
GRACE
FIR
HOBART
WALKER
W 6TH
W 7TH
W 8TH
W 9TH
W 10TH
CHICAGO
DETROIT
TREMONT
PEARL
DUPAGE
THURMAN
MADISON
HOMER
OAK
MAPLE
ELM
POPLAR
CLEVELAND
GREEN
WARREN
W WILLIAM
W RIPLEY
ANN
CHARLES
W BARKER AVE
E BARKER AVE
KENTUCKY
TENNESSEE
OHIO
ELSTON
MANHATTAN
BUFFALO
MOMENTUM: MICHIGAN CITY 2040
THE FUTURE CITY
TFC Map 18, Downtown Improvements
0
350
700
1,400
Feet
ADOPTED November 20, 2018
Client: City of Michigan City
Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham
Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI
Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.



Parklets

The term "parklet" was first used to represent the conversion of an automobile parking space into a mini-park for passive recreation. Parklets emerge from the low-cost conversion of small and under-utilized residual spaces originally devoted to cars into spaces for the passive or active recreation of people. Parklets vary based on the following characteristics:

- **Location**: Parklets can occupy former parking spaces, street medians, traffic triangles, repurposed travel lanes and parking lots or excess asphalt space at angled or irregular intersections;
- **Surrounding land uses:** Commercial or residential;
- **Size**: From a couple of parking of spaces to spaces extending along the length a block, to larger spaces occupying entire parts of a block;
- **Shape**: Linear, square, rectangular, triangular, or irregular;
- **Duration**: From a few hours (e.g., Ciclovias and Sunday Streets), to one day (Park(ing) Day), to part of the year (during spring and summer), to year-around installations;
- **Type of activity**: Passive or active recreation.

The following general design guidelines are recommended:

- Parklet should be easily accessible from the sidewalk;
- Some landscaping is expected;
- Parklet should be visually permeable to enable people to rest and experience the street off the sidewalk;
- Parklet should conform to ADA access guidelines. Parklet must be open to the public and display two standard signs (per city template) stating "public parklet;"
- Should feel public and be devoid of cues (e.g., umbrellas and condiment bottles on tables) that signify that the space's primary function is for commercial activity;
- Seating should be included and any removable furniture must be distinct from those of restaurants.

Source: Reclaiming the Right of Way: A Toolkit for Creating and Implementing Parklets. UCLA Luskin School of Public Affairs. UCLA Complete Streets Initiative. September 2012 (Available at: http://innovation.luskin.ucla.edu/sites/default/files/parklettoolkit.pdf

Parklets emerge from the low-cost conversion of small and under-utilized residual spaces originally devoted to cars into spaces for the passive or active recreation of people.

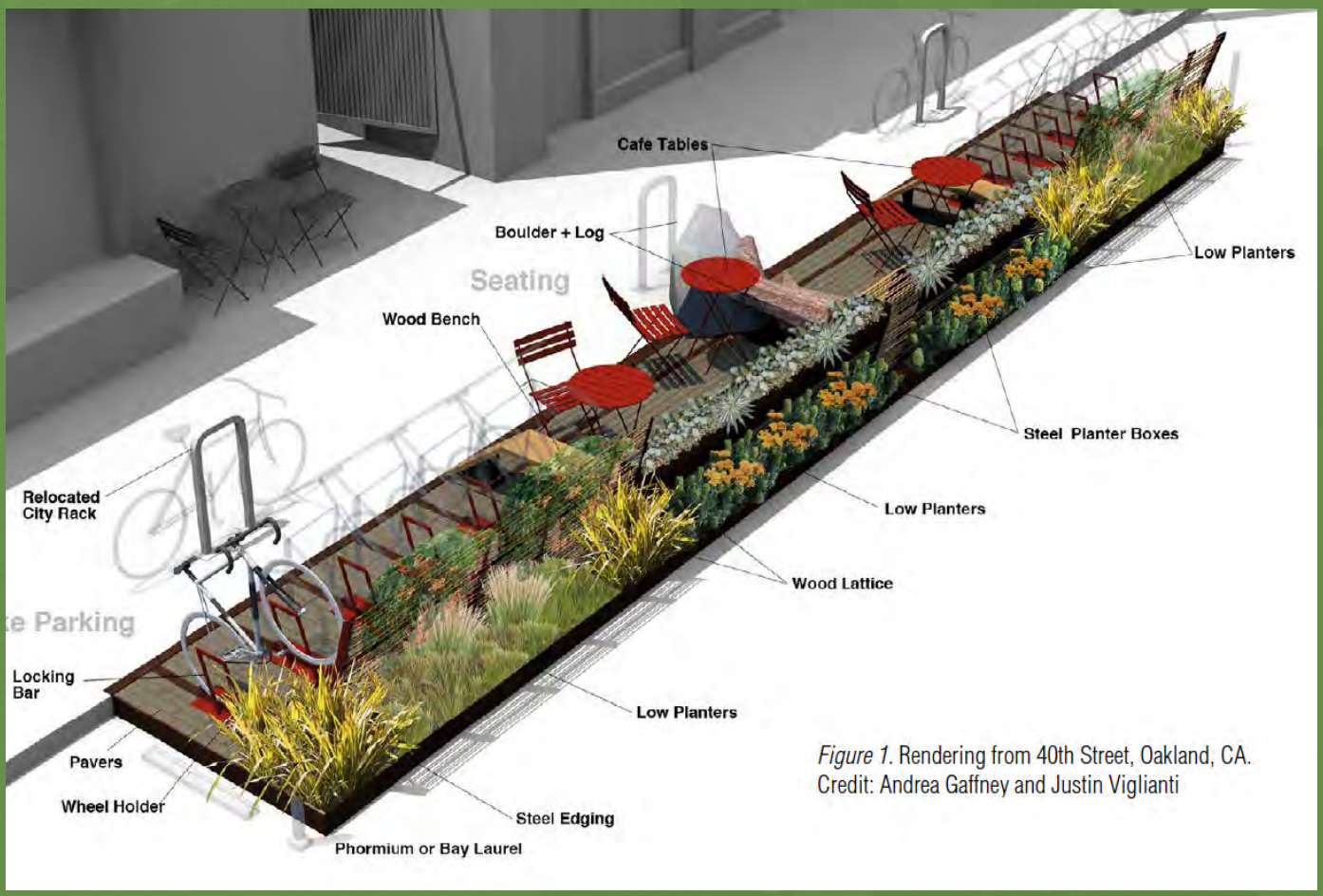


Figure 1. Rendering from 40th Street, Oakland, CA.
Credit: Andrea Gaffney and Justin Viglianti

ACTIONS AND INITIATIVES

1. Identify all alleys and passages within the Downtown area.
2. Document existing conditions (pavement width, condition, wall surface materials, historically significant architectural details, etc.).
3. Identify multi-modal connection opportunities within alleys and passages.
4. Identify strategies for enhancing alleys and passages with contained vegetation (green walls, street trees, flower boxes, etc.).
5. Develop signage standards for alleys and passages.
6. Incorporate public art into alleys and passages.
7. Establish a funding mechanism to encourage alleyway enhancement projects.

STRATEGY 8.1.4: *Develop woonerfs in new high-density residential development areas, including in Downtown.*

As described in the sidebar, Woonerfs, a 'woonerf,' is a Dutch term that means, "living street," and refers to street that is shared equally by pedestrians and vehicles; where traffic calming devices and pedestrian enhancements have been implemented to the point where motorized traffic is restricted to a walking pace (as per Article 44 of the Dutch Traffic Code.[1] With increased residential densities Downtown, it will be important to ensure a finer grain of pedestrian refuges and recreation areas, such as woonerfs, pocket parks and urban plazas (refer to *On Woonerfs* spread on pp. 1.194-1.195).

1 Road Traffic Signs and Regulations in the Netherlands Ministerie van Verkeer en Waterstaat, June 2006 Accessed 7 February 2007 (Available at: https://www.rijksoverheid.nl/ministeries/ministerie-van-infrastructuur-en-waterstaat).

ACTIONS AND INITIATIVES

1. Consider requiring the inclusion of woonerfs in mixed-use (MU) districts and future planned unit developments.
2. Consider including woonerfs as a specific street type within Article 06. – Design Standards, Sec. 06.04. – Streets, of the City's Code of Ordinances.

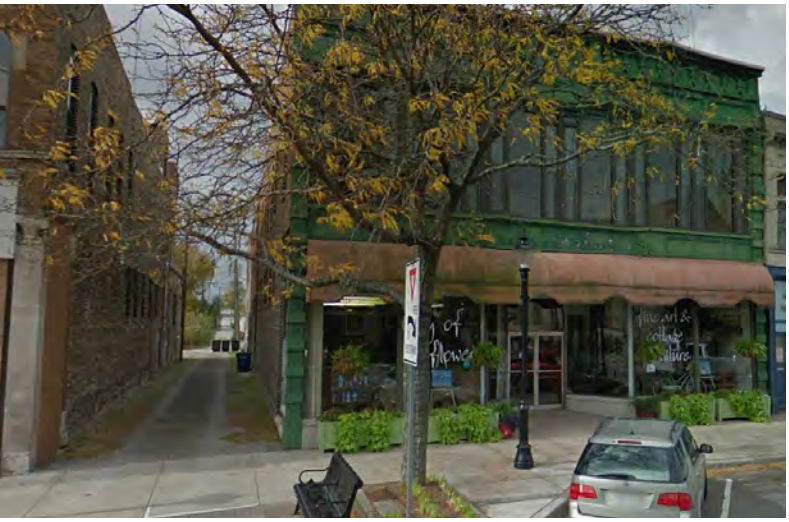
STRATEGY 8.1.5: *Develop a palette of streetscape furnishings.*

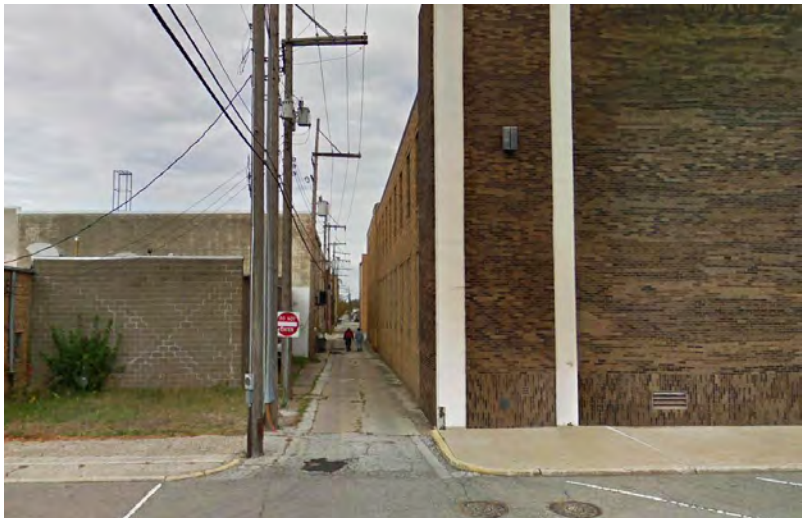
To further promote the Downtown brand, develop a family of streetscape furnishings (ornamental street lights, benches, bollards, waste receptacles, bicycle racks, planters, etc.) that would be unique to the Downtown Arts District. This could be an opportunity to enlist local artists to help design specific furnishings, such as a unique bike rack, as previously described (as depicted in TFC Figure 21, *Recommended Streetscape Furnishings,* page 1.167).

ACTIONS AND INITIATIVES

1. Develop a unique blade sign for Downtown business owners. Work with local artists to develop a blade sign that draws from the Michigan City branding program but is unique to the Downtown Arts District.

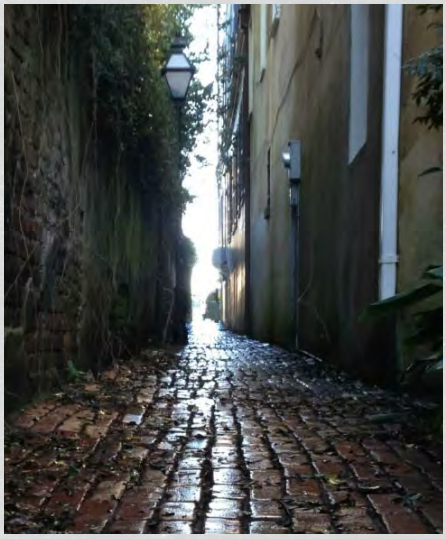
Opportunity Alleys Downtown Michigan City (see TFC Map 17, Downtown Improvements for alley locations)





"Alley Activation" - Reclaiming Alley Space as a Public Realm

Alleys used to be planned into cities for trash access, deliveries, electrical, plumbing, and mechanical services, fire engines, and for parking. As a secondary circulation pattern, many pedestrians, cyclists and even autos use alleys for shortcuts or back access. While alleys vary in width, material, and use, one thing is certain: alleys not only provide important space for services bu also invaluable public space. (Source: S*eattle Integrated Alley Handbook Activating Alleys for a Lively City,* by Mary Fialko and Jennifer Hampton).



ALLEY IN CHARLESTON, SC

Source: *The Secret Side of Charleston—Discovering Hidden Alleys and Passageways*, by Logan Waddell, February 18, 2016.

Some of the most lovely, picturesque, charming and surprising spots in all of Charleston are the tucked-away alleys, lanes and walkways that are leafy, brick-clad secret passages.

CANTON ALLEY - CHINATOWN SEATTLE, WA

Source: Tight Urbanism in Canton Alley (Available at: alleysofseattle.com)

Canton alley was not only a service alley like its' other Seattle contemporaries, but actually housed a number of loft-style alley oriented apartments. These large apartments were almost like tenements in that multiple families shared each apartment and some had businesses in storefronts on the alley. The community's long-term goal is to bring business back into the vacant storefronts to help draw more foot traffic.

SNOWFLAKE ALLEY - DOWNTOWN ANNAPOLIS, MD

The Downtown Annapolis Partnership decorated Snowflake alley (Cabbage alley) to promote events downtown. Snowflake Alley is decorated with bright snowflakes which light the way in a narrow alley between Main Street and the shops and restaurants on State Circle and Maryland Avenue.

GREEN ALLEY - DETROIT, MI

In addition to functioning as a pedestrian and cyclist-friendly neighborhood thoroughfare, it demonstrates a few different sustainable design features, including:

- Reclaimed bricks
- Convex surface and permeable pavement to help direct rainwater back into the water table, rather than into the overburdened sewer system
- Extensive native plantings to promote natural biodiversity
- High-induction lighting to illuminate the alley at night in a way that uses considerably less energy than traditional or LED street lightings.

Source: http://www.greengaragedetroit.com/site/building/green-alley/

On Woonerfs

A "woonerf" is an urban design tool which originated in the Netherlands. It is intended to transform streets from car prioritized spaces to shared spaces for all modes of transport, including pedestrians. Woonerfs are designed to make the driver feel uncomfortable, thus forcing them to reduce their speed, as opposed to using the traditional method of signs and speed-bumps.

A woonerf blends the line between pedestrian and vehicle paths. By removing curbs and any indication of a car travel line, while at the same time adding landscaping and street furniture, the public realm for pedestrians is expanded into what was the street. Parking areas are dispersed, so to prevent a wall of cars blocking access to the street. Curves are used to reduce sight lines for drivers. If a driver is able to see an exit in the distance, they will try to get there as fast as possible while disregarding the pedestrians. Sidewalks are also eliminated in a woonerf, since the idea is that people and vehicles share the same space. Research on different case studies of woonerfs (woonerven) in Europe and in the U.S. has shown that they have a positive effect on the street environment as well as on residents' lives by:

- Reducing driving speeds and increasing levels of safety;
- Creating more efficient use of space;
- Increasing socialization and activities;
- Creating a more attractive street;
- Increasing natural surveillance, which deters casual crime;
- Enabling the elderly and others with limited mobility to have better access;
- Improving the environmental quality of urban streets, helping to increase the demand for urban living.

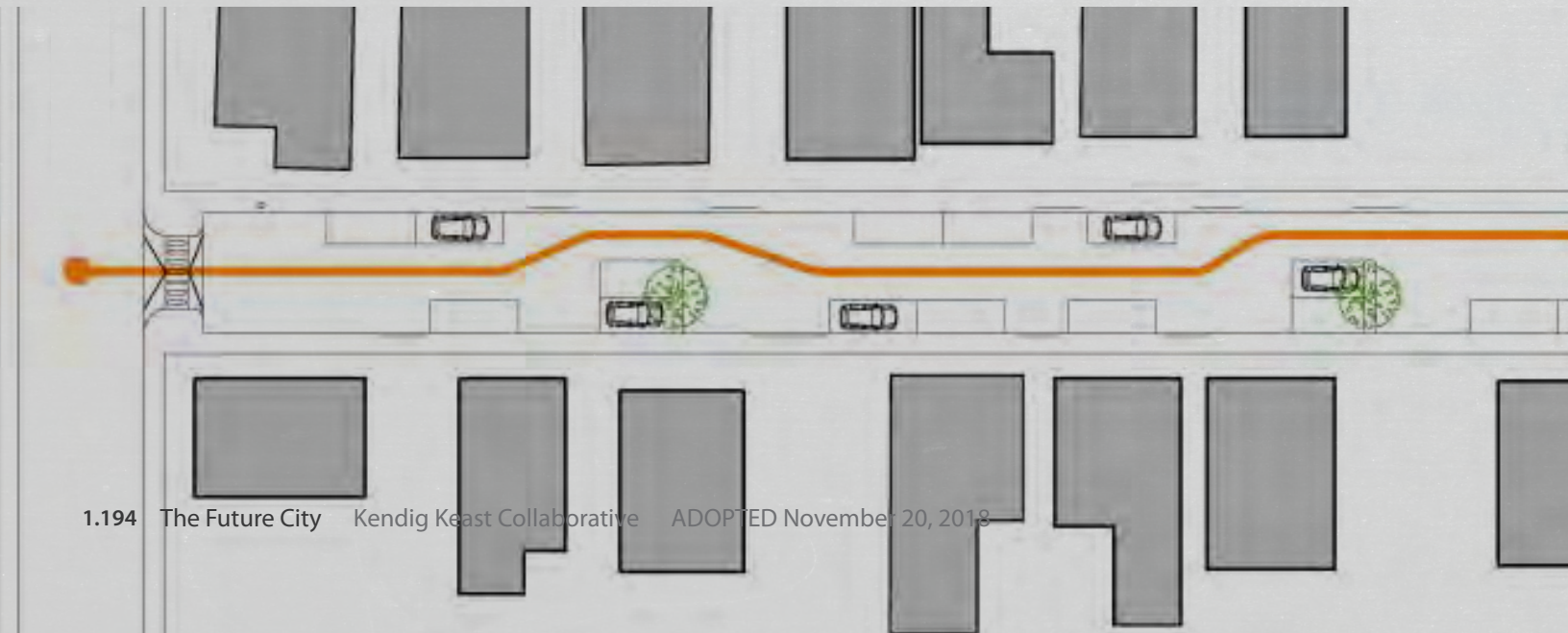
Woonerf implementation requires a distinct approach to street design, so the woonerf core concepts are clear and adaptable; and they consist of the following guidelines:

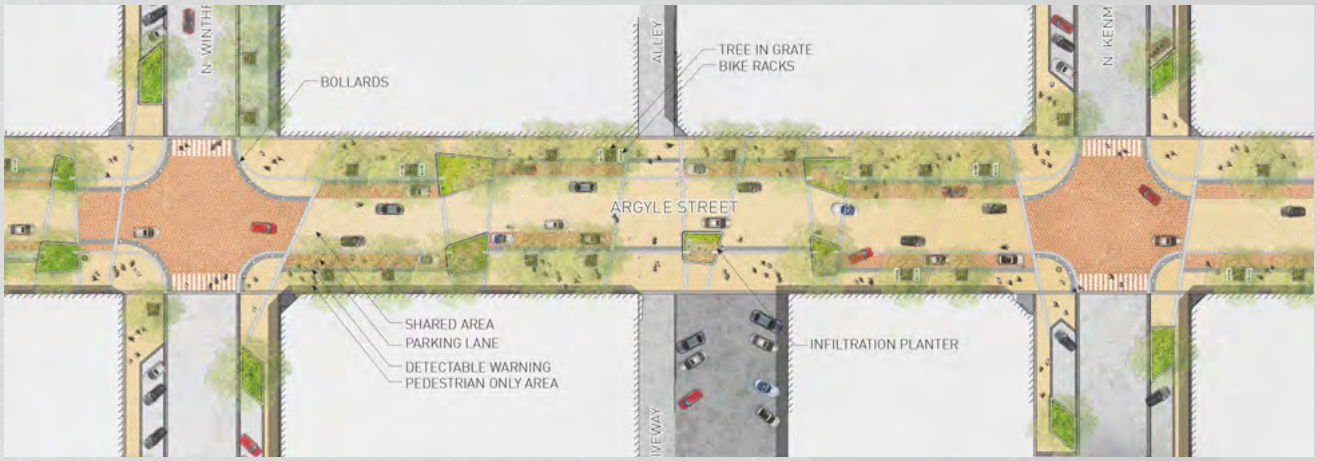
- **Have a clear and distinct entrance.** A woonerf should be marked by some kind of entrance so people going into the street will know that this area is not a typical neighborhood.
- **Eliminate the continuous curb.** Pedestrian and auto space should be on the same level.
- **Use traffic calming measures.** The design of the street should add slight curves to break up the sight lines of a driver and also introduce physical and visual features that will encourage people to drive slowly and with greater caution.
- **Provide on-street parking.** Parking should be provided intermittently rather than continuously so the car is not the predominant element in the street.
- **Incorporate outdoor furnishings and landscaping.** Street trees and planters make the street look more attractive as well as calm traffic.[1]

Case Studies for shared streets in the U.S.:

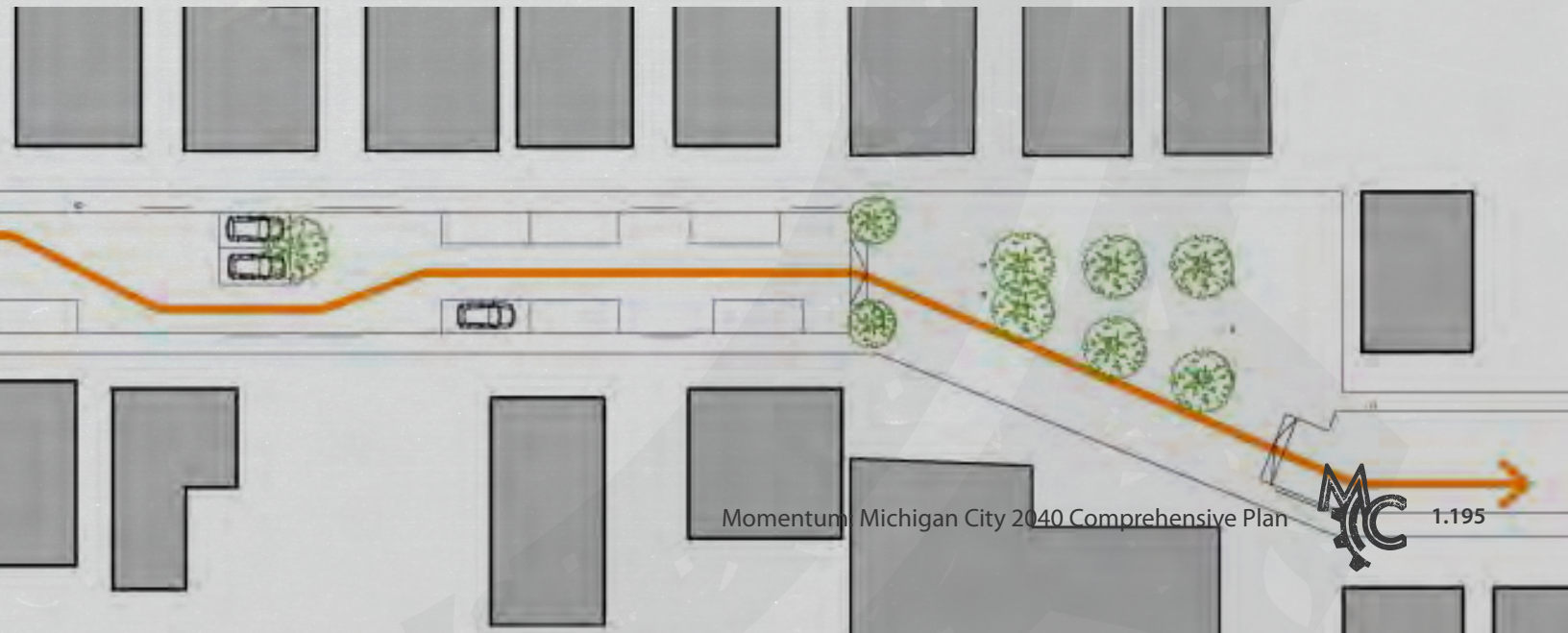
- Commercial
  - Asheville, NC (Wall Street);
  - San Francisco, CA (Linden Street);
  - Cambridge, MA (Palmer and Winthrop Street).
- Residential
  - The Cottages and Bridgewalk in Boulder, CO;
  - Appleton Street Boston, MA;
  - Borderline Neighborhood Shared Streets Project in Santa Monica, CA.

1 Collarte, Natalia, 2012. The Woonerf Concept: Rethinking a Residential Street in Somerville. Tufts University. Available at: https://nacto.org/wp-content/uploads/2015/04/woonerf_concept_collarte.pdf





Source: Woonerf in the West Suburbs Offers a Sneak Peek at Uptown Streetscapes, Streets Blog Chicago, June 2014.
Gateway to River Street in Batavia. Photo: John Greenfield



2. Partner with local artists to develop a unique bicycle rack for Downtown. The *North Gateway Implementation Strategy* identified several proposed bicycle rack locations (as depicted on TFC Map 18, *Downtown Improvements*).

STRATEGY 8.1.6: *Develop a public gathering place Downtown.*

As depicted in TFC Figure 24, *Downtown Plaza*, and on TFC Map 18, *Downtown Improvements*, the Redevelopment Commission has acquired and aggregated several parcels on either side of 7th Street, between Washington and S. Franklin Streets. The objective is to close this segment of 7th Street and develop a plaza for public events, such as concerts, farmers market, etc. The plaza will feature a depressed area that can be filled with water and converted into a skating rink during the winter season. There may be an overhead canopy, public restrooms, and likely a warming station.

ACTIONS AND INITIATIVES

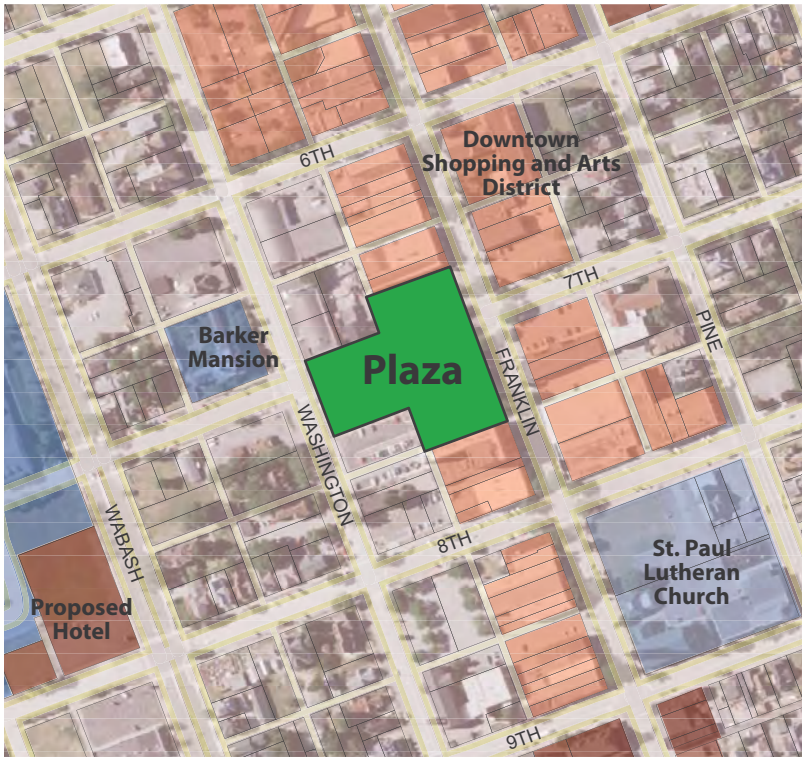
1. Consistent with Michigan City's industrial heritage, consider repurposing shipping containers to function as bathrooms, storage, and warming huts.

STRATEGY 8.1.7: *Strengthen Michigan City's public art ecosystem. Continue to promote public art Downtown.*

A public art ecosystem is an interconnected network of public art installations and programs; where one element or entity feeds into the next and each component is dependent upon the entire system. A healthy arts ecosystem is rooted in several core principles:

1. **Improving Lives.** A healthy arts ecosystem maximizes the arts' capacity to improve the lives of human beings in concrete and meaningful ways.
2. **Eye of the Beholder.** Different people relate to the arts in vastly different ways across different contexts, and for that reason an ecosystem-based approach to public art focuses on matching individuals with the opportunities that are most suited for them. The only way to determine who can benefit the most from having the arts in their lives is through widespread and varied exposure to the arts.
3. **Net Benefit.** The only way an arts ecosystem can be considered healthy depends upon the degree that people's lives are really being improved in concrete and meaningful ways as a result of their participation in it.

TFC Figure 24, Downtown Plaza



Valparaiso Central Park Plaza

4. **People, not Institutions.** A healthy arts ecosystem focuses almost exclusively on people. It is not hard to see how the interests of institutions may come into conflict with the interests of other elements of the ecosystem, including those of professional and nonprofessional artists, audience members, donors, and the broader community.
5. **Collective Good.** The best arts ecosystem is one that maximizes the net benefit for all individuals in the system, today and in the future. The collective good in the arts ecosystem is best achieved when opportunities to improve lives are distributed in an equitable fashion.[1]

Continue to bolster Michigan City's arts scene and brand through additional arts installations.

ACTIONS AND INITIATIVES

1. Measure and communicate the economic value and economic contribution of the creative sector throughout the City and region, including nonprofit arts organizations, independent artists and for profit creative businesses. Articulate the economic development rationale for arts, culture and creative economy including the attraction and retention of talent.
2. Work with Downtown business owners to identify building walls to use for large murals.
3. Partner with the Lubeznik Center for the Arts to pursue grants and other funding opportunities to finance additional art installations Downtown.
4. Partner with the Lubeznik Center for the Arts to sponsor arts programs for children, focused on developing art elements for enhancing Downtown.
5. As depicted in TEC Map 37, *Public Art*, in *The Existing City* report (page A.160), develop a self-guided tour of public art installations, art galleries, and artists' studios in and around Downtown.
6. Provide an artists' resource and services website that collates information around planning an event, managing an event, finding work and living space. Offer a hotline for immediate communication.[2]
7. Work with artists within Michigan City to partner and/or coordinate with the Dunes Arts Foundation.
8. Continue to implement the short-term and long-term priorities and specifics of the *Public Art Master Plan* for Michigan City.

1 A Healthy Arts Ecosystem. Createquity. (Available at: http://createquity.com/about/a-healthy-arts-ecosystem/).
2 2014, City of Marquette. Image Marquette: Re-created: City of Marquette Arts and Culture Master Plan.

Sidebar

Michigan City Arts and Culture

According to the One Region 2016 Indicators Report, Northwest Indiana arts-related businesses have increased to 1,139 although creative sector workers decreased slightly to 4,691 in 2015. It is the region's rich cultural, recreational and natural resources drawing in millions of tourists from across the globe each year. The majority of these visitors in 2012 and 2013 came from the nearby states of Illinois, Indiana, Michigan and Ohio but the region also saw visitors from as far away as Germany staying an average of 2.4 days and typically travelling in a party of 3.7 people. The most popular attractions continued to be the four casinos, Indiana Dunes National Lakeshore, Indiana Dunes State Park, Lighthouse Place Outlets, Albanese Candy Factory restaurants (Lake County), sports events and recreational facilities such as Deep River Water Park (Lake County), Zao Island (Porter County) and Washington Park Zoo. Visitors spent over $1.8 billion in the region per year. Lake County benefited the most from the tourism industry with $795.3 million in spending in 2014 to generate 12,225 direct jobs. In 2013, 10 Porter County saw $386.6 million in revenue to generate 4,962 jobs. In La Porte County, $619.2 million in tourism and travel revenue in 2014 generated 5,896 jobs.

STRATEGY 8.1.8: *Consider adopting a percent for the arts ordinance.*

As outlined in the *Public Art Master Plan* for Michigan City, adopt an ordinance that would require that a fee, which is typically some percentage of the project cost, is placed on large scale, public sector development projects in order to fund and install public art. The public art may or may not have to be located in proximity to the public project. A percent for the arts ordinance would help fund public art throughout Michigan City.

ACTIONS AND INITIATIVES

1. Investigate how percent for the arts policies and ordinances have worked in other cities.

STRATEGY 8.1.9: *Preserve the historic significance and integrity of the Elston Grove Historic District.*

ACTIONS AND INITIATIVES

1. Enhance understanding of Elston Grove's history and the character-defining features and elements that contribute to the neighborhood's historic significance.
2. Tell Elston Grove's story.
   - Create interpretive panels, historic markers, exhibits, and public installations about Elston Grove's history.
   - Publish a guided tour of the Elston Grove neighborhood.
   - Expand the use of the City's website for educational purposes to include information on Elston Grove's historic resources.
   - Provide history and historic preservation educational modules within MCAS state and local history courses.
   - Publish style guides for Elston Grove's historic building types and character-defining elements.
   - Incorporate Elston Grove's history into planning documents and planning processes.
3. Work with Purdue Northwest University to encourage students to live in the Elston Grove and Downtown and utilize an expanded Transit Triangle bus service to get to and from school.

STRATEGY 8.1.10: *Work with the Historical Review Board and other local partners to preserve, stabilize and restore historically significant sites, structures and buildings which contribute to Michigan City's built environment and cultural heritage.*

ACTIONS AND INITIATIVES:

1. Strive to recognize and preserve architecturally or historically significant structures built more than 50 years ago.
2. Consider the impacts of new development on historical resources as a part of the City's historical review process and require appropriate mitigating measures.
3. Coordinate with the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology on proposed development areas depicted on the *Future land Use Map*, in relation to potential archaeological sites.
4. Seek both state/federal and private funding for restoration and enhancement of historical resources.
5. Assist in the identification of available spaces for the proper storage, preservation and display of significant cultural and historical artifacts.
6. Provide appropriate means to recognize property owners who rehabilitate, restore, retain or reproduce historical elements of their properties.
7. While promoting historic preservation, the City will adopt no policy or regulation which shall limit a site or structure from being used in an economically viable manner.

STRATEGY 8.1.11: *Consider recreating the historical arch across S. Franklin Street.*

As described in the *Public Art Master Plan* for Michigan City, the recreation of the historical arch across Franklin Street could both serve as a gateway, a historical marker, and a lead-in to other public art.

Welcome "illuminated" Arch and Spaulding Hotel on right Arch constructed in 1923 by the Indiana Rotary Clubs. Source: The INGenWeb Project, http://www.ingenweb.org/inlaporte/MichCityphotos.htm.

Another example of a historic arch at Franklin Street, looking south from Washington Park. Source: CardCow.com Vintage Postcards and Collectibles, https://www.cardcow.com/546149/franklin-street-looking-south-from-michigan-park-city-indiana/.

On Lighting

Artificial outdoor lighting is required to protect public safety, provide for commercial businesses, and for quality of life. All of these needs can be accomplished and still avoid bad lighting that causes glare, spills onto neighboring property, wastes energy, and harms the environment.

There is a real need for light at night to improve safety. Drivers need to see pedestrians. Police need to see into dark areas to protect the public. Pedestrians need to see their surroundings. There has to be sufficient light to achieve all these needs. However, too much light can be blinding. If light is misdirected and glares directly in the eyes, it causes an unsafe situation. Even if light is properly aimed, it will create deep shadows that prevent visibility, if it is too bright.

Businesses need to promote their services and products, and nighttime lighting does draw attention. However, lighting for advertisement should not be so overly bright that it overpowers streetlights creating a safety hazard. No artificial light at night should shine horizontally off the property. Businesses should only be fully lit during their hours of operation.

Michigan City is fortunate to have the Indiana Dunes National Lakeshore as a neighbor. As an environmentally sensitive resource the provides tourism revenue, the Indiana Dunes must be protected. Michigan City contributes to light pollution at the Indiana Dunes. The light dome over Michigan City obstructs the view of the natural night sky. Light pollution is an issue for migrating birds and all wildlife. This is not necessary. Michigan City can provide for safety and business needs, while avoiding polluting the sky with wasted energy.

Artificial light is a known health issue. In June 2016, the American Medical Association issued a report titled, *Human and Environmental Effects of Light Emitting Diode (LED) Community Lighting*. This report states that the, "AMA encourages the use of 3,000k or lower lighting for outdoor installations such as roadways. All LED lighting should be properly shielded to minimize glare and detrimental human and environmental effects, and consideration should be given to utilize the ability of LED lighting to be dimmed for off-peak time periods."[1]

1 American Medical Association, 2016. Human and Environmental Effects of Light Emitting Diode (LED) Community Lighting. (Available at: https://www.ama-assn.org/sites/default/files/media-browser/public/aboutama/ councils/Council%20Reports/council-on-science-public-health/a16-csaph2.pdf

MindMixer Results

If you could change one thing about Michigan City, what would it be?

Lighting Ordinance:

"There is a need for safe outdoor lighting, but Michigan City has some very bad, unshielded, excessively white, unhealthy, badly aimed, lit all night, outdoor lights."

Michigan City should consider developing zonal lighting usage districts for residential, commercial, and park land uses. Residential neighborhoods need light for pedestrian and street traffic safety, but also must allow residents to get healthy sleep. As mentioned, in residential zones the AMA recommends 3,000k, or less color temperature for human health.

Commercial zones may need higher color rendition, for example outdoor car sales lots, but only during business hours. Retail parking lots should be 3,000k or less. City parks are natural areas and should have the most protected lighting environment. Large areas of parkland do not need lighting at all. Trails used at night may require low intensity pedestal fixtures. Some sports fields will need large light towers, but they should be dark when not active.

Michigan City needs to provide lighting that will accommodate safety, business needs, human health, and the environment. Lighting must be designed to protect against direct glare, and excessively bright lighting. It is in everyone's interest to minimize light pollution caused by inappropriate or misaligned light fixtures. Sensible lighting will protect the public, improve courtesy among neighbors, preserve Michigan City's quality of life, and reclaim the aesthetic and cultural resource of the starry sky.

STRATEGY 8.1.12: *Develop a comprehensive lighting program for Michigan City.*

ACTIONS AND INITIATIVES

1. Provide lighting that not only meets functional requirements but enhances the scenic qualities and night-time experience of the City.

STRATEGY 8.1.13: *Reduce nighttime glare and light trespass.*

For all new development, shield all exterior light fixtures to meet the IESNA Full Cutoff Classification or an Uplight rating of O, to prevent glare and/or Light trespass onto any neighboring properties. All exterior light fixtures should be efficient while providing minimum illumination levels sufficient for personal safety and security. Efficient exterior lighting is defined as 60 lumens/watt minimum system efficiency. Safety and security lighting should minimize glare and/or light trespass.

ACTIONS AND INITIATIVES

1. Require that fixtures are employed that effectively project light downwards. Eliminate direct upward lighting.
2. Require that occupancy sensors are employed in future parking structures.
3. Require motion sensors for office interior lighting.
4. Employ occupancy sensors/ timers for exterior lighting.
5. For all new commercial and institutional development, install an automatic device that reduces the outward spillage of internal light by:
    - reducing the input power to lighting fixtures by at least 50 percent between the hours of 11 p.m. and 6 a.m. year-round; or
    - shielding all openings in the building envelope with a direct line of sight to any non-emergency light fixtures between the hours of 11 p.m. and 6 a.m. year-round.
6. Use appropriate Color temperature. Use the lowest color temperature that is acceptable in the context of its application, preferably equal to or less than 3,000k.

Parks are actively used in the daytime and in the evenings. To facilitate evening use, pathways and sports areas are illuminated. The lighting fixtures in use vary in effectiveness. Many existing wall pack fixtures shine horizontally and are a major source of glare.

7. Use fixtures that are full cutoff so that they light a pathway or sitting area without causing glare.
8. Use only full cutoff wall pack fixtures on park buildings, that are mounted at an appropriate height.
9. Manage sports lighting installations for minimum impact on the lighting of surrounding park areas and residential areas.

STRATEGY 8.1.14: *Require all exterior fixtures to be Dark Sky compliant.*

Dark Sky Compliant fixture must have the Dark Sky Fixture Seal of Approval which provides objective, third-party certification for lighting that minimizes glare, reduces light trespass and doesn't pollute the night sky. If a Dark Sky Fixture Seal of Approval is not available fixtures must be full-cutoff with a color temperature rating of 3,000k or less.

All exterior light fixtures should be efficient while providing minimum illumination levels sufficient for personal safety and security. Efficient exterior lighting is defined as 60 Lumens/Watt minimum system efficiency. Safety and security lighting should minimize glare and/or light trespass. For more information see the *Best Practices for Effective Lighting* (Available at: http://www.rascto.ca/sites/default/files/BP_Effective_Lighting_Toronto.pdf).

ACTIONS AND INITIATIVES

1. Use "de-lamping" techniques to reduce lighting levels at parks, sports fields and parking lots, where appropriate for the location and use, considering security and decorative lighting issues. Change holiday or decorative lighting to light-emitting diodes (LEDs) or other energy efficient lighting systems. Replace incandescent and mercury vapor street, parking lot, park and other outdoor lights with energy efficient alternatives, such as LEDs. Work with energy provider to promote use of utility financial incentives to assist residential and commercial customers improve energy efficiency, such as by using on-bill financing, loans and rebates and demand management programs.

Policies

Lighting (L)

L Policy 1: Permit reasonable uses of outdoor lighting for nighttime safety, utility, security, and enjoyment.

L Policy 2: Preserve the ambiance of the night.

L Policy 3: Curtail and reverse any degradation of the nighttime visual environment and the night sky.

L Policy 4: Minimize glare and obtrusive light by limiting outdoor lighting that is misdirected, excessive, or unnecessary.

L Policy 5: Conserve energy and resources to the greatest extent possible.

L Policy 6: Help protect the natural environment from the effects of night lighting.

Public Art (PA)

PA Policy 1: Place art to engage people and enhance the open space and architecture. Consider art that interprets a natural or cultural story.

PA Policy 2: Consider site factors such as circulation and adjacent uses when selecting and placing temporary or permanent art.

PA Policy 3: Direct the inclusion of works of art in the public works projects of the City and to place art on municipally owned or rented property. The City's Public Art Master Plan shall guide the development, administration and maintenance of public art in Michigan City.

PA Policy 4: Continue to support collaborative, public-private partnerships in the advancement of the Public Art Master Plan for Michigan City.

PA Policy 5: Allow public art to serve as a vehicle to express the City's history and cultural heritage.

PA Policy 6: Encourage the involvement of artists in the design and development of public spaces by facilitating collaboration between artists, planners, architects, landscape architects, and urban designers whenever possible in the total design process.

PA Policy 7: Increase the awareness of public art and promote opportunities to further advance public art.

PA Policy 8: Support stakeholders and government partners to facilitate public art opportunities. The City will facilitate a range of partnerships in order to realize opportunities for more artworks and programs that are relevant and timely in advancing a cultural and creative City.

PA Policy 9: Works of art must be constructed in a manner that insures its longevity. The making of the art should include the use of correct technical processes and materials which have a relative permanence.

PA Policy 10: Site selection will consider the relationship of materials, colors, and textures and will exclude locations which result in visually poor and conflicting relationships between the object and the site.

Historic Preservation (HP)

Preservation is a key piece of sustainable development. As the City grows, retaining significant and irreplaceable buildings or fabric may be as much a measure of achievement as building the new. Not only is it resource conserving, it retains, refreshes, and infuses the future with the City's historical values, culture, and identity.[1]

HP Policy 1: Stewardship of Place. Foster stewardship of neighborhood, place, and landscape as the City grows and develops.

HP Policy 2: Integrate preservation of historically significant sites, structures, and landscapes into the land planning process, including incorporating preservation goals into the community master plan and reconciling and coordinating preservation policies with local development policies.[2]

HP Policy 3: Support historic preservation programs that are holistic in scope, meaning that they:

- Seek to involve all elements of the community in planning, development, implementation, and feedback.
- Strive to interpret history and cultural heritage in the most inclusive sense possible, reaching across barriers of race, ethnicity, religion, class, or income.
- Seek to protect not only the resources itself, but its context in the larger community by ensuring that preservation of significant structures is not limited to preservation of a building's "skin" without adequate consideration of its other component parts and history.[3]

HP Policy 4: Context Sensitive Design. Use the existing architectural and historical character within an area as a guide for new construction. Support preservation strategies that respect the heritage, context, design and scale of older neighborhoods while recognizing the evolution of those neighborhoods' built form.

HP Policy 5: Economic Value of Preservation. Promote the City's cultural and historic identity as an economic asset.

HP Policy 6: National Register Listing. Support the nomination of eligible historic resources for listing on the National Register of Historic Places.[4]

HP Policy 7: Contextual Historic Landscapes. Retain, protect, and maintain access to open spaces and significant natural features such as streams, mature trees, and hills that are adjacent to and contribute to the integrity of a historic resource.[5]

HP Policy 8: Adaptive Reuse. Encourage adaptive reuse of historic properties to preserve cultural resources and conserve natural resources.

HP Policy 9: Preservation Awareness. Promote awareness and appreciation of Michigan City's cultural heritage and historic resources.[6]

HP Policy 10: Encourage the use of preservation tools to advance housing diversity and market affordability, economic development, environmental sustainability, parks and recreation, and urban design.

1 2017. San Francisco Urban Design Guidelines. San Francisco Planning Department. Available at: www.sfplanning.org
2 1997. APA Policy Guide on Historic and Cultural Resources. Available at: https://www.planning.org/policy/guides/adopted/historic.htm
3 Ibid.
4 Chapter 12, Historic Preservation. 2030 Comprehensive Plan for the City of Raleigh, North Carolina.
5 Ibid.
6 Ibid.

OBJECTIVE 8.2: Promote high-density / intensity, mixed-use, transit oriented, infill development and redevelopment within Downtown.

Transit Oriented Development

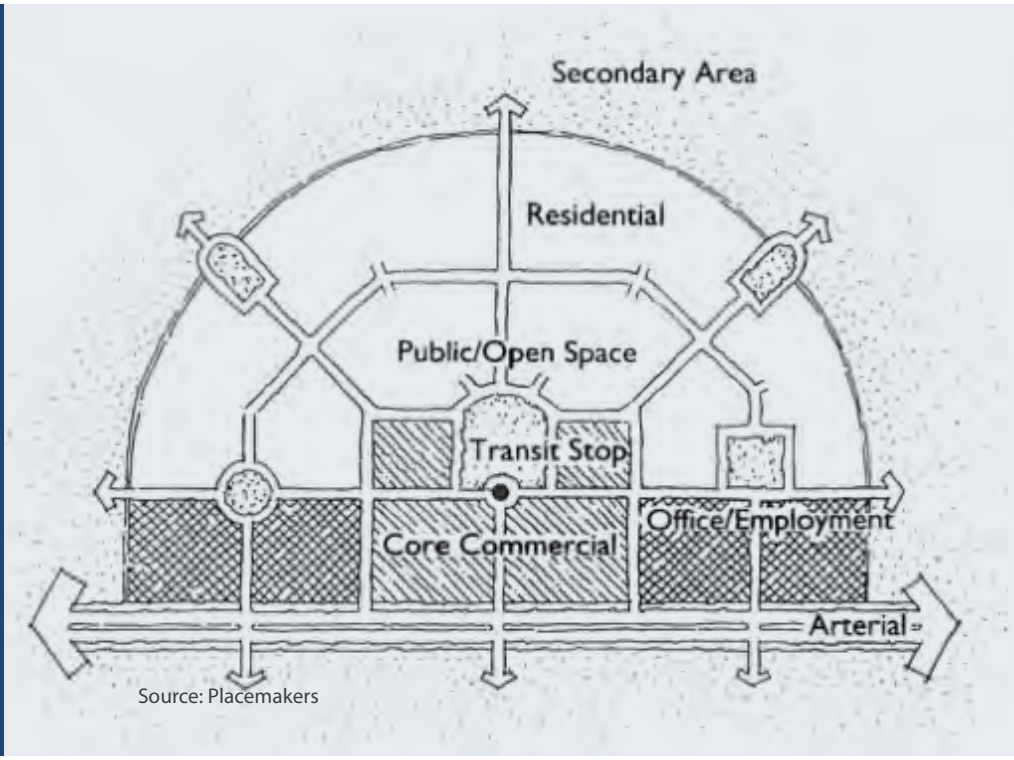
According to Peter Calthorpe, who developed the concept of Transit Oriented Development (TOD), 'the Pedestrian Pocket is defined as a balanced, mixed-use area within a quarter-mile or five minute walking radius of a transit station. The functions within this 50 to 100-acre zone include housing, offices, retail, day care, recreation, and parks. Up to 2,000 units of housing and one million square feet of office space can be located within three blocks of the transit station using typical residential densities and four-story office configurations." The housing types are standard low-rise, high-density forms such as three-story walk-up apartments and two-story townhouses." People have a choice: walk to work or to stores within the Pedestrian Pocket; take the light rail to work or to shop at another station; car pool on a dedicated right-of-way; drive on crowded freeways."[1]

1 Kelbaugh, Doug, ed. 1989. "The Pedestrian Pocket: A Post-Industrial Suburb," in *The Pedestrian Pocket Book. A New Suburban Design Strategy*. Princeton Architectural Press

Transit Oriented Development (TOD), by definition, is the integration of transportation with surrounding land uses. This is accomplished through urban design, zoning, community development, and supportive infrastructure investments. There is no defined model for TOD in terms of the mix of land uses, density, or building types but there are patterns and successful examples to learn from. See TFC Table 23,*TOD Place Types,* for examples of TODs that are similar in scale to Michigan City. In the simplest of terms,TODs consist of compact, moderately to highly dense, mixed-use areas within one-half mile of a transit stop or station. TODs are also characterized by streetscapes and an urban form oriented towards pedestrians to facilitate walkability both in and around the station area. While some communities may choose to build big, TOD approaches do not require substantial new development. TODs often include investments such as sidewalk and bike commuter improvements, parks, affordable housing preservation, and commercial revitalization. At the center of each TOD is the transit station. This document identifies a transit station as being a station serving a premium type or types of transit (commuter rail, light rail or bus rapid transit) or a station that functions as a local bus hub. The transit stations are the focal point of connectivity and are the catalyst for adjacent, mixed-use development. The development that extends outward from the

TRANSIT ORIENTED DEVELOPMENT or TOD is typically defined as more compact development within easy walking distance of transit stations (typically a half mile) that contains a mix of uses such as housing, jobs, shops, restaurants and entertainment.

Source: Reconnecting America



Source: Placemakers

transit station can be broken down into three primary categories:

- Transit core
- Transit neighborhood
- Transit supportive area

Transit Oriented Development (TOD), with its direct accessibility to transit services, has been shown to bring real benefits to the municipalities that embrace it. TOD centered around a transit hub provides a planned area extending as much as one mile around the station.

Transit accessible communities exhibit higher property tax returns per unit area, and stimulate greater economic activity than traditional single family neighborhoods, in conjunction with urban proximity. TOD has advantages for younger persons and families as well. Millennials are driving less than older generations, while walking, biking and using transit at higher rates. A National Association of Realtors survey in 2014 found that Millennials prefer walkable communities to driving. 48 percent of survey respondents opted for smaller yards within easy walking distance of the community's amenities, as opposed to homes with large yards where they would have to drive to access amenities.[2]

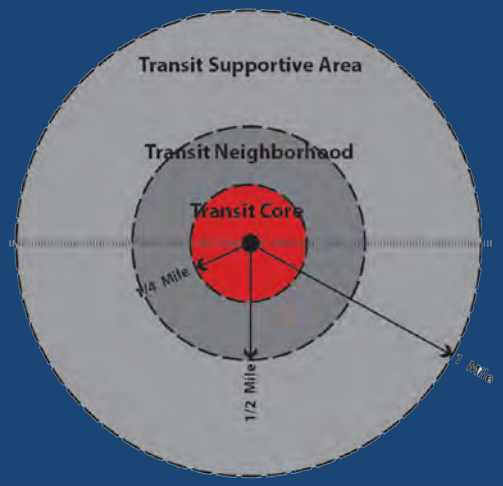
STRATEGY 8.2.1: ***Use Urban Dimensions in Urban Places.***

Conventional zoning codes are typically replete with various dimensional standards that govern a range of topics, including minimum lot sizes and widths, floor area ratios, setbacks, and building heights. These standards are generally geared to produce low-intensity, low-rise residential and commercial development. While this development form and pattern may be appropriate in some areas and under some circumstances (e.g., around environmentally sensitive areas), these standards often have unintentionally stifled more compact development in many cities and towns, preventing the development of attractive, lively, and cost-efficient

2 From Northwest Indiana Regional Development Authority Comprehensive Strategic Plan, 2016 Update

The development that extends outward from the transit station can be broken down into three primary categories:

- Transit core
- Transit neighborhood
- Transit supportive area



Principles of Station Area Planning

- Maximize ridership with transit oriented development
- Generate meaningful community involvement
- Design streets for all users
- Create opportunities for affordable and accessible living
- Make great public spaces
- Manage parking effectively
- Capture of the value of transit
- Maximize neighborhood and station connectivity
- Implement the plan and evaluate success

Source: Reconnecting America

Image Source: The SubwayNut, http://subwaynut.com/chicago/south_shore_line/11th_st/

TFC Table 23, TOD Place Types		
Typologies that apply to Michigan City 11th Street Station	**Urban Neighborhood** Urban neighborhoods have moderate to high densities and transit is less of a focal point of activity than in center place types. Intensities are usually spread evenly throughout the half-mile radius with an increase near the station.	**Transit Neighborhood** Stations in transit neighborhoods are less a focus of activity than in the previous place types and usually do not have enough density to support much local serving retail. They are typically served by rail or multiple bus lines at one location.
What are the characteristics of the station area?	Predominantly residential district with good access to regional and subregional centers	Predominantly residential district organized around transit station
What is the transit mode?	Heavy rail, LRT/streetcar, BRT, commuter rail, local bus	LRT/streetcar, BRT, commuter rail, local bus
What is the peak frequency of transit?	5-15 minutes	15-30 minutes
What is the land use mix and density?	Moderate- to high-density residential uses with supporting commercial and employment uses	Low- to moderate-density residential uses with supporting commercial and employment uses
What are the retail characteristics?	Primarily local-serving retail opportunity; need for some community-serving retail	Primarily local-serving retail opportunity
What are the major planning and development challenges?	Expanding local-serving retail opportunities and increasing high-density housing	Integrating moderate density housing and supporting local-serving retail
Examples	Fruitvale in Oakland, Greenwich Village in New York City, the Pearl District in Portland, University City in Philadelphia	Ohlone-Chynoweth outside San Jose; Plano, Texas; Barrio Logan in San Diego; Capitol Hill in Washington D.C.
Development Guidelines for TOD Place Types		
Housing Mix (New Development)	Mid-rise, low-rise, townhomes	Low-rise, townhomes, small lot single family, and some mid-rise
Station Area Total Units Target	2,500-10,000	1,500-4,000
Net Project Density (New Housing)	40-100 du/acre	20-50 du/acre
Station Area Total Jobs Target	N/A	N/A
Minimum FAR (New Employment Development)	1.0 FAR	1.0 FAR

Source: Station Area Planning: How to make great Transit Oriented Places Manual. Reconnecting America and the Center for Transit Oriented Development. This manual is intended to help with simplifying the complex decisions that surround planning for TOD projects and station areas by providing details about the scales of development likely to occur in different places, as well as station area planning principles and TOD plan checklists. The manual begins with a discussion of seven "TOD place types," followed by a self-diagnostic questionnaire to help identify a particular station area place type in a TOD typology we have applied and refined in several regions around the U.S. The following Place Types, Urban Neighborhood and Transit Neighborhood apply to the scale and size the transit and the city. See manual online at http://reconnectingamerica.org/assets/Uploads/tod202.pdf.

Eastside Transit Village, Plano, Texas. Source: North Central Texas Council of Governments

Pearl District, Portland, Oregon. Source: Smart Growth Online

Fruitvale Station, Oakland, California. Source: Next City

places. Recalibrating dimensional standards can help accommodate and promote a more compact development pattern and create more attractive urban environments. Changes in dimensional standards can also improve connectivity enhanced site planning and design. Additional benefits include:

– Higher density development that supports transit and mixed-use activity centers;
– A more attractive public realm that is designed to balance pedestrians and bicyclists with automobiles;
– Cost-efficient provision of utilities infrastructure and services.

ACTIONS AND INITIATIVES

1. Tailor dimensional standards in the City's Zoning Ordinance and Subdivision Regulations to promote more compact development. Consider changing minimum standards to maximums.
    - For residential development, relevant changes could include lot width and area changes, smaller yards, increased lot or building coverage for smaller lots, increased height, and increased density.
    - For commercial or mixed-use development, relevant changes could include increased height, smaller yards and open space, increased lot or building coverage, and increased floor area ratios (FAR).
2. Modify codes for commercial districts to allow residential development, especially over first-floor retail.
3. Eliminate landscape buffers in the commercial area; there is no need to buffer like uses, such as two office buildings, or a restaurant and a store, from each other.
4. Create incentives to provide multiple housing types in existing districts through dimensional standards (e.g., enable small lots and limited buffer yards between homes).
5. Establish or reduce block lengths or perimeters to produce better connections and increase walkability.
6. Adopt context-based or neighborhood-based dimensional standards that replicate existing, appealing, compact neighborhood patterns (e.g., narrow street width, sidewalks wide enough for safe and comfortable walking).[1]

1 November 2009. Nelson, Kevin, AICP. Essential Smart Growth Fixes for Urban and Suburban Zoning Codes. EPA, (pp. 7-8).

STRATEGY 8.2.2: *Increase redevelopment densities and intensities in transit oriented development districts (TODs).*

Increasing the average density of infill, redevelopment, and greenfield projects is crucial to improving the quality of life in the community. Higher density is important to protecting water quality, open space, and supporting mobility options like public transit, walking, and biking. Increased density creates the customer base needed for retail, public transit, and amenities that residents want. Communities need to address density in a comprehensive manner rather than project by project. As outlined within this Comprehensive Plan and *Future Land Use Map* there are areas within Michigan City that can support higher density development. These areas would support mixed-use development that will allow walking and biking to shops and services, and can be conveniently served by bus or rail transit, which reduces driving, thus minimizing parking requirements. These policies can be implemented through new mixed-use or transit oriented development (TOD) districts, changes in zoning designations, or modifying zoning to allow greater density in existing districts. Other strategies include creating new compatibility standards and design guidelines to improve transitions between higher density development and low-density neighborhoods.

ACTIONS AND INITIATIVES

1. Tailor development standards (e.g., height limits and floor to area ratio [FAR], parking requirements, and open space and landscaping regulations) to accommodate denser developments. Urban-style projects should not be evaluated based on low-density development standards.
2. Establish minimum densities or intensities in community or regional mixed-use centers and transit oriented developments.
3. Set parking maximums rather than minimums to discourage too much parking supply for a development. This will enable higher density development, as parking often limits a project's overall density.
4. Incent and regulate structured parking.
5. Designate a building envelope rather than specifying density. This allows flexibility in the number of units, which creates greater density while controlling variables such as height and setbacks.[1]

STRATEGY 8.2.3: *Ensure the implementation of equitable transit oriented development (TOD).*

Equitable TOD offers a mix of housing choices affordable to people with a range of incomes. Providing affordable housing near transit can significantly lower combined housing and transportation costs, which can typically claim 55-60 percent of the household incomes of working families in major metropolitan areas.[2]

Because TOD residents are more likely to use transit, municipalities can reduce or eliminate minimum parking standards in TODs, which can decrease the costs of development and therefore the costs of building affordable housing. Density bonuses can accomplish similar objectives and work well near transit stations, where communities typically want more development.

Municipalities can remove barriers to equitable TOD and reduce costs by waiving or reducing impact fees, expediting permitting approvals, or donating publicly owned land. Additionally, collaboration among local planners, metropolitan planning organizations, community development corporations, and developers can increase the likelihood of achieving development that meets community goals.

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1 November 2009. Nelson, Kevin, AICP. *Essential Smart Growth Fixes for Urban and Suburban Zoning Codes*. EPA, (pp. 7-8).

2 Center for Housing Policy, 2006. *A Heavy Load: The Combined Housing and Transportation Burdens of Working Families*. http://www.reconnectingamerica.org/assets/Uploads/pubheavyload1006.pdf Accessed January 2018.

Source: NWI Times, Old South Shore Train Station remodeling planned, May 2013.

11th Street Transit Block

During the development of this Comprehensive Plan, and in anticipation to the double-tracking of the South Shore Commuter Rail line, a supplemental plan was developed to evaluate the redevelopment of the 11th Street Station block, and is entitled, *A Multi-modal Hub for Lake Michigan's South Shore* (February 07, 2018), hereafter referred to as the *11th Street Station Block Plan*. The core objectives of the plan include:

- understanding the full development potential of the Site from a design perspective informed by market analysis;
- testing that perceived potential with leading, best practice developers engaged in highly relevant endeavors and adjust the development program accordingly;
- stimulating demand for the Site: (1) by bringing attention to Michigan City, showcasing its assets (local, regional and national) and its high capacity, proactive leadership; and (2) by bringing developers into the process (in a meaningful, but buffered way);
- maximizing development impact for Michigan City while reducing the risk (by testing and validating development programs in advance).[1]

Preliminary market analysis confirms that the redevelopment of the 11th Street Station can be catalytic in stimulating significant growth and redevelopment throughout the Downtown area. As outlined in the plan, market study findings confirm that the 11th Street Station transit block can be:

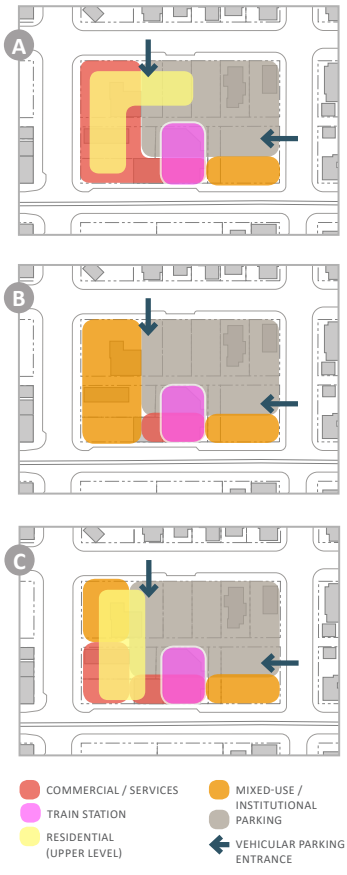
- **A Hub for the City and the Region.** The existing urban street grid that composes Downtown, combined with, good vehicular access from all directions and proximity to existing destinations (Lakefront, Arts District, Casino, Outlet Mall) position the Transit Block to become a hub for Michigan City and Lake Michigan's South Shore.
- **High Value, Centrally Located.** Michigan City's affordability and central location within the Michiana corridor will be a draw for residents, students, visitors and employers, alike.
- **The Transit Block represents a reduced risk / high creativity opportunity for the right developer.** The site will be offered with rational, pre-approved guidelines, reducing development risk yet fostering a cohesive mixed-use development with a variety of complementary components.
- **A Catalyst for Downtown.** The successful development of the Transit Block will help set the table and the standards for future residential and commercial development on parcels within close proximity to the new multi-model commuter hub.[2]

The plan presents an analysis of three development programs, all of which include a 63,775 square feet building footprint which would house a 500 stall structured parking facility (an expansion of NICTD's 287 parking space requirement); and a 2,000-2,500 square feet station facility (NICTD requirement). Additionally, there would be two surface parking lots (108 spaces) along 11th Street, between Pine Street and Cedar Street.

1 018, Neighborhood Capital Institute. A Multi-modal Hub for Lake Michigan's South Shore. Page 2.

2 2018, Neighborhood Capital Institute. *A Multi-modal Hub for Lake Michigan's South Shore*. Page 13.

TFC Figure 25, 11th Street Transit Block Program Land-Use Strategies



(A) Residential / Mixed-Use / Commuter Parking

(B) Institutional / Education / Mixed-Use / Co-working/ Commuter Parking

(C) Blended Mix of Live/ Work / Mixed-Use / Commuter Parking

Option 1: Best Residential Site, includes (refer to TFC Figure 26, *Transit-enhanced Development Site, Option 1*)

- a seven-level shared residential tower over the parking garage with platform/grade level retail, office, and service uses with 170 units (850 square feet average);
- a four level parking podium with one level below grade;
- South facing, upper level amenity deck;
- 732 parking spaces (500 NICTD spaces plus 170 residential spaces, plus 46 commercial spaces).

TFC Figure 26, Transit-Enhanced Development Site Option 1

Option 2: **Institutional Hub**, includes (refer to TFC Figure 27, *Transit-enhanced Development Site, Option 2*)

- four levels of Office / Classroom / Co-working space along Franklin Street (30,000-45,000 gross square feet);
- grade-level retail, office and service uses (13,000 gross square feet);
- four level parking podium w/ one level below grade;
- 678 parking spaces (500 NICTD spaces plus 178 miscellaneous commercial spaces).

TFC Figure 27, Transit-Enhanced Development Site Option 2

Option 3: **Live, Work, Play, Learn**, includes (refer to TFC Figure 28, *Transit-enhanced Development Site, Option 3*)

- four levels of office / classroom space along Franklin Street (30,000-45,000 gross square feet);
- grade-level retail, office, and service uses (13,000 gross square feet);
- six levels of residential above parking deck (150 units);
- four level parking podium w/ one level below grade;
- 678 parking spaces (500 NICTD spaces plus 150 residential spaces, plus 28 miscellaneous commercial spaces).

TFC Figure 28, Transit-Enhanced Development Site Option 3

At the time of drafting this Comprehensive Plan the decision had not been made regarding which alternative to pursue. As depicted on TFC Map 18, *Downtown Improvements* (page 1.189), additional development considerations that have emanated from the *11th Street Station Block Plan* include:

– A multi-modal transit facility within the block south of 11th Street and west of Franklin Street. This terminal would be utilized by:
  1. Michigan City Transit and Downtown Trolley;
  2. Transit Triangle Bus Service; which provides bus service from Michigan City to Purdue Northwest University; from La Porte to Purdue Northwest; and from Michigan City to La Porte.
  3. Coach USA; which currently provides bus service from Marquette Mall to Chicago Midway International Airport, O'Hare International Airport, and South Bend International Airport.
  4. Casino Shuttle Bus service; which provides free transportation to and from the 11th Street Station.
– The potential for a hotel to be located on the southeast corner of the Lighthouse Place Premium Outlet Mall, as depicted on TFC Map 18, *Downtown Improvements*.

STRATEGY 8.2.4: *Develop a Transit Oriented Development (TOD) Plan focused on the 11th Street Station.*

Prepare a *TOD Plan* for a one-quarter to one-half mile radius off of the 11th Street Station. Evaluate land uses, neighborhood enhancements, potential redevelopment sites, pedestrian and vehicular circulation enhancements, and vehicular parking plans.

ACTIONS AND INITIATIVES:

1. Delineate the one-quarter mile and one-half mile study area (refer to TFC Figure 29, *Potential TOD Study Area*).
2. Overlay the potential Transit Development District (TDD) area to evaluate additional financial opportunities.
3. Prepare a scope of work and commission TOD plan assignment.

STRATEGY 8.2.5: *Further investigate the potential to utilize the block west of Franklin Street and south of 11th Street to develop a mutli-modal transit facility.*

As previously described, this block is potentially an excellent site to utilize for a multi-modal transit terminal.

ACTIONS AND INITIATIVES:

1. Partner with Michigan City Transit, Coach USA, and the Blue Chip Casino to advance a potential transit terminal development program.

STRATEGY 8.2.6: *Advance the development of the 11th Street Station block.*

ACTIONS AND INITIATIVES:

1. Determine the preferred development program option.
2. Prepare a development package and formulate public-private partnership options.
3. Actively pursue the potential funding sources outlined in the *11th Street Station Block Plan*.

STRATEGY 8.2.7: *Develop a public trolley service Downtown.*

As summarized in *The Existing City* report, *Proposed Michigan City Trolley Service* (page A.104), expand the Michigan City Transit (MCT) program to include a full-time trolley service with convenient stops from the 11th Street Station to Downtown's principal amenities (refer to TEC Map 22, *Proposed Trolley Service*; and TFC Map 18, *Downtown Improvements*).

ACTIONS AND INITIATIVES:

1. Work with the Michigan City Transit Department to determine the likely costs and confirm trolley stops.
2. Develop public-private partnerships to secure capital funding for trolley.

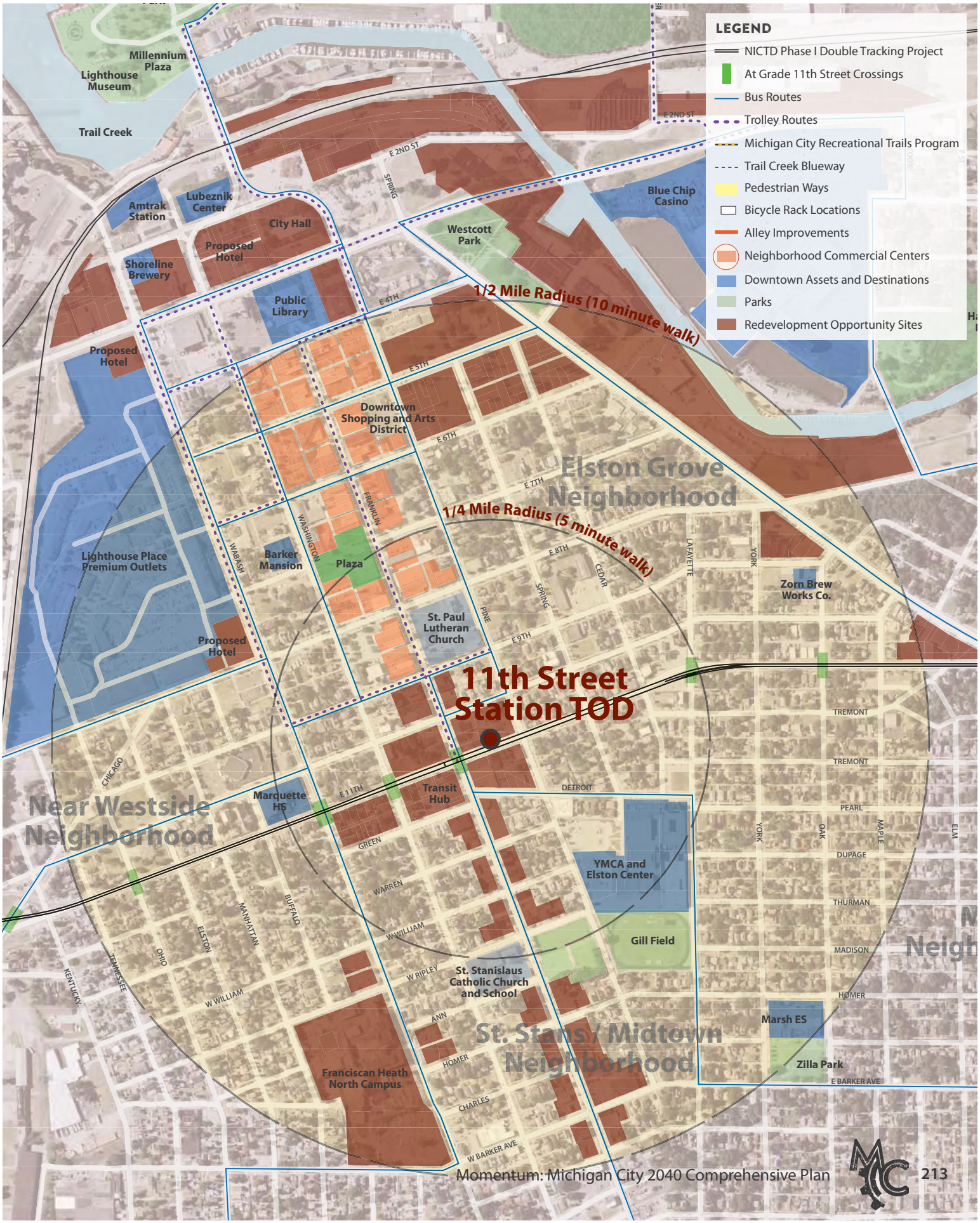
STRATEGY 8.2.8: *Continue to seek partnerships through which to develop a hotel on the former Police Station site.*

The City is interested in developing a hotel complex on the former Police Station site and has advertised an RFP to solicit and gauge interest.

ACTIONS AND INITIATIVES:

1. As an interim measure, redevelop the site to reflect the typical dune character and flora of the Lake Michigan shoreline environment. Develop a large dune and plant native grasses, trees and other vegetation around its perimeter.

TFC Figure 29, Potential TOD Study Area



STRATEGY 8.2.9: ***Prepare an adaptive reuse study for the Franciscan Health Michigan City North Campus facility and site (TFC Figure 30, Franciscan North Campus in Midtown Site Location).***

It is the intention of the Franciscan Health Administration to use the 14.1 acre, Franciscan Health Michigan City North Campus adaptive reuse program to advance the City's redevelopment objectives for Midtown and the transit oriented development area around the 11th Street Station.

ACTIONS AND INITIATIVES:

1. Work with the Franciscan Health Administration to determine what programmatic functions will remain within the existing buildings, and how much available space will remain for other uses.
2. Develop an adaptive reuse program, schedule and budget for the campus, including existing buildings, parking structure, and surface parking lots.

STRATEGY 8.2.10: ***Develop EV Charging Stations Downtown and at key entrances into Michigan City, including U.S. Highways 421, 20, and 12.***

ACTIONS AND INITIATIVES:

1. Secure partnerships with EV Charging Station developers and determine optimal locations for charging stations, including Downtown, Washington Park, and at strategic locations along U.S. Highways 421, 20, and 12.

TFC Figure 30, Franciscan North Campus in Midtown Site Location

EV
ELECTRIC
VEHICLE
ONLY

OBJECTIVE 8.3: Manage and administer downtown as urban commercial district.

STRATEGY 8.3.1: *Continue to partner with the Michigan City Mainstreet Association (MCMA) to sponsor community events Downtown.*

From the Shelf Ice Festival to Taste Michigan City to Swale Music Festival to First Fridays, the Michigan City Mainstreet Association hosts / sponsors many significant events Downtown. These events are opportunities to draw people together Downtown, which supports local businesses. As the living room of the community, Downtown should remain the place to hold public events and celebrations.

ACTIONS AND INITIATIVES

1. Consider additional cultural and arts-related events that can happen Downtown.
2. Strengthen events advertising. Aggressively promote Downtown events utilizing social media platforms, membership databases from local and regional Chambers of Commerce. Consider promotional advertising campaigns focused specifically at the Indianapolis audience.
3. Utilizing available capital and other resources, and in partnership with local SCORE mentors (refer to: www.score.org), develop small business seminars for Downtown business owners.

STRATEGY 8.3.2: *Provide capital assistance to the Mainstreet Association.*

While the MCMA has been very successful in sponsoring and facilitating local and regional events Downtown, it remains a volunteer-supported organization, and therefore is limited in its capacity to do more. The Laporte County Visitor's Bureau, the Michigan City Area Chamber of Commerce, and the City's Redevelopment Commission and Economic Development Corporation should consider providing the MCMA capital assistance to the MCMA so the organization could expand administratively and hire an executive director; and as a result, expand its capacity to further support and promote Downtown business owners, expand the arts program, sponsor more events, and develop the tools required to manage Downtown as an urban commercial district.

STRATEGY 8.3.3: *Work with business owners to relocate businesses to more appropriate areas of town.*

There are several businesses located in the Downtown area, which are not necessarily best suited to stimulate synergies among businesses, or promote the Downtown arts district. These businesses may be better located, for example, in a more auto-oriented environment; perhaps further south on S. Franklin Street / U.S. Highway 421.

ACTIONS AND INITIATIVES

1. Develop a database of all the businesses within the Downtown area, north of 10th Street.
2. Using Beacon, identify businesses, the owners of which do not own the property where the business is located.
3. Approach the business owner to determine space and programmatic needs, as well as clientele.
4. Inventory properties that fit the business location criteria.
5. Consider possible business relocation assistance.

Eight Principles of Main Street

While the Main Street Four-Point Approach provides the format for successful revitalization, implementing it is based on eight principles that pertain to all areas of the revitalization effort.

6. **COMPREHENSIVE**. Downtown revitalization is a complex process that cannot be accomplished through a single project. For successful, long-term revitalization, a comprehensive approach must be used.
7. **INCREMENTAL**. Small projects and simple activities lead to a more sophisticated understanding of the revitalization process and help to develop skills so that more complex problems can be addressed and more ambitious projects undertaken.
8. **SELF-HELP**. Local leaders must have the desire and will to make the project successful. The NMSC provides direction, ideas and training, but continued and long-term success depends upon the involvement and commitment of the community.
9. **PUBLIC-PRIVATE PARTNERSHIP**. Both the public and private sectors have a vital interest in the economic health and physical viability of downtown. Each sector has a role to play, and each must understand the other's strengths and limitations so that an effective partnership can be forged.
10. **IDENTIFYING AND CAPITALIZING ON EXISTING ASSETS**. Business districts must capitalize on the assets that make them unique. Every district has unique qualities, like distinctive buildings and scale, that give people a sense of place. These local assets must serve as the foundation for all aspects of the revitalization program.
11. **QUALITY**. Quality must be emphasized in every aspect of the revitalization program. This applies equally to each element of the program, from storefront design to promotional campaigns to educational programs.
12. **CHANGE**. Changes in attitude and practice are necessary to improve current economic conditions. Public support for change will build as the program grows.
13. **IMPLEMENTATION ORIENTED**. Activity creates confidence in the program and even greater levels of participation. Frequent, visible changes are a reminder that the revitalization effort is underway. Small projects at the beginning pave the way for larger activities as the program matures.

What is Michigan City Mainstreet Association?

MICHIGAN CITY MAINSTREET ASSOCIATION

Michigan City Mainstreet Association (MCMA) is a 501(c)(4), non-profit, social welfare organization dedicated to improving the quality of Michigan City's Uptown Arts District (UAD) (shown at right in TFC Figure 31) located in the heart of the City's downtown. The MCMA is the only non-profit organization in Michigan City that is a registered Indiana Mainstreet Program, and through this designation, we strive to create a city center that is a great place to live, work, play, and invest.

PERCEPTION OF DOWNTOWN

The MCMA strives to improve not only the quality of the UAD, but also the perception of Michigan City through promotional efforts focused on the downtown. To that same effect, we host many unique, exciting, annual events throughout the year.

ECONOMY OF DOWNTOWN

The MCMA encourages diversity of the economic base to create a healthy, complete Downtown economy that will stand on its own, but also will create an environment that will attract new, needed businesses to the city center. We encourage and coordinate local businesses to work together to self-promote and we highlight exciting and remarkable achievements of businesses in the UAD and the various service options that are available.

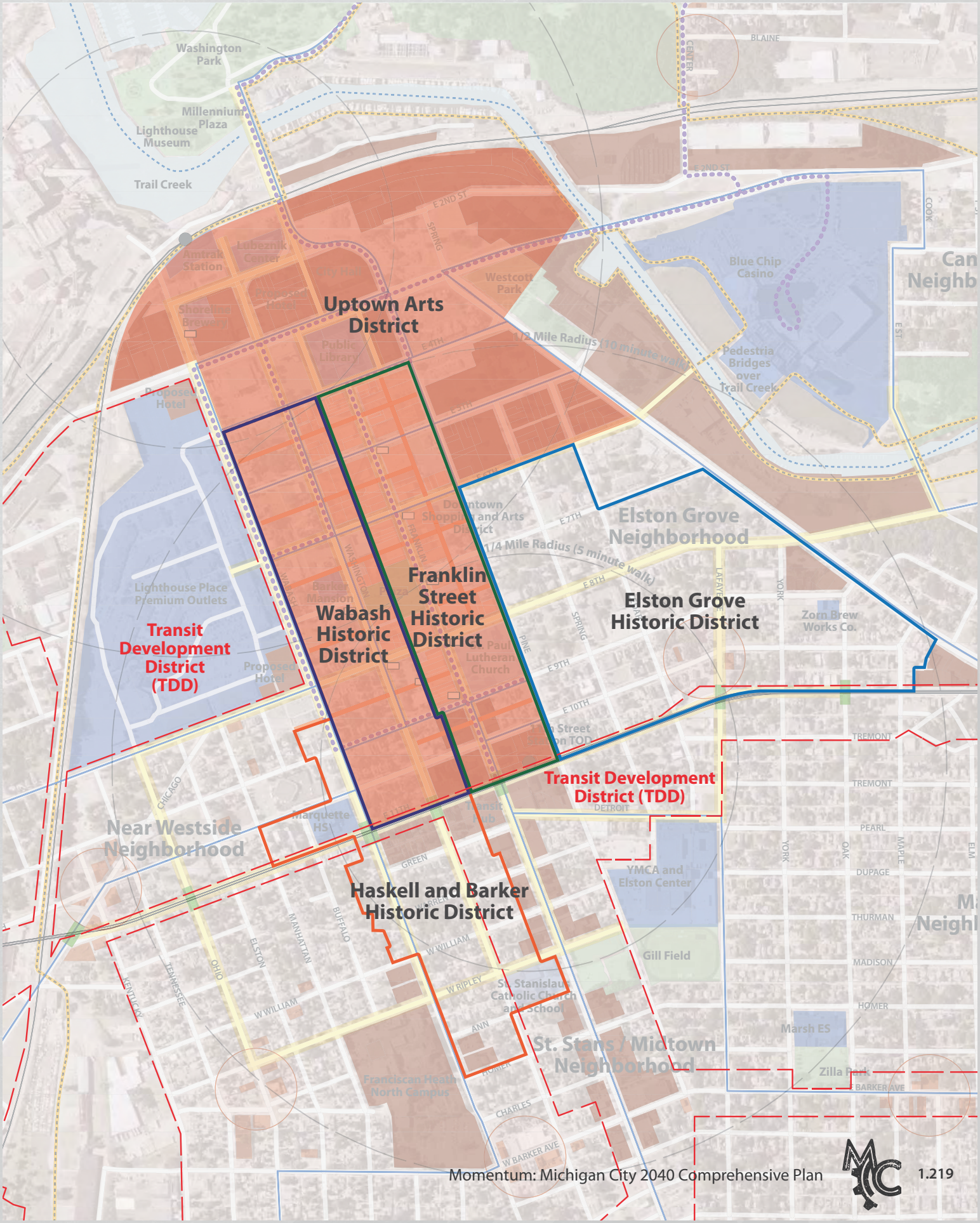
DESIGN OF DOWNTOWN

The MCMA is focused on improving the appearance and functionality of the Downtown as well. The MCMA focuses on the design of the Downtown and petitions responsible governmental bodies to create needed improvements and additions such as lighting, signage, wayfinding, seating, sidewalks, streets, planters, properties and building facades, parks, and more. The MCMA does this by paying special attention to ongoing and future projects in the area and recommending design elements to governmental bodies responsible for capital expenditures on public improvements.

VOLUNTEERS

The MCMA is a volunteer organization. The MCMA Board of Directors is comprised of 12 volunteers. All committees are run with volunteers. All profits, by law, go back into MCMA events and efforts. The MCMA is completely self-sustaining, and it receives no funding from other entities or organizations. The organization relies on profits from events and from the generous financial support from our members, sponsors, and supporters.

TFC Figure 31, Uptown Arts Districts, Historic Districts, and Transit Development District.



Industrial Arts Opportunity

The Barker-Pullman property could potentially be a redevelopment opportunity for creative businesses, public galleries, unique dining and entertainment venues. The case studies on the following pages demonstrate how other cities have capitalized on vacant warehouses and leftover space to create major attractions.

WYNWOOD WALLS - MIAMI, FL

Source: Wynwood Walls – 2016 Global Awards for Excellence Winner, uli.org

The Wynwood Walls was conceived by the renowned community revitalizer and placemaker, the late Tony Goldman in 2009. He was looking for something big to transform the warehouse district of Wynwood, and he arrived at a simple idea: "Wynwood's large stock of warehouse buildings, all with no windows, would be my giant canvases to bring to them the greatest street art ever seen in one place." Starting with the 25th–26th Street complex of six separate buildings, his goal was to create a center where people could gravitate to and explore, and to develop the area's pedestrian potential.

SAWYER YARDS - HOUSTON, TX

Source: Sawyer Yards www.sawyeryards.com

Sawyer Yards is a creative community thriving in the heart of Houston's historic First Ward, surrounded by an active rail yard where 20+ trains change the landscape each day. Against this backdrop, industrial warehouses transformed into built- for-purpose studios are now home to one of the largest working artist communities in the country. Just three minutes from Houston's downtown business district, Sawyer Yards is defined by eight city blocks of industrial warehouses, revived and reimagined as an anchor for the city's vibrant art scene. There are three main areas of Sawyer Yards, the Main Yard with offices, art studios, vacant rice silos, a climbing gym, shops and two breweries; the West Yard includes housing and a park; and the North Yard is made up of Spring and Sabine Street art studios.

THE CRUCIBLE AND FIRST FRIDAYS - OAKLAND, CA

The Crucible first opened its doors on January 15th, 1999, in a rented 6,000 square foot warehouse in West Berkeley. Sculptor Michael Sturtz, leading a small, dedicated cohort, shared his vision of a new kind of industrial arts educational experience that offered anyone and everyone the opportunity to be creative. A small grant of $1,750 inspired them to start off, and The Crucible began its first session with 11 classes, seven of them taught by Sturtz himself. Since then, with the generous support of faculty, donors, volunteers, students, staff, members, and the local community, The Crucible has grown to become the largest nonprofit industrial arts education facility in the United States. Together, we have brought the positive creative force of art into our community, each year introducing more people to the rewards of creating with their hands and imagination. (Source: The Crucilble Workshop)

Oakland Art Murmur (OAM) began as a collaboration among eight art spaces to promote the arts region and gain a wider audience for their individual visual art programs. The OAM led to the creation of the First Friday Art Gallery Walk in 2006, when all participating spaces held concurrent receptions; this is now a hybrid event with 40 participating galleries and mixed-use arts spaces, attracting 20,000 visitors to the event officially called "Oakland Art Murmur First Friday Art Gallery Walk". (Source: https://oaklandartmurmur.org/)

Source: kidsandart.org, The Crucible Workshop

Source: planning.org, Great Places in America, Uptown: Oakland, CA

Policies

Urban Design (UD)

The City of Michigan City shall require that new development - including commercial, office, industrial, and residential development - is of high quality and reflects the City's desire to create a high quality, attractive, functional, and efficient built environment.

UD Policy 1: Respect and exhibit natural systems and features. Site, orient and sculpt buildings to reinforce and accentuate views, built forms, and natural topography.

- Use site design to frame visual connections to natural features such as waterways and hilltops.

UD Policy 2: Recognize and respond to urban patterns. Design sites to improve or augment existing land use, open space, and building patterns.

UD Policy 3: Harmonize relationships between buildings, streets, and open spaces.

- Relate building scale and massing to the size and scale of existing buildings.
- Modulate building massing vertically and/ or horizontally to a scale compatible to its context.
- Use street widths to help establish the general massing, scale, and proportions of the building.

UD Policy 4: Recognize and enhance unique conditions. Seize design opportunities to celebrate and reinforce irregularities, alignments, and juxtapositions of the urban fabric as points of identity.

- Consider celebrating corner buildings with traditional or reinterpreted treatments such towers, belvederes, cupolas, awnings, marquees, gables, art and prominent entries.

UD Policy 5: Create, protect, and support view corridors.

UD Policy 6: Integrate common open space and landscape with architecture. Provide a sequence of spaces that transition between public and private realms.

- Complement building architecture with compatible landscape architecture in concept, form, and materials.
- Use trees, planting, and paving to develop defined human-scaled spaces.

UD Policy 7: Express a clear organizing architectural idea. Make architectural concepts clear, compelling, and compatible with a site's context.

- Harmonize building designs with neighboring scale and materials.
- Develop details and select materials that are consistent with the overall architectural strategy and neighborhood compatibility.

UD Policy 8: Render building facades with texture and depth. Avoid large expanses of undifferentiated blank surfaces. Respond to the ornamental scale of adjacent buildings. Historic features may be reinterpreted, but should be identifiable as from their own era. Avoid cursory historicism and facade elements that mimic neighbors.

UD Policy 9: Coordinate building elements. Integrate art, signage, canopies, street furnishings, lighting, paving, planting, building materials, entries, and windows and other finer-grained architectural elements provide additional means of animating and harmonizing a building project with its environment.

UD Policy 10: Design public open spaces to connect with and complement the streetscape. Open spaces provide relief and rhythm to the urban experience when thoughtfully incorporated with neighboring uses.

- Locate open spaces so they are physically and visually accessible from the sidewalk.
- Define larger open spaces with smaller spaces to encourage different uses or activities.
- Program public space to support adjacent interior uses.
- Orient and design publicly accessible open space to maximize physical comfort. Consider solar orientation, exposure, shading, shadowing, noise, and wind.

Policies

Central Business District (CBD)

CBD Policy 1: Continue to support the revitalization and redevelopment of Michigan City's Downtown.

CBD Policy 2: Ensure that Downtown is the preferred location for major community facilities.

CBD Policy 3: Maintain a well-defined, compact urban form with Downtown as the "heart of the City;" with densities and mixtures of uses that encourage walking and transit use, and more efficient use of vehicles balanced with other transportation modes.

CBD Policy 4: Downtown is attractive and efficient, the heart of finance, commerce, and trade, and economically competitive with new planned commercial centers.

CBD Policy 5: Consider increases in FAR or height as compensation for contributions to public facilities (open space, public art/sculpture, fountains). Infill development within the CBD should have a minimum floor to area ratio (FAR) of 4.0.

CBD Policy 6: Buildings should be oriented to face the street and have entrances and windows that provide natural surveillance of the street.

CBD Policy 7: Uninterrupted expanses of parking should be avoided. Parking areas should be broken into smaller blocks divided by landscaping and pedestrian walkways. To the extent possible, parking areas should be distributed between the rear and sides of buildings, rather than in front of buildings. As infill development occurs, structured parking should be encouraged and incented.

CBD Policy 8: Encourage accessory parking structures for all uses to be architecturally compatible with the primary structure by using similar façade treatments and materials.[1]

CBD Policy 9: Downtown reflects the new living pattern of an increasingly urban society and consequently must provide areas in which people can socialize, recreate, and enjoy the living, working and shopping experience that Downtown provides. Encourage residential uses as component to all redevelopment proposals for the Downtown area. Prohibit uses, activities and physical building characteristics that detract from downtown's residential opportunities.

CBD Policy 10: Encourage buildings arrangements that frame the public realm, with building frontage that follows streets minimal setbacks. Building massing and articulation provides for interesting spaces that can function as pocket parks and public gathering places.

CBD Policy 11: Downtown building facades possess pedestrian-scale elements, including overhangs, awnings and canopies, which reflect the style and character of the structure, and enable shopping and storefront gazing to continue during inclement weather.

CBD Policy 12: Encourage mix of uses vertically in same building.

CBD Policy 13: Ensure that streetscape furnishings, elements and signage unify, and provide continuity to the Downtown Central Business District.

1 Clark County, Nevada Comprehensive Plan Urban Land Use Policies. Clark County Department of Comprehensive Planning (Available at: http://www.clarkcountynv.gov/comprehensive-planning/land-use/Documents/Consolidated_Urban_Land-Use_Policies.pdf)

Focus Area 6:

Housing and Neighborhoods

Guiding Principles

Housing Principle 1: Housing Equity. Support initiatives to develop fair and equitable, affordable housing within neighborhoods throughout the City.

Housing Principle 2: Infill Development. Encourage residential infill development and redevelopment that is compatible with the scale and character of existing neighborhoods.

Housing Principle 3: Housing Choice. Include a variety of housing types and sizes to support the needs of existing and future residents, during every stage of life. This includes, but is not limited to, youth, college students, single professionals, families, empty nesters, seniors, and those of varying economic ability. Ensure there are options for convenient (located in proximity to employment centers), affordable and dignified places to live.

Housing Principle 4: Affordable Housing. Support initiatives to develop new affordable housing within neighborhoods throughout the City.

Housing Principle 5: Ensure Compatibility. Develop multi-family housing at a density and scale that is compatible with surrounding neighborhoods, and does not over-burden existing utilities and roadway capacity. Larger multi-family developments should be located on sites with adequate space for off-street parking, accessory structures, adequate landscaped buffers, and recreational activity.

Neighborhoods Principle 6: Connectivity. Promote neighborhood design that allows for multi-modal connectivity between residential areas, commercial areas, parks and open space.

Neighborhoods Principle 7: Living Closer to Work. Locate greater residential densities near major employment centers, to reduce vehicle miles traveled. Encourage home-based work where the nature of the work is not disruptive to the neighborhood.

Neighborhoods Principle 8: Amenities as Focal Point. Provide appropriate park space and recreation areas and amenities as a focal point in all newly developing neighborhoods.

Neighborhoods Principle 9: Safety and Well-being. Provide a neighborhood environment that promotes safety and social well-being of residents, and preserves sensitive natural areas.

Introduction

Michigan City's long-term future as a viable community is inextricably tied to the condition and availability of its housing resources. Housing is central to almost any discussion about City affairs, no matter whether the focus is on business recruitment and workforce housing, multi-family housing, replacing aging, obsolete housing stock, or the ability to simply walk from one neighborhood to another. As Michigan City positions itself as an attractive alternative to other cities in the Chicago metropolitan region, the quality, affordability, and selection of housing options will undoubtedly directly influence the City's ability to recruit and retain residents and employers.

Having a diverse stock of housing - new and old, large and small - is instrumental in offering choice and providing for the individual needs of all households, regardless of economic stature. However, while one challenge is to address future housing needs, another task is to sustain the integrity of existing neighborhoods. Besides price and location, another consideration is the design and composition of neighborhoods. The suburban development that occurred in the latter part of the 20th century departed substantially from the established town settlement pattern near the core of the city. Michigan City reflects this pattern of development. Recent national trends, however, reflect a growing demand for new residential developments that engender neighborhood-style patterns that are once again integrated into the existing fabric of the community; and are located near other uses for ease of access; provide transportation options; access to public amenities and other services; and preserve resources and sensitive landscapes through innovative subdivision design.

Michigan City residents wish to enjoy quality housing and the positive impact that well-designed neighborhoods can have on the image and wellbeing

of the community. Concurrent with employment and population growth, Michigan City's stock of housing and neighborhoods will continue to grow. Providing quality housing and neighborhoods is fundamental in creating a desirable place to live. Considering citizen concerns and comments about existing residential developments, it is important to recognize that creating a diversity of future housing options to support changing lifestyles will likely require additional development standards and incentives.

The purpose of this plan element is to identify strategies and potential solutions to ensure that the community meets its existing and future housing needs through the provision of high-quality, affordable, and diverse housing offerings; that exist within safe, livable, and attractive neighborhood environments. The types of housing, their arrangement and design, the integration of open space and amenities all contribute significantly to the character of the community. The City's economic health relies, to a large part, on its ability to preserve its well-established neighborhoods while planning for the development of new living environments that meet the physical, social, and economic needs of its residents.

Within Focus Area 1, *Growth Capacity and Economic Performance*, proposed strategies promote fiscally responsible growth patterns which balance greenfield development with infill development and redevelopment. Those same strategies can be translated to assist in maintaining affordable and desirable housing. A focus on development of housing in proximity to employment centers that also offer adequate infrastructure and strong service delivery will reduce transportation costs and minimize the long term costs associated with improvement and maintenance of streets and utilities. Improving the overall affordability of housing stock, without reducing housing quality allows for improved living conditions and, for some, a transition to prosperity. A housing strategy must be based upon the premise of ensuring affordability, maintaining quality, creating opportunities for positive transition, and establishing sustainable development patterns.

MAINTAINING AFFORDABILITY

Affordability is complex and highly variable. Households earning a spectrum of incomes will each view affordability differently. Recent increases in land prices and housing costs in Michigan City and LaPorte County have caused some families to begin to encounter affordability issues. Beyond availability, the price barrier created by the new housing market can create difficulties for many families considering the purchase of a new home in Michigan City. Additionally, an increasing group of seniors, young unmarried professionals, and lower income residents are in need of housing that is affordable relative to their particular stage of life. These issues and others will be discussed within this element.

MAINTAINING HOUSING DIVERSITY

Changing demographics and lifestyles resulting from an aging Baby Boomer generation (which composes 20 percent of the American population), the majority of which are well into retirement (although they are living longer); the emerging Millenials, whose vision of the American Dream does not necessarily include owning a home and a car; and the desire for more walkable and bike-able community environments; complete with multi-modal public transit options; are having a profound impact on the urban form and character of this country's built environment. The quest to attract more corporate headquarters and skilled high-tech labor force will likely engage more young, single professionals who are interested in outdoor activities, dining in ethnic restaurants, and drinking craft beers with friends. They want to be where the action is and will most likely prefer to live in and around Downtown Michigan City compared to the suburban single-family residential neighborhoods to the south.

DEVELOPING CITIES OF NEIGHBORHOODS

The most vibrant and economically successful cities in this country are those that are composed of strong, cohesive neighborhoods that are woven together by thriving commercial corridors and punctuated with lively "town centers," and entertainment districts. As discussed in this element, there is a distinct difference between a subdivision and a neighborhood, the latter being a place that people have endowed with cultural values and meaning. The most successful neighborhoods fulfill the diverse housing and social needs of every stage of one's life and provide depth and richness to living.

HOUSING CHARACTERISTICS

As previously discussed, Michigan City's population is anticipated to grow from 31,157 people (2016) to

about 41,504 by the year 2040 (target population), an increase of 10,347 people. The average household size in Michigan City in 2015 was 2.34 persons; and average family size is 2.98 persons. Using this same average as a starting point, Michigan City will require approximately 4,422 additional viable housing units by 2040 to accommodate its projected population and – assuming a variety of housing types are provided – maintain a sound, balanced housing market. This figure is conservative as it does not account for the number of aging homes that will become functionally obsolete, fall into disrepair, and need to be replaced.

If the same ratio of owner- versus renter-occupied housing continues in future years (6,270 owner-occupied versus 4,123 renter-occupied in 2016), then approximately 2,220 (50.2 percent) of the projected 4,422 new units by 2040 will be owner-occupied, and 1,468 units (33.2 percent) will be renter-occupied.

As summarized in TEC Table 20, *Housing Tenure (2016/17) (The Existing City* report, pageA.144), Michigan City holds a steady residential vacancy rate of approximately 16.6 percent, or 2,472 homes (2016). The "rule of thumb" often used by economists is that five to eight percent is a "natural" vacancy level that promotes the healthy functioning of the housing market, as well as supporting the community's economic development. When the vacancy rate is too low, demand for housing will push up rents and prices as consumers vie for scarce units. Conversely, when vacancy rates are high, new and relocating households can often be accommodated by the existing stock of housing, and new units are not necessary. If housing vacancy in Michigan City should fall to a sustained rate below five percent, then the estimated number of units needed to house its future population will need to be somewhat higher to maintain the local market's vacancy cushion. While a 16.6 percent vacancy rate would suggest that this condition may be remote, the vacant dwellings in Michigan City are largely "company housing" (such as those zoned R1D, and found in the Near Westside, Marsh, and Queens neighborhoods), constructed in the 1940s and 50s; and are either in poor / substandard condition, or are considered too small to accommodate the current living space requirements of a changing, often more affluent demographic composition. Small lot sizes and required setbacks constrain the ability to add floor space; and most houses contain toxic materials, such as lead and/or asbestos, which requires abatement.

Livability can be defined as, "the sum of the factors that add up to a community's quality of life - including the built and natural environments, economic prosperity, social stability and equity, educational opportunity, and cultural, entertainment and recreation possibilities."

Source: Partners for Livable Communities

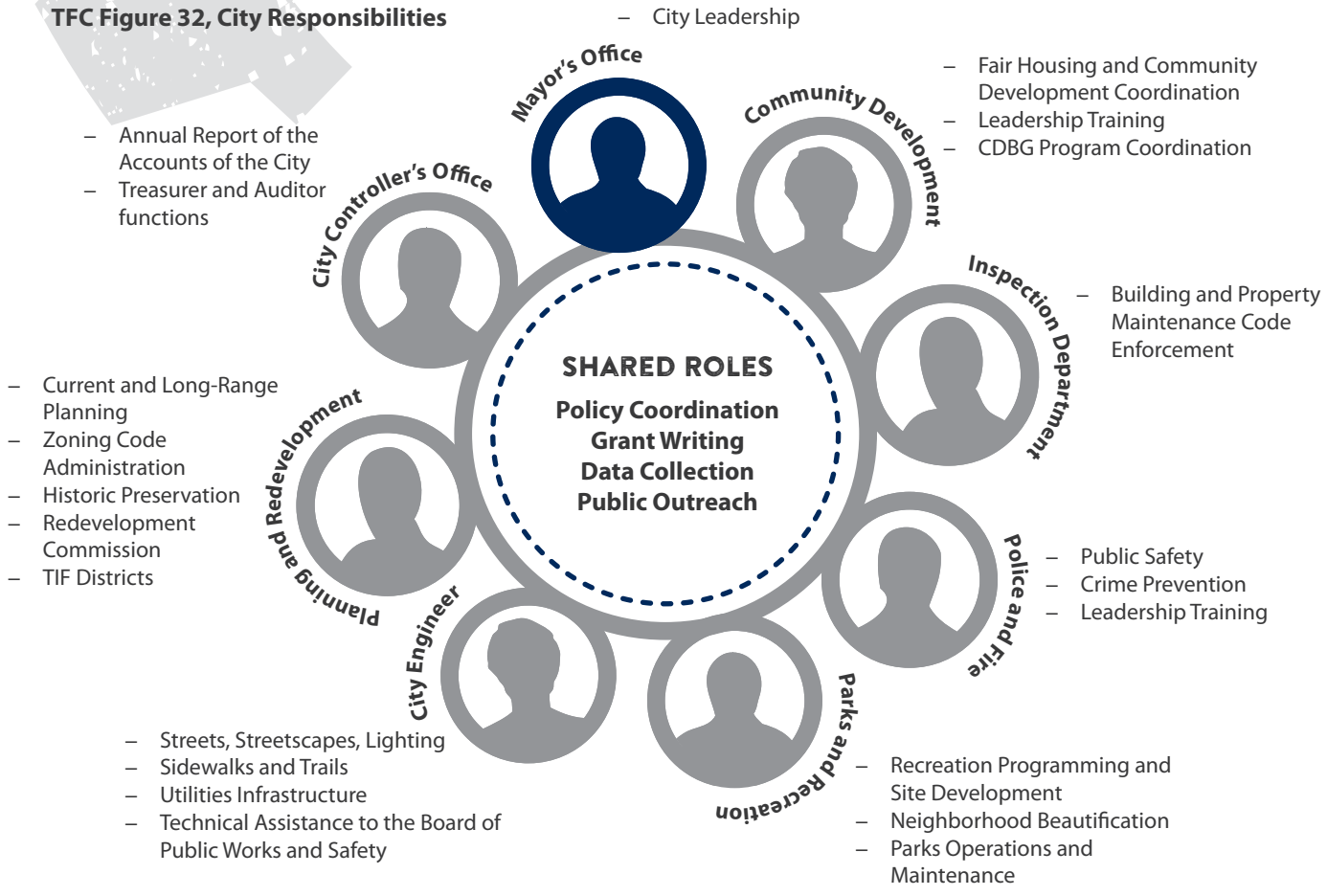
CITY'S ROLE

The quality, condition, and relative affordability of Michigan City homes is influenced, in part, by the housing market in LaPorte County. The City has a major role in protecting the community's quality of life and economic health through code enforcement and establishment of ordinances that dictate minimum standards. As depicted in TFC Figure 32, *City Responsibilities*, the coordination of housing is a shared effort throughout many of the prominent departments within the City. The departments involved with housing and neighborhoods include: Community Development, Inspection, Police and Fire, Parks and Recreation, Engineering, Planning and Redevelopment, and Controller. These seven departments, and the Mayor's office, are intimately involved in shaping the quality of housing and neighborhood composition throughout the City. City government's role in supporting and incenting the development of housing densities, diversity and affordability includes ensuring an adequate supply of land zoned for residential development which supports diverse housing types, in locations that can be supported with the necessary utility infrastructure and public services.

RESIDENTIAL ZONING

Roughly 59 percent, or 14,254.9 acres, of land zoned within the Planning Area can accommodate residential uses. Of this area, approximately 61 percent, or 6,893.4 acres of land within Michigan City's City limits, can accommodate residential uses; as depicted in TEC Map 44, *Zoning* (*The Existing City* report page A.187), and TFC Table 24, *Zoning Districts that Allow Residential Uses*. The most common type of residential zoning is moderate sized lots and larger single family dwellings found in R1C, which occupies 2,233.3 acres, roughly 32 percent of land zoned with residential uses within the City. The second most common type of residential zoning is the R1D district, which consists of single family, urban neighborhoods with small lots. In general, these districts allow for a range of lots sizes. Multi-family housing, mainly represented within the R3A and R3B

TFC Figure 32, City Responsibilities



districts occupies only four percent (565.0 acres) of all residentially zoned land in the Planning Area; and of that amount, only seven percent (495.0 acres) within the City limits. Similarly, small lot single-family housing, which is allowed in R1D, R1E, R2A, and R2B districts, together occupies fifteen percent (2,188.7 acres) of residentially zoned land in the Planning Area; and of that area, 31 percent (2,179.6 acres) of residentially zoned land in the City limits.

Ultimately, the City's application of its residential zoning affects the cost of housing. The predominance of larger-lot single family housing is not inherently bad; however, it limits the variety of housing options that specific user groups, such as seniors, childless couples, and Millennials, are looking for. For instance, seniors have distinctly different housing needs than a young family with children. In essence, the larger lot single family home is not a viable housing option for all residents. In

TFC Table 24, Zoning Districts that Allow Residential Uses

Zoning Districts*		Minimum Lot Area in Square Feet	City Limits		Planning Area	
			Acres Zoned	Percent of Residential Zoned	Acres Zoned	Percent of Residential Zoned
A1 A2	Agriculture	1,306,800 (30 acres)	3.0	0.03%	1,147.3	4.8%
R1A	Single Family Residential	15,000	301.1	2.7%	1,392.3	5.8%
R1B	Single Family Residential	10,000	1,085.3	9.7%	5,738.3	23.9%
R1C	Single Family Residential	7,200	2,233.3	20.1%	2,366.4	9.9%
R1D	Single Family Residential	5,000	1,601.5	14.4%	1,602.7	6.7%
R1E	Waterfront Residential	5,000	402.6	3.6%	410.4	1.7%
R2A	Townhouse	5,000	54.4	0.5%	54.4	0.2%
R2B	Townhouse	3,120	121.1	1.1%	121.1	0.5%
R3A	Low-Rise Multiple Family Residential		444.9	4.0%	514.9	2.1%
R3B	Mid-Rise Multiple Family Residential		50.1	0.5%	50.1	0.2%
R4	Manufactured Housing Park	5,000	76.4	0.7%	326.1	1.4%
B1	Neighborhood Commercial (Multiple Family Residential or Dwellings in Mixed-Use Buildings)		66.8	0.6%	78.1	0.3%
CBD1	Downtown Core (Townhouse, Multiple Family Residential or Dwellings in Mixed-Use Buildings)		82.6	0.7%	82.6	0.3%
MD	Marina District (Townhouse or Multiple Family Residential)		370.1	3.3%	370.1	1.5%
Total Residential Zoned Land			**6,893.4**	**61.9%**	**14,254.9**	**59.3%**

* Zoning is not available for the following areas in the Planning Area: Porter County and the Towns of Trail Creek, Pottawattamie Park, Long Beach and Michiana Shores.

order to accommodate these groups, the City will want to understand how these user groups can have housing choice while maintaining the desired community character of Michigan City.

GOAL 9.0:

A diversity of affordable and adaptable housing types in sufficient quantity to accommodate a range of family sizes and income levels.

OBJECTIVE 9.1: Encourage affordable housing ownership options. Expand opportunities for homeownership, especially for moderate to low income households.

Affordability

The affordability of local housing is a key factor regarding a community's economic development potential and ability to attract and retain a quality workforce. As more new and existing homes come to market at higher sale prices, maintaining affordability for a large proportion of the local population, and especially for first-time home buyers, will be an ongoing challenge. In response to area growth and housing demand, and the need for diversity in housing typology as well as price point, it is important to bring more "starter," intermediate and custom homes – as well as multi-family projects – to the market that aim for price points and rents that balance affordability with value and quality.

According to the *One Region 2016* Indicators Report, as property values and rents have increased, homeowners and renters are having a more difficult time affording housing, yet the number of households who struggle has improved following a 2010 – 2011 peak. Post housing crisis and recession, Northwest Indiana continues to be burdened by a hefty number of vacant homes. Construction of new housing declined sharply from 2006 to 2011. However, since 2012, the annual number of housing starts has risen slightly, indicating the market may have stabilized.

Nationally, 25 percent of homeowners paid more than 30 percent of their income for housing in 2014. While somewhat lower in Northwest Indiana, the number of burdened households is on the rise. In La Porte County, the number increased from 16.8 percent to 19.9 percent. In Lake County, the number of homeowners with unaffordable housing rose from 19.2 percent in 2000 to 23.4 percent in 2014. In Porter County, the number rose from 16.3 percent in 2000 to 19.4 percent in 2014.

HOUSING AND TRANSPORTATION: A MORE COMPLETE MEASURE OF AFFORDABILITY

The search for affordable housing drives some households to move farther away from employment centers to cheaper, rural land that may also offer an escape from the urban environment. Yet recent studies show that much of the "affordability" of this more distant housing is offset by increased transportation costs. As more people move into fringe or unincorporated areas, the unimproved (or improved but unable to keep up with growth) transportation network becomes increasingly congested, adding further to commute times and travel costs.

The Center for Housing Policy, in coordination with the Center for Neighborhood Technology, notes that households across the country with a median income of between $20,000 and $35,000 spend roughly 54 percent of their annual income on housing and transportation costs – if they live in the central city. The same households located farther away pay roughly 70 percent of their annual income to cover such costs. For households earning between $35,000 and $50,000 the percentage spent on housing and transportation if living away from employment drops to 51 percent, but remains a very substantial cost burden, particularly in comparison to those living in or near an employment center.

From fair housing and low-income housing to public safety via crime prevention, each department within the City plays a vital role in ensuring that the key components that make up safe, quality neighborhoods are maintained.

JOBS HOUSING BALANCE

Housing options are part of the economic development equation. In the future, as Michigan City markets its business parks and industrial sites, prospective employers will zero-in on the quality of life of its employees. *Where will single professionals live and play? Can a young family afford a home? How is the school system?* Attracting (and retaining) businesses is directly tied to the supply and price range of housing types. Maintaining this balance between jobs and housing is important so residents can live and work in their community. With the close proximity of Chicago, Michigan City will directly compete with the upscale apartment, townhouse and retail options only 75 minutes away.

Indeed, maintaining a balance between financially rewarding jobs, the local economy, and how this is reflected in the quality of housing is very important. Not only does this balance factor-in to quality of life considerations, it may also influence the siting of new businesses in Michigan City. As discussed in the *Growth Capacity and Economic Performance* element, attracting new business relies upon the host city having an adequate supply of decent housing for potential workers. Even retaining businesses and providing for their expansion relies upon a healthy housing market that offers adequate choice in housing and living environments.

Anecdotal evidence suggests that there are too few high-end housing options in Michigan City; and that business attraction may be more difficult due to the lack of adequate and available housing for a more sophisticated and discerning, white collar workforce. While adequate jobs are an asset, there is always a need to be wary of the implications of a jobs-to-housing imbalance. Longer commutes and lower quality of life are possible results of a local housing market that has a scarcity of housing units at varying prices.

NATIONAL TRENDS

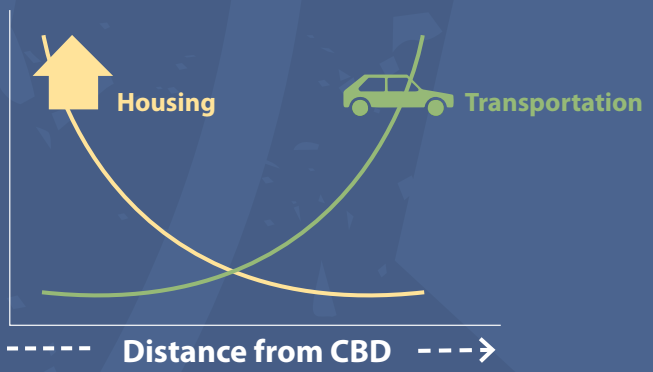
According to a joint effort by the Center for Housing Policy and the Center for Neighborhood Technology, combined housing and transportation costs grew faster than local incomes between 2000 and 2010 in the 25 metropolitan areas that were studied. Housing and transportation cost burdens vary significantly by income. The combined costs of housing and transportation consumed 59 percent of the income of moderate-income households, which are households with incomes between 50 and 100 percent of a metropolitan area's income. With housing and transportation consuming over 50 percent of household income, moderate-income households have relatively little left over for expenses such as food, education, and health care, not to mention savings to cushion unexpected financial hardships.

In the exurban areas that are the greatest distance to employment centers, prices for housing are considerably lower; or at least, larger or better-quality housing can be purchased per dollar spent on housing. Transportation costs, on the other hand, tend to increase along with commuting distance. According to The Center for Housing Policy, at some distance, generally 12 to 15 miles, the increase in transportation costs outweighs the saving on housing - and the share of household income required to meet these combined expenditures rises. This relationship is depicted in TFC Figure 33, *Tradeoffs of Housing and Transportation Costs by location to CBD*. Better-planned, mixed-use communities with balanced jobs and housing can help reduce travel distances and thus limit the growth in trip lengths.

For the region as a whole, as more households commute to distant job centers or other work locations some

TFC Figure 33, Trade-offs of Housing and Transportation Costs by Location to CBD

Farther from jobs located within CBD, housing costs tend to be lower; however, the trade-off comes with higher transportation costs. While the share of income devoted to housing or transportation varies from area to area, the combined costs of the two expenses are surprisingly constant. In areas where families spend more on housing, they tend to spend less on transportation, and vice-versa.



distance from where they live, clogged and congested thoroughfares are the norm. Among other costs are those for traffic safety, enforcement and mobility infrastructure-related improvements.

GAME CHANGER: SOUTH SHORE RAIL LINE

That's why the double-tracking of the South Shore Commuter Rail line could be such a game changer. It will enable residents of Michigan City to commute to places of employment in Downtown Chicago in under one hour, while avoiding all of the negative consequences of having to drive into the City.

STRATEGY 9.1.1: *Analyze the City's zoning ordinance to ensure that adequate avenues exist for the development of affordable housing; and revise as appropriate.*

ACTIONS AND INITIATIVES

1. Consider amending the City's zoning ordinance to incent the development of affordable housing through the provision of density bonuses. Incenting the inclusion of affordable housing units in new, mixed-use residential developments, especially within a PUD district, and the proposed Mixed-Use (MU) district, in exchange for a density bonus enables the developer to make the same amount of profit while the City ensures that new affordable housing units are coming online at no additional cost to the taxpayer.
2. Ensure an adequate supply of R1C, R1D, R1E, R2A, and R2B, R3A, and R3B zoned parcels, in proximity to Downtown, the 11th. Street Station, and major employment centers.

STRATEGY 9.1.2: *Consider formulating and implementing an affordable housing strategy.*

Affordable housing strategies should be targeted to meet the City's diverse housing needs and be designed to achieve housing goals while understanding the market and economic conditions of development. To do this Michigan City will need to have a clear understanding of the housing needs at varying levels of affordability, geography, tenure and unit type. This understanding should lead to a specified goal for the number of housing units created and preserved at all levels of affordability. Additionally, a comprehensive set of tools, strategies and metrics should be developed to achieve those goals, and track / measure and the effects of the City's policies and programs.

ACTIONS AND INITIATIVES

1. Update the City's *Housing Needs Assessment* report (2010) to identify and address existing low-income gaps and other needs regarding housing supply.
2. In addition to developing goals for percentages of affordable housing units, consider access to critical community services, including transit. Promote affordable housing close to transit (¼ mile from high frequency bus corridor and 11th Street Station for South Shore Commuter Rail line).
3. Maintain and increase housing opportunities for income-restricted residents, such as seniors and the disabled.
4. Increase access to housing and support services for the homeless and near-homeless.
5. Consider administering an affordable housing investment fund (AHIF). Develop a revolving loan

The Housing Strategy

- *Increase affordability through expanded housing choice.*
- *Establish opportunities for site and community transition.*
- *Promote context sensitive manufactured housing.*
- *Build "living environments" such as neighborhoods and villages, rather than subdivisions and strip lots.*
- *Develop the majority of housing near employment centers.*

Housing Needs Assessment 2010

The following significant findings have been identified in this report:

In 2000, **16.8%** of the total housing units in the City were vacant.	Overall housing units increased from 1990-2007, but older units were abandoned at a higher rate during this time period.	In general, the Housing Stock in Michigan City is Aging and in need of rehabilitation (approximately 45% of homes are 40 years old or older in 2007).
In 2000, **40%** of housing units were renter occupied.	In 2000, **26.5%** of households in Michigan City were in need of some form of housing assistance.	In 2007, **38%** of owners with mortgages, **12%** of owners without mortgages, and **48%** of renters in Michigan City spent 30% or more of household income on housing.
Approximately **690** housing units (occupied and vacant) in Michigan City were determined to be substandard in 2009.	In 2007, **14%** of the population were 65 years or older.	In the first part of 2009, there was a housing gap of **76** non-homeless elderly and **118** nonhomeless frail elderly in need of housing.
In 2007, families made up approximately **62%** of households.	Non-family households are increasing and married couple families are decreasing.	In 2000, **35%** of family households were female householder with no husband present.
In 2007, **33%** of households were categorized as "People Living Alone".	In 2000, **44%** of elderly renters and **66.4%** of large family renters were in need of housing assistance.	About **1/5 th** of elderly and large families' homeowners were in need of housing assistance.
In the first part of 2009, **57** non-homeless persons with HIV/ Aids and their families were provided housing.	In the first part of 2009, **81** homeless individuals and **108** non-homeless persons with chronic substance abuse problems were sheltered.	In 2007, **21%** of individuals reported a disability (among people at least 5 years old).
In the first part of 2009, **43** non-homeless persons with disabilities were identified as needing housing.	In 2000, approximately **41%** of persons with disabilities who rent and **25%** of persons with disabilities who own a home were in need of housing assistance.	In the first part of 2009, there was a gap of **23** individuals in need of emergency shelter and **4** in need of permanent housing identified.

fund that provides gap financing to developers that are committed to preserving and/or building affordable housing units in the City. Coordinate with LaPorte County in administering AHIF within the Planning Area (outside the City limits).

6. In conjunction with the affordable housing investment fund (AHIF), the Redevelopment Commission and Housing Authority should consider developing a tenant assistance fund (TAF) which would provide income-qualified, vested tenants with rental assistance if rents increase as a result of redevelopment. The fund would be designed to mitigate the possible negative effects of increased rents resulting from the redevelopment, renovation, or acquisition of committed affordable unit properties.
7. Continue to secure federal and state programs such as low-income housing tax credits (LIHTC), HOME, and CDBG funding sources for the development of affordable housing.
8. Continue to promote public-private partnerships for the provision of affordable housing.
9. Consider the utility of adopting a dynamic housing policy that supports shared-equity homeownership and life-cycle underwriting.
10. Where appropriate and geographically/market-feasible, consider donating City-owned property, where appropriate, to incent the development of affordable housing.
11. Continue to educate potential homebuyers about federal and state homeownership programs. The Federal Housing Administration (FHA) provides mortgage insurance on loans made by FHA-approved lenders throughout the United States. FHA loans have become the primary means by which low- and moderate-income households and first-time homebuyers purchase a home. FHA loans can have lower down payment requirements and higher allowable loan-to-value ratios than conventional loans.
12. Develop affordable housing parking standards. National and local precedents have demonstrated that there are reduced parking needs for occupants of affordable units. Studies illustrate that parking utilization rates in affordable housing properties tend to be less than one space per unit. A parking study of affordable housing would provide a basis for recommendations on parking policy for affordable housing within the City.
13. Enable home sharing. Home sharing has been successful in several communities around the country because it enables seniors to age in place and expands affordable living for both seniors and others. A home sharing program would be compatible with the City's definition of "family."
14. Provide density bonuses to developers that comply with the City's affordable housing goal.
15. Consider utilizing the Hoosier Homestead Initiative (HHI) to promote affordable housing opportunities. For more information on the HHI, refer to *The Existing City* report, page A.149.
16. As outlined in the *Housing Needs Assessment* (2010), encourage greater public awareness about the need for affordable housing through City- and County-sponsored publications, advertisements and workshops.

STRATEGY 9.1.3: *Ensure the utilization of energy and water efficiency best construction practices in the construction of affordable housing.*

ACTIONS AND INITIATIVES

1. Encourage energy efficiency in new and renovated affordable housing.
2. Encourage water conservation in existing and newly constructed affordable housing.
3. Encourage the conservation of natural resources by reducing or eliminating waste throughout the building's entire life-cycle, including the development phase, the usage phase and the building's end-of-life stage.
4. Provide education to landlords, tenants and homeowners on energy efficiency, water conservation, recycling, and waste reduction activities.

STRATEGY 9.1.4: *Provide affordable, attainable housing opportunities.*

ACTIONS AND INITIATIVES

1. Encourage homeownership through developing a cost-effective housing replacement and reinvestment strategy that includes a variety of housing types.
2. Foster opportunities for creative housing types and concepts, including tiny houses, townhomes, housing for individuals in Michigan City on a temporary basis, and passive energy homes.
3. Plan for a mix of housing types in all neighborhoods, available to a variety of income levels, including a prioritization for housing with ADA accessible design.

STRATEGY 9.1.5: *Provide assistance to prospective and new homeowners interested in purchasing and renovating existing housing units in Michigan City.*

Although it has been previously stated that the condition, size, spatial configuration, and lot size of much of the existing housing stock in Midtown neighborhoods are detriments to encouraging investment, these very housing units, if renovated, could be very attractive and affordable for single professionals, young families, empty nesters, and senior citizens. Impediments to renovation of existing housing stock include abating toxic materials, such as lead and asbestos; and the need to seek variances to existing zoning and subdivision regulations.

ACTIONS AND INITIATIVES

1. As an incentive to housing renovation, consider providing technical and capital assistance for abating toxic materials, and designing additions.

OBJECTIVE 9.2: Ensure a variety of housing types, suitable and attractive to people at different stages in their life.

Diverse Housing Needs

Housing needs are not static. Needs change over time as people move through different stages of their lives. The availability of life-cycle housing sustains the community by preventing polarization of residents in one age or income group. As one generation of residents moves through its life-cycle, it can move into the housing provided by the previous generation, just as the next generation will move into the housing being vacated. This evolution is facilitated by the provision of diverse housing by type, value, and stage of life-cycle including:

- Affordable rental units for young people just beginning to enter the workforce;
- Affordable single-family units for first-time home buyers and young families;
- Move-up housing for people with growing families and/or incomes;
- Empty-nester housing characterized by small size but high-quality, and lower-maintenance;
- Housing for seniors and the disabled that accommodates physical limitations;
- Assisted living environments to provide health and medical care to the elderly.

Based on changing demographics and affordability needs, a diversity of housing types are needed within Michigan City and the Planning Area. User groups with diverse housing needs include seniors, low income and homeless, and college students.

LIFE-CYCLE HOUSING POLICIES

In a world of limited public funding, Michigan City is challenged with the need for increasing the number of households benefiting from stable, affordable housing while managing its economic impact. In order to identify opportunities that reduce the cost of providing affordable housing over the long term, the City of Michigan City should ask:

- *How can the affordability of properties be secured over residents' full life-cycles?*
- *How can housing strategies respond to the changing needs of households over time?*
- *How can housing strategies respond to, and take advantage of, the dynamics of neighborhood change?*

By extending the time horizon of interest from a single point in time to a full life-cycle, opportunities for cost-savings arise that, if capitalized upon, could help serve more people more effectively within the threshold of current resources. In the coming years, it will be important for the City to coordinate with both private and public sector partners for a shared focus on anticipating change and establishing a framework to preemptively address it.

INCREASING HOUSING CHOICE

As previously discussed, the housing stock in Michigan City is mainly comprised of two types of housing: single family detached homes and multi-family apartments / condominiums. For the most part, housing throughout the City follows a traditional model – a single home located in the center of a site with ample space for side yards, a front yard, and a rear area. While not surprising, the lack of diversity in housing contributes to issues regarding affordability. Diversity allows for transition in housing to occur. As will be discussed, beyond the traditional single family home or apartment complex American housing can be divided into a variety of categories. While some of the types discussed (such as high rise apartment), may not be as appropriate to Michigan City as others, the range of types exhibits the variety of housing options that are available.

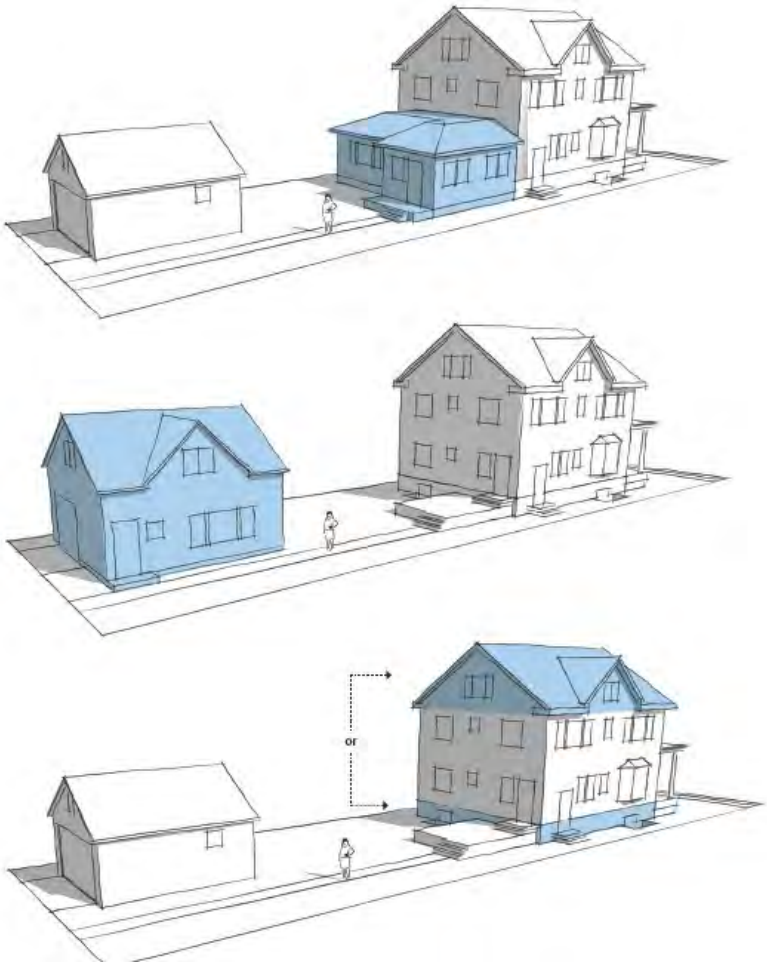
Single Family Homes

A single family housing typology includes the traditional home associated with the American Dream and the housing type most common in Michigan City. The structure is detached from other dwellings and represents the only dwelling unit on a parcel. Single family homes can be designed affordably by adjusting location on the site to allow innovative techniques (i.e., zero lot line development); through alternative construction practices; home design; and financial incentives.

Single Family Homes with Accessory Unit

A single family house with secondary unit housing typology remains similar in appearance to the traditional single family house; however, a second unit within the structure can be leased to individuals or families. Historic homes often designed secondary unit features into the structure in order to lease space or for use by domestic assistants. In the past, home design had evolved away from this practice as leasing portions of a home became "undesirable." With the rise in "new urbanism," the practice is being reconsidered as a means of improving affordability and diversity that further creates a stable environment for renters as an alternative to apartments.

Like the home with a secondary unit, a single family house with cottage or accessory cottages were once commonplace and are only recently beginning to witness a resurgence – thanks in large part to the move to recapture many discarded, but useful, practices in housing. Commonly referred to as a "Granny Flat," the accessory cottage or above garage apartment inserts renters into the stable environment of homeownership. Additionally, the unit provides added income to the homeowner and makes the cost of the home more affordable.



Source: "'Accessory' dwellings head to Minneapolis Council". Star Tribune. November 2014

Alley Flat Initiative

Source: The Alley Flat Initiative, thealleyflatinitiative.org

The Alley Flat Initiative is a joint collaboration between the University of Texas' Center for Sustainable Development (UTCSD), the Guadalupe Neighborhood Development Corporation (GNDC), and the Austin Community Design and Development Center (ACDDC). The Alley Flat Initiative proposes a new sustainable, affordable housing alternative for the City of Austin. "Alley Flats" are small, detached residential units, accessed from Austin's extensive network of under utilized alleyways. Each Alley Flat is designed to a $105,000 budget and a minimum of three stars on the Austin Energy Green Building Program Single Family rating tool.

The initial goal of the project was to build two prototype alley flats- one for each of two families in East Austin – that would showcase both the innovative design and environmental sustainability features of the alley flat designs. These prototypes were built to demonstrate how sustainable housing can support growing communities by being affordable and adaptable.

Together, University of Texas - Center for Sustainable Design and the City of Austin's long-term objective of the Alley Flat Initiative is to create an adaptive and self-perpetuating delivery system for sustainable and affordable housing in Austin. The "delivery system" would include not only efficient housing designs constructed with sustainable technologies, but also innovative methods of financing and home ownership that benefit all neighborhoods in Austin.

Willow House Model: 845 sf, 2 bedrooms and 1.5 bathrooms

Example Site Planning for an Alley Flat

Source: The Alley Flat Initiative > How It Works > Planning > Site Specifics

Example Zoning Standards

- Side Yard Setback: 5' (15' on a street side yard)
- Rear Yard Setback: 10' (5' on an alley)
- Maximum Height: 30' or 2 stories
- Setback from Principle Structure: 10' minimum
- Maximum Lot Coverage: Building cover 40% maximum, Impervious cover 45% maximum.
- Parking Spaces: one space required in addition to requirement for principal single-family house (if you are within 1/4 mile of an activity corridor that is also served by transit no parking is required for the Alley Flat). The parking required for the principal single-family house is dependent on the codes in place at the time of construction of the principal house.
- Size: Per current code, ADUs must be less than 1,100 square feet or 15% of the lot area (whichever is smaller) and no more than 30 feet tall. The second floor of a 2 story ADU can be no more than 550 square feet.

Courtyard Housing

This category offers the benefits of a row house, with the added "twist" of entry through a courtyard. Courtyard homes may be incorporated into innovative development techniques to include playgrounds, a community center or a forested green space. Like multi-family homes, courtyard homes must be designed to fit into the context of the surrounding setting.

Another building type, bungalow court houses, consists of a series of small, detached structures, providing multiple units arranged to define a shared court that is typically perpendicular to the street. The shared court takes the place of a private rear yard and is an important community-enhancing element.

Source: Danielson Grove, Seattle, WA, Ross Chapin Architects

Source: Mandela Gateway, Oakland, CA

Source: Missing Middle: Responding to the Demand for Walkable Urban Living. missingmiddlehousing.com

Low Density Multi-family Homes

Duplexes and triplexes are fairly rare in today's housing market, although they can be found in several of Michigan City's newer and older neighborhoods. Multi-family homes provide a viable alternative to the single family home. Both can be designed to appear as large scale single family structures with multiple stories and provide opportunities for both renters and owners. Other multi-family homes can be designed to accommodate numerous households. Smaller multi-family structures such as duplexes and triplexes can be designed to fit into a wide variety of environments, ranging from rural to urban. However, larger multi-family homes are commonly considered suburban or urban due to increased density and are likely best located within the growth boundaries of communities that can provide ample utilities.

Similar to duplexes, triplexes and multi-family homes, row houses offer the reduced construction cost that come with attached structures while also permitting a sense of independence. For a time, row houses fell out of favor as designers sought to move away from the gritty design of the urban environment. However, like other forms of housing, row houses have once again gained popularity as an option to single family homes and apartments. Like multi-family structures, row houses have a reputation as an urban (or possibly suburban) solution, rather than a pattern found in a rural setting.

Source: Missing Middle: Responding to the Demand for Walkable Urban Living. missingmiddlehousing.com

Source: Missing Middle, missingmiddlehousing.com,Four-plex Overview

Tiny Houses

The term, "tiny houses," refers to a social movement where people are choosing to downsize the space they live in. The typical American home is around 2,600 square feet, whereas the typical small or tiny house is between 100 and 400 square feet. Tiny houses come in all shapes, sizes, and forms, but they enable simpler living in a smaller, more efficient space. People are joining this movement for many reasons, but the most popular reasons include environmental concerns, financial concerns, and the desire for more time and freedom (http://www.thetinylife.com). With thoughtful, innovative designs, some homeowners have discovered a small house actually leads to a simpler yet fuller life, connecting them with family, friends, and nature while freeing them from mortgages. An issue for tiny home owners are where to locate due to municipal zoning codes. Most cities require a residential dwellings to be at least 350 square feet and wheels on the tiny home classify it as a mobile home but it doesn't meet the size and length requirement to be a mobile or to allow it to be in an RV Park. A solution is for "local governments to do more by eliminating square-footage requirements and creating special zones where tiny house communities can set up." (The Mercury News, *Tiny houses gain popularity in Bay Area but...,* June 2016). Communities of tiny homes are popping up across the country and are referred to as "pocket neighborhoods".

While these tiny houses have become popular for their novelty, aesthetic, and conceptual appeal, they've also proven to be wildly practical, especially in the context of disaster relief and humanitarian aid. In fact, during disaster relief for Hurricane Katrina, Marianne Cusato developed the "Katrina Cottages." These cottages became an incredibly useful alternative to FEMA trailers due to their ability to provide housing and shelter quickly at reduced cost (refer to Facilitating Small Lot Infill / Redevelopment: Katrina Cottages sidebar, page 1.245). Several cities, including Portland, Seattle and Oakland, have even used tiny house neighborhoods to combat homelessness.

Source: Third Street Cottages, Langley, WA, Ross Chapin Architects

Facilitating Small Lot Infill / Redevelopment: Katrina Cottages

One of the ways the City could facilitate increased infill construction in older neighborhoods with smaller lots is to modify the development regulations to combine incentives with removed barriers to rehabilitation or development. The intent is to promote and provide incentives for affordable infill development in a manner that creates a higher quality, complete neighborhood – one that does not compromise architectural integrity and is able to maintain or improve its property values over time. The key is combining the right incentives with the right code provisions and applying it to the right geographic areas to ensure the City's intent is achieved.

By way of example, the City could modify the development regulations to allow small-lot, stick-built housing by establishing reduced individual lot and parcel standards. Provisions could be provided for single-family detached dwelling units of both one and two stories. Standards would be needed for the lot containing the unit, parcel standards that address the perimeter of the parcel upon which the unit is based, and general bulk standards. Additional provisions could be added for architectural styling (e.g., requiring front porches, pitched roofs, etc.), on- or off-lot parking, etc.

Source: Congress for New Urbanism

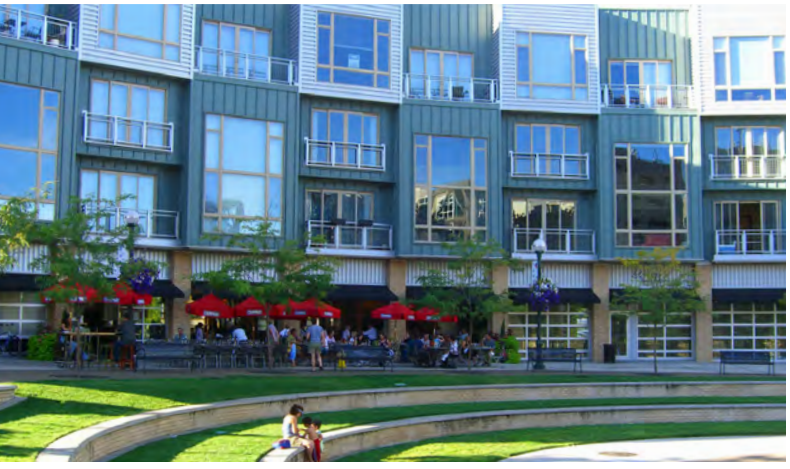
Alternately (or in combination), the City could utilize the already established resources of emerging small-lot housing trends, e.g., Katrina Cottages. Katrina Cottages were originally conceived as Tiny Cottages to replace post Hurricane Katrina FEMA trailers with sturdy, permanent structures worthy of being kept for a hundred years or more. Today, they have evolved into a nationwide sensation that has been hailed for their design, durability, versatility, and affordability. In this regard, the City could consider modifying zoning regulations and pre-approving predesigned modular or stick-built plans that meet the City's quality and durability standards.

Source: Marianne Cusato https://www.mariannecusato.com/

High Density Multi-family Homes

Apartments. Divided into four housing types (walk-up, low-rise, mid-rise, and high-rise), apartments offer affordability through the reduced construction cost per unit and added density.

Mixed-Use Housing. Mix of uses was once commonplace and today, mixed-use housing is making a tremendous comeback, particularly in proximity to existing urban areas or new "mega sites" with the opportunity to create new communities. Mixed-use housing can offer a variety of commercial retail and entertainment activities and proximity to a variety of resources such as parks, schools and work.



Sidebar

Mixed-Income Housing Projects

Making housing affordable for low- and middle-income households in urban areas has become more of a challenge as wages stagnate and housing costs rise. Combining affordable and market-rate dwellings can help: market-rate units may be able to subsidize affordable ones, and the affordable components can tap additional sources of funding or garner density bonuses.

The following projects, Arlington 360 and Cottages on the Greene, create rental and for-sale units for individuals and families earning a range of incomes by rehabilitating vacant lumber mill buildings or deteriorated social housing blocks, or replacing defunct hospitals, old military barracks, automobile repair garages, or vacant sites and parking lots.

ARLINGTON 360

Location: Arlington, Massachusetts

The opening of Arlington 360 in 2014 represents the culmination of more than a decade of efforts to redevelop the 18-acre hilltop campus of Symmes Hospital which closed in 1999. The architectural team placed two four-story apartment buildings near the site's center and located two- and three-story townhouses along the perimeter to relate to the scale of the surrounding neighborhood. Of the 164 apartments and 12 for-sale townhouses, 26 of the apartments are affordable, with 17 reserved for households earning at or below 80 percent of area median income (AMI) and nine for those earning below 120 percent of AMI. Amenities include public parks, a community garden, and walking trails.

Source: Arlington 360, www.livearlington360.com

Source: Bing Maps

COTTAGES ON GREENE

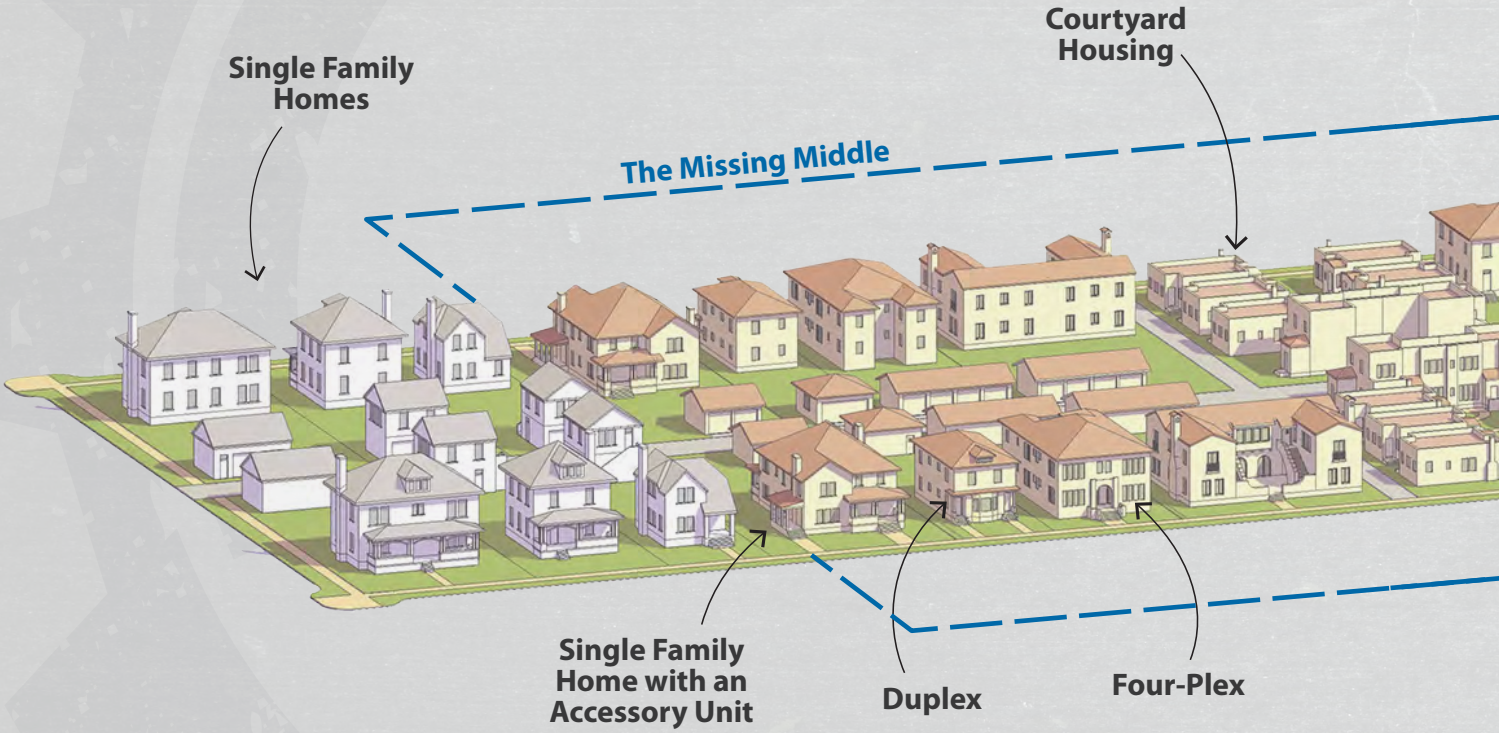
Location: East Greenwich, Rhode Island

In building a new housing complex on the former site of an auto repair business, surrounded by low-density housing on three sides, Providence-based Union Studio sought to minimize the sense of density. Their solution was to configure 15 for-sale units as cottages in a mix of freestanding single units, duplexes, and a three-unit townhouse. To ensure affordability, the two-bedroom cottages are no larger than 1,100 square feet. Five of these units have deed restrictions for low-income housing, an approach that qualified the development for a density bonus. Two of the units were sold to households with incomes below 80 percent AMI, and three to households with incomes below 120 percent of AMI. Affordable and market-rate units are indistinguishable from each other.

Source: Union Studio Architects

Source: Union Studio Architects

The Missing Middle

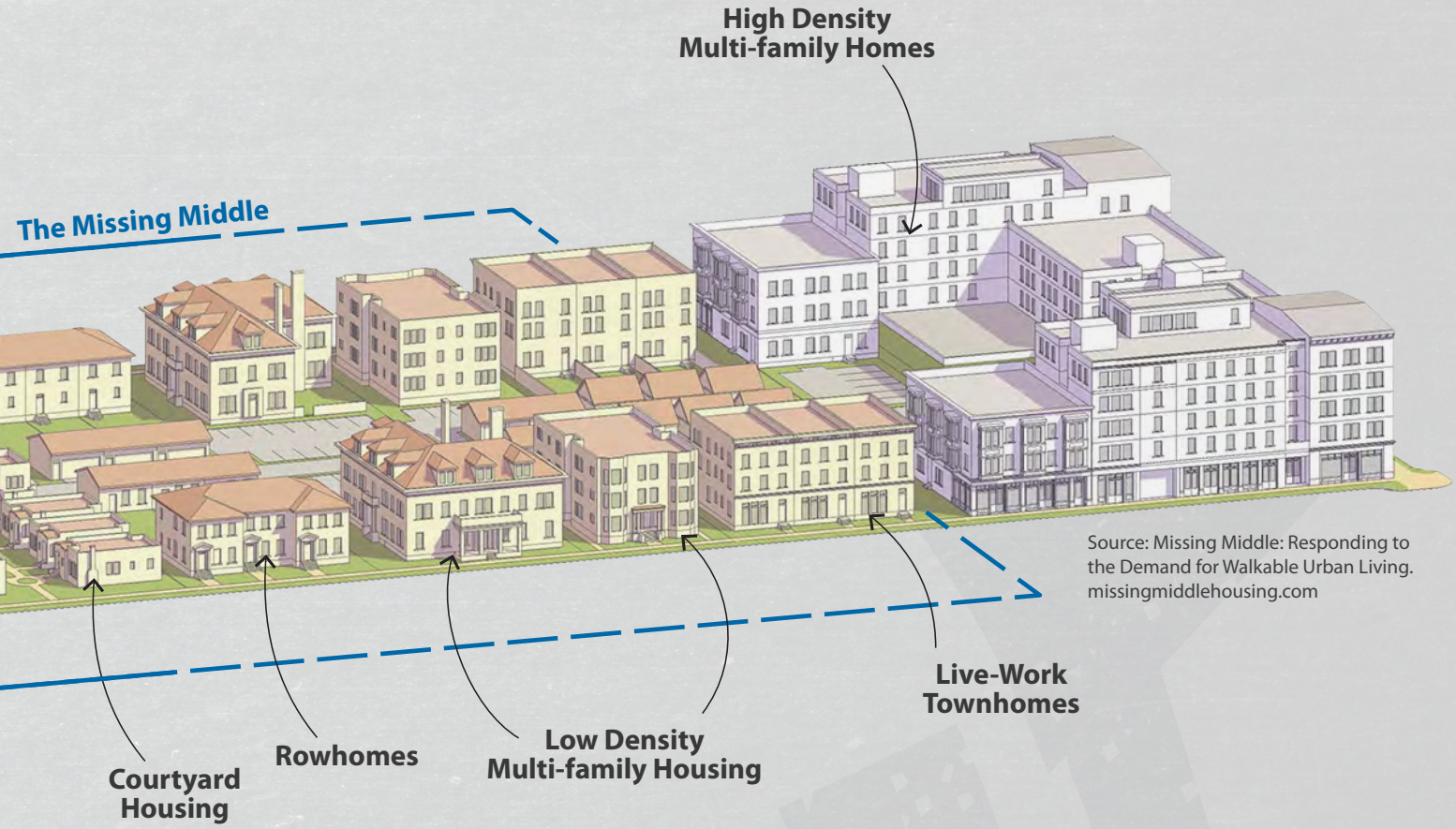


In the New York Times article, "*Car-Free in America?*" real estate developer and visiting fellow at the Brookings Institution, Chris Leinberger predicted that the U.S. is, "in the middle of a structural shift toward walkable urban way of living and working. After 60 years of almost exclusively building a drivable suburban way of life, which the market wanted and real estate developers built, the consumer is now demanding the other alternative. That alternative is for places where most everyday needs can be met within walking distance and cars are not a necessity for every trip out of the house."[1] According to Leinberger, there are many reasons to encourage this market trend: social cohesion, environmental sustainability, public health, lower public sector costs for infrastructure per square foot. But the bottom line is household economics. American families who are car-dependent typically spend 25 percent of their household income on their fleet of cars, compared with just nine percent for transportation for those who live in walkable urban places. The potential 16 percent savings could be reallocated to improved housing (building household wealth), educating children, or family savings. To give the market what it wants, several steps need to occur:

- More rail transit and bike and walking infrastructure;
- Legal permission to build higher-density, multi-use projects (generally, walkable urban development is illegal in the U.S.);
- Management of these places to ensure cleanliness and safety, and promote festivals and infrastructure;
- Affordable housing programs to insure inclusiveness since these places tend to be the most expensive places to live and work on a price-per-square-foot basis.

In his article, "*Focus on Small Design Changes*," Marc Schlossberg, provides a compelling follow-up to this argument and suggests that to reduce car use in the suburbs, the focus should be on land use, connectivity and parking. The first prerequisite for walking is to have somewhere to walk to. Suburbs generally fail in this regard because residential, commercial and office space are typically segregated from one another. Once there is something within walking distance, it is important to have a way to walk there. By design, the street network in many suburbs is isolated and designed to drain neighborhood roads on to major automobile arteries. For a pedestrian or cyclist, this means a quarter-mile trip often becomes a mile-long one along roads congested with cars. Having enabled mixed land uses and increased multi-modal connectivity, disincentives for car use need to be addressed starting with the excessive availability

1 Marc Schlossberg,"Focus on Small Design Changes," in "Car-Free America?" May 12, 2009. New York Times.



Source: Missing Middle: Responding to the Demand for Walkable Urban Living. missingmiddlehousing.com

of parking. Driving makes sense if there is an easy place to park at one's destination. So reducing the available parking is key. Minimum parking requirements should replaced with maximum parking requirements.[2]

To be less reliant on cars new suburban neighborhoods would need to include varied types of residences, good schools, parks, playgrounds, convenient shopping, a variety of jobs and public transportation. Indeed, they might resemble the kinds of places Americans planned back in the New Deal era, the 1930s, when Greenbelt, Md., was built by the federal government as a model suburban town, complete with housing, town center, schools, recreational facilities and parks.[3]

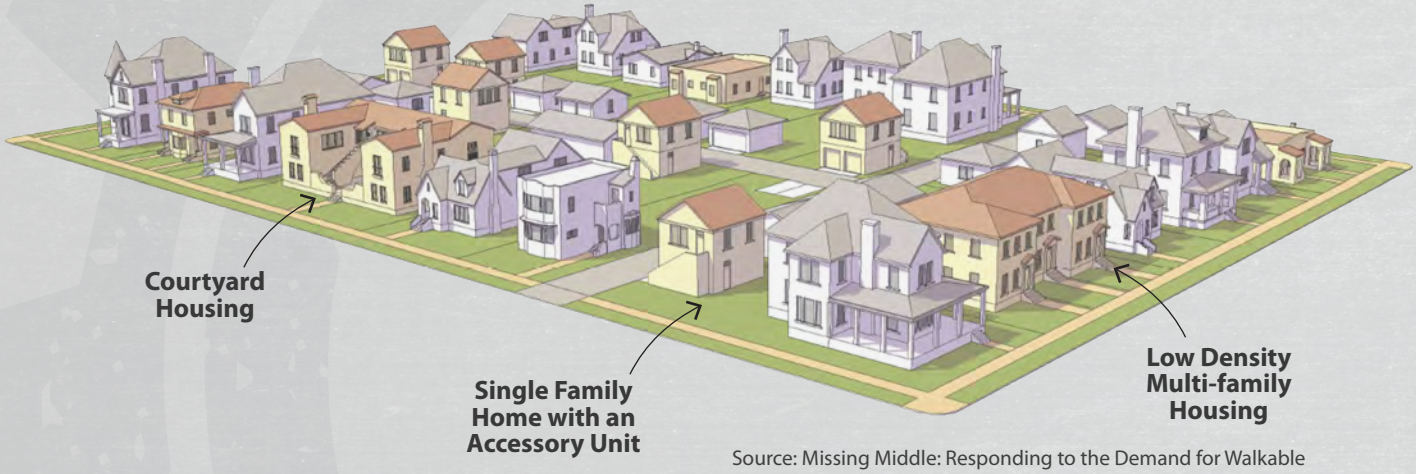
In his article, "*The Missing Middle Response to Urban Housing Demand*," Dan Parolek suggests that "missing middle" housing, which includes duplexes, four-plexes, and bungalow courts housing types, achieve medium-density yields and provide high-quality, marketable options between the scales of single-family homes and mid-rise flats for walkable urban living. They are designed to meet the specific needs of shifting demographics and the new market demand, and are a key component to a diverse neighborhood. Missing middle housing units typically do not get larger than the scale of a house (2 ½ story height, width along a street, and depth of building) and accommodate multiple units within the building. These housing types exist in every neighborhood across the country that was built prior to the 1940s which provide diverse housing choices and affordability.[4]

They are classified as "missing" because very few of these housing types have been built since the early 1940s due to regulatory constraints, the shift to auto-dependent patterns of development, financing challenges, and the incenting of single-family home ownership. The missing middle housing concept can also be used as an affordable housing tool, in that diversifying the housing stock to accommodate different income levels, lifestyles, and demographics can lead to positive affordable outcomes.[5]

Characteristics of Missing Middle housing include:

1. **A walkable context:** Missing middle housing types need to be built within an existing or newly created walkable urban context. Buyers or renters of these housing types are choosing to trade larger suburban

2 Marc Schlossberg,"Focus on Small Design Changes," in "Car-Free America?" May 12, 2009. New York Times.
3 Dolores Hayden, "When Expectations Were Different," in "Car-Free America?" May 12, 2009. New York Times.
4 Dan Parolek, "The Missing Middle Response to Urban Housing Demand," Public Square: A CNU Journal, June 23, 2016
5 Dolores Hayden, "When Expectations Were Different," in "Car-Free America?" May 12, 2009. New York Times.



Source: Missing Middle: Responding to the Demand for Walkable Urban Living. missingmiddlehousing.com

housing for less space, no yard to maintain, and proximity to services and amenities such as restaurants, bars, markets, and work.

2. **Medium density but lower perceived densities:** These building types typically range in density from 16 dwelling units per acre (du/acre) to up to 35 du/acre, depending on the building type and lot size. Due to the small footprint of the buildings and the fact that they are usually mixed with a variety of housing types, even on an individual block, the perceived density is usually quite lower—they do not look like dense buildings. A combination of these types gets a neighborhood to a minimum average of 16 du/acre. This is important because this is generally used as a threshold at which an environment becomes transit- supportive and main streets with neighborhood-serving where walkable retail and services become viable.
3. **Small footprint and blended densities:** A common characteristic of these housing types are small- to medium-sized building footprints. This makes them ideal for compatible infill, even in older neighborhoods that were originally developed as single-family but have been designated to evolve with slightly higher intensities.
4. **Smaller, well-designed units:** The starting point for missing middle housing needs to be smaller-unit sizes. The market is demanding smaller units, but our planning and regulatory systems including parking requirements by unit, density calculated in dwelling units per acre, and our impact fees that are the same per unit regardless of size discourage small units. This encourages developers to build the largest units they are allowed thus impacting affordability as well.
5. **Off-street parking does not drive the site plan:** Additional challenges in implementing missing middle housing include trying to provide too much parking on site; and not adhering to the policy of constructing a walkable urban context. Requiring too much off-street parking shifts neighborhoods below the 16 du/acre density threshold, thus making buildings economically inviable. Parking regulations cannot require more than one off-street parking space per unit to make these economically viable, and 0 to .5 spaces is even better. In addition, on-street parking must ¬be available adjacent to the units to make this viable.[1]
6. **Creating community:** Missing middle housing creates community through the integration of shared community spaces within the types, as is the case for courtyard housing or bungalow courts, or simply from the proximity they provide to the community within a building and/or the neighborhood. This is an important aspect, in particular within the growing market of single person households (which compose nearly 30 percent of all households) that want to be part of a community. This has been especially true for single women who have proven to be a strong market for these missing middle housing types, in particular bungalow courts and courtyard housing.

1 Dan Parolek, "Missing Middle Housing: Responding to the Demand for Walkable Urban Living 1," APA HCD News, Spring 2016.

STRATEGY 9.2.1: *Encourage a variety of housing types that fit the character of Michigan City while providing housing options for all residents.*

ACTIONS AND INITIATIVES

1. Incent the construction of a variety of housing types such as co-housing, duplexes, rowhouses, mixed-use buildings, and single family detached housing with accessory dwelling units.
2. Ensure an adequate supply of housing at a variety of prices and rents by promoting new home ownership opportunities, improvement of the existing housing stock, responsible rental property ownership, and the development of compatible infill housing.
3. Encourage infill housing designs that create a pedestrian-friendly streetscape.

STRATEGY 9.2.2: *Promote residential development in Downtown.*

Pursue the strategies related to promotion of new residential and mixed-use activity in Downtown Michigan City. Numerous studies have illustrated that when people live in a relatively "urban" environment, they bring new foot traffic to the area (especially on evenings and weekends); additional retail, service and entertainment demands which can spur the immediate market; and expectations for a safe and hospitable environment in which to live, recreate, and host guests and visitors. So amenities and security are both necessary to create a favorable environment for more extensive residential living in and around the City's Central Business District and Marina District.

ACTIONS AND INITIATIVES

1. Evaluate amendments to the Joint Zoning Ordinance to enable and encourage alternative residential development typologies, including lofts, residential over retail, townhouses and multi-family units.
2. Work with the Michigan City Mainstreet Association to identify potential residential development opportunities within the Central Business District.
3. Consider financial, regulatory and other types of incentives (e.g. expedited review, floor area or density bonuses) to encourage Downtown housing.

STRATEGY 9.2.3: *Increase the compatibility of multi-family residential housing with single family detached residential districts within Michigan City.*

Multi-family developments serve an important function in Michigan City. They provide housing for young professionals not ready to buy a home; corporate housing; housing for college students and retirees; housing for those who do not need/want a yard; and affordable housing for those who cannot meet the expense of home ownership.

ACTIONS AND INITIATIVES

1. Ensure that new multi-dwelling housing in Michigan City is designed to respect existing single dwelling residential patterns. Bufferyard standards between multi-family (R3A-B) and single family detached residential (R1A-E) should be increased from a Type A bufferyard (10 foot width) to a Type C bufferyard (50 foot width) with an eight foot tall wall.
2. While the importance of multi-family residential housing is recognized, attention should be given to how it is developed. For this reason, multi-family developments shall be subject to specific architectural standards as provided for in an amended section of the City's Zoning Ordinance.
3. While the number of multi-family units developed in the City is largely market-driven and based on demand the City should consider how much multi-family development is too much and whether a threshold or maximum, not exceed percentage, relative to single family detached residential, is warranted. As indicated in TFC Table 24, *Zoning Districts that Allow Residential Uses* (page 1.231), currently multi-family residential makes-up 2.3 percent of the total housing stock in the Planning Area, and 4.5 percent of housing stock in the City limits. As indicated in TFC Table 25, *Housing Composition in Comparison Communities* (page 1.253), the percentage of multi-family housing (five or more units) compared to single family attached / detached housing is variable, although the average is approximately 16 percent.

STRATEGY 9.2.4: *Modify the City's zoning ordinance to encourage higher-density housing near major roadways, and as a buffer to single-family detached housing areas, while not adding to zoning complexity.*

TFC Table 25, Housing Composition in Comparison Communities			
Comparison Community (2016 data)	Number and Percentage (%) of Multi-family Housing Units (5+ units)	Number and Percentage (%) of Single Family Housing Units	Total Number of Housing Units
Bay City, MI	4,149 (09%)	43,889(91%)	48,038
Duluth, MN	7,897 (05%)	28,895 (95%)	30,365
Holland, MI	2,483 (20%)	9,953 (80%)	12,436
Lorain, OH	4,475 (16%)	24,730 (84%)	29,205
Marquette, MI	2,200 (26%)	6,266 (74%)	8,466
Michigan City, IN	2,719 (19%)	12,165 (81%)	14,884
Muskegon, MI	2,988 (19%)	13,186 (81%)	16,174
Sheboygan, WI	3,709 (17%)	18,460 (83%)	22,169

Increasing housing densities along transportation corridors can be accomplished within a "Mixed Use Urban Corridor District" designation by providing an incentive for increased housing density in transition areas near arterial streets.

STRATEGY 9.2.5: *Incent the maintenance and rehabilitation of mature multi-family residential housing.*

ACTIONS AND INITIATIVES

1. Consider providing a property tax exemption as an incentive for owners of older multi-family buildings to improve their properties. Under this program eligible owners of older multi-family rental properties (25+ years old, 5+ units) would receive an exemption of property taxes on the additional value created by the renovations for 10 years, and then the exemption is phased out over the following five years. Tie the tax exemption to affordable housing and add a requirement that a share of the units in qualifying projects are maintained as committed affordable units for the period of the property tax exemption.

STRATEGY 9.2.6: *Enforce property maintenance of housing units, especially rental properties and eliminate substandard housing conditions.*

Reduce the number of sub-standard housing units (e.g., units lacking complete plumbing and units with no heating facilities).

ACTIONS AND INITIATIVES

1. Consider establishing a program for first-time home buyers that would provide capital assistance to reduce principal and closing costs. Capital assistance programs such as this are very successful in enabling low-income and very low-income residents to become homeowners. The State of Indiana has a 'First Time Home Buyer Down Payment Assistance Program' is designed to revitalize neighborhoods and restore pride by providing homeownership opportunities. This program is provided through the Homeownership Opportunity Network (HON) and assists borrowers by providing HOME program funds in the form of forgivable loans for principal reduction, down payment, and closing costs when purchasing a home. This program has been successfully implemented in the City of Gary and includes the following municipal provisions:
   - Assistance for eligible individuals and families is provided on a first-come, first-served, and one-time basis when purchasing a single-family home in the City of Gary. Applicants must provide total household and financial information prior to a formal approval for assistance.
   - Assistance amounts are determined by calculating, projecting and verifying an applicant's annual income based on the gross amount of all adult members of the household. These calculations will be based on anticipated income received during the coming twelve-

month period. Prior year tax returns and income statements must be supplied to support additional eligibility requirements.

The City should consider performing a periodic inventory of housing conditions, as permitted by funding and staffing, on a neighborhood by neighborhood basis, to identify units suitable for concentrated code enforcement, rehabilitation, demolition, or other actions to achieve a viable residential environment. The City should consider offering rehabilitation loan assistance through a local housing assistance program, cooperative ventures with non-profit groups, and/or Community Development Block Grant (CDBG) type programs to effect spot removal of blighted structures and blighting influences.

2. Consider providing a homebuyer education technical assistance workshop. In areas with a high percentage of substandard housing units, the City should consider providing property owners with consumer information and technical assistance on new housing products and their applications in order to encourage improved housing maintenance. In Gary, to apply for assistance through the First Time Home Buyer Down Payment Assistance Program, all applicants must successfully complete the Homeownership Opportunity Network Homebuyer Education Workshop. Certificates may be accepted from other HUD-certified and approved agencies (dated within 12 calendar months of application).
3. The City should consider performing a periodic inventory of housing conditions, as permitted by funding and staffing, on a neighborhood by neighborhood basis, to identify units suitable for concentrated code enforcement, rehabilitation, demolition, or other actions to achieve a viable residential environment.
4. The City should consider offering rehabilitation loan assistance through a local housing assistance program, cooperative ventures with non-profit groups, and/or Community Development Block Grant (CDBG) type programs to effect spot removal of blighted structures and blighting influences.

Seniors

Affordable, accessible, and well-located housing is central to the quality of life for people of all ages, but especially for adults aged 50 years and older. Accessibility is essential to older adults' health and safety as physical and cognitive limitations increase. Proximity of housing to stores, services, and transportation enables older adults to remain active and productive members of their communities, meet their own basic needs, and maintain social connections. The existing housing stock is inadequate to meet the escalating need for affordability, accessibility, social connectivity, and supportive services.

- High housing costs force millions of low-income older adults to sacrifice spending on other necessities including food, undermining their health and well-being.
- Much of the nation's housing inventory lacks basic accessibility features, preventing older adults with disabilities from living safely and comfortably in their homes.
- Nationally, the transportation and pedestrian infrastructure is generally ill-suited to those who cannot or choose not to drive, isolating older adults from friends and family.

America's older population is in the midst of unprecedented growth. With the aging of the large baby-boom generation and increased longevity, the 50-and over population is projected to increase about 20 percent by 2030, to 132 million. In just 15 years, one in five people will be at least aged 65. Ensuring that these older adults have the housing they need to enjoy high-quality, independent, and financially secure lives has thus taken on new urgency not only for individuals and their families, but also for the nation as a whole.

Joint Center for Housing Studies of Harvard University (2014)

– Disconnects between housing programs and the health care system put many older adults with disabilities or long-term care needs at risk of premature institutionalization.

THE CHALLENGES AHEAD

The Joint Center for Housing Studies of Harvard University recently published a report, entitled: *Housing America's Older Adults - Meeting the Needs of an Aging Population* (2014). The report reveals some alarming indicators regarding the disparities senior citizens face in finding affordable housing:

– The incidence of housing cost burdens also rise with age as income falls. As it is, however, a third of households aged 50-64 already pay excessive shares of their income for housing.

– Today, a third of adults aged 50 and over - including 37 percent of those aged 80 and over - pay more than 30 percent of their income for housing that may or may not fit their needs.

– Severely cost-burdened households aged 50-64 save significantly less for retirement.

– The typical homeowner aged 65 and over has enough wealth to cover nursing home costs for 42 months and enough non-housing wealth to last 15 months. The median older renter, in contrast, cannot afford even one month in a nursing home.

– Homeownership rates vary widely by race/ethnicity. Among adults aged 50 and over, 82 percent of whites own homes, compared with just 58 percent of blacks, 62 percent of Hispanics, and 70 percent of Asians. As the minority share of the population grows, this disparity implies that more and more older adults will be housing cost burdened and therefore have less wealth to tap to meet their needs as they age.

– Millions of older adults who develop disabilities live in homes that lack accessibility features such as no-step entry, single-floor living, extra-wide doorways and halls, accessible electrical controls and switches, and lever-style door and faucet handles. The 2011 American Housing Survey reports that just one percent of U.S. housing units have all five of these universal design features. Roughly two in five housing units in the country have either none or only one of these features.

– The majority of older adults live in low-density suburban and rural areas where it is difficult to shop, access services, or visit family and friends without using a car.[1]

Aging in place is best undertaken with preparation, including adaptations of physical space, modes of transportation, or other facets of life, in advance of physical or cognitive need.

AGING IN PLACE

The Centers for Disease Control and Prevention (CDC) defines aging in place as "the ability to live in one's own home and community safely, independently, and comfortably, regardless of age, income, or ability level." If needed, those aging in place may receive care or assistance by paid or unpaid (often family) caregivers. As gerontology literature recognizes, older residents renegotiate how - and indeed if - they can continue to stay in their homes as their preferences and circumstances (health, finances, relationships, and family and social supports) shift over time. While there is no universally accepted definition of aging in place, many researchers, advocates, and commentators point to the same list of elements needed to make remaining in one's home both possible and desirable:

– affordable, secure, and physically accessible housing;

– affordable, safe, and reliable transportation alternatives for those unable or unwilling to drive;

– opportunities to engage in recreational, learning, cultural, volunteering, and/or social experiences; and

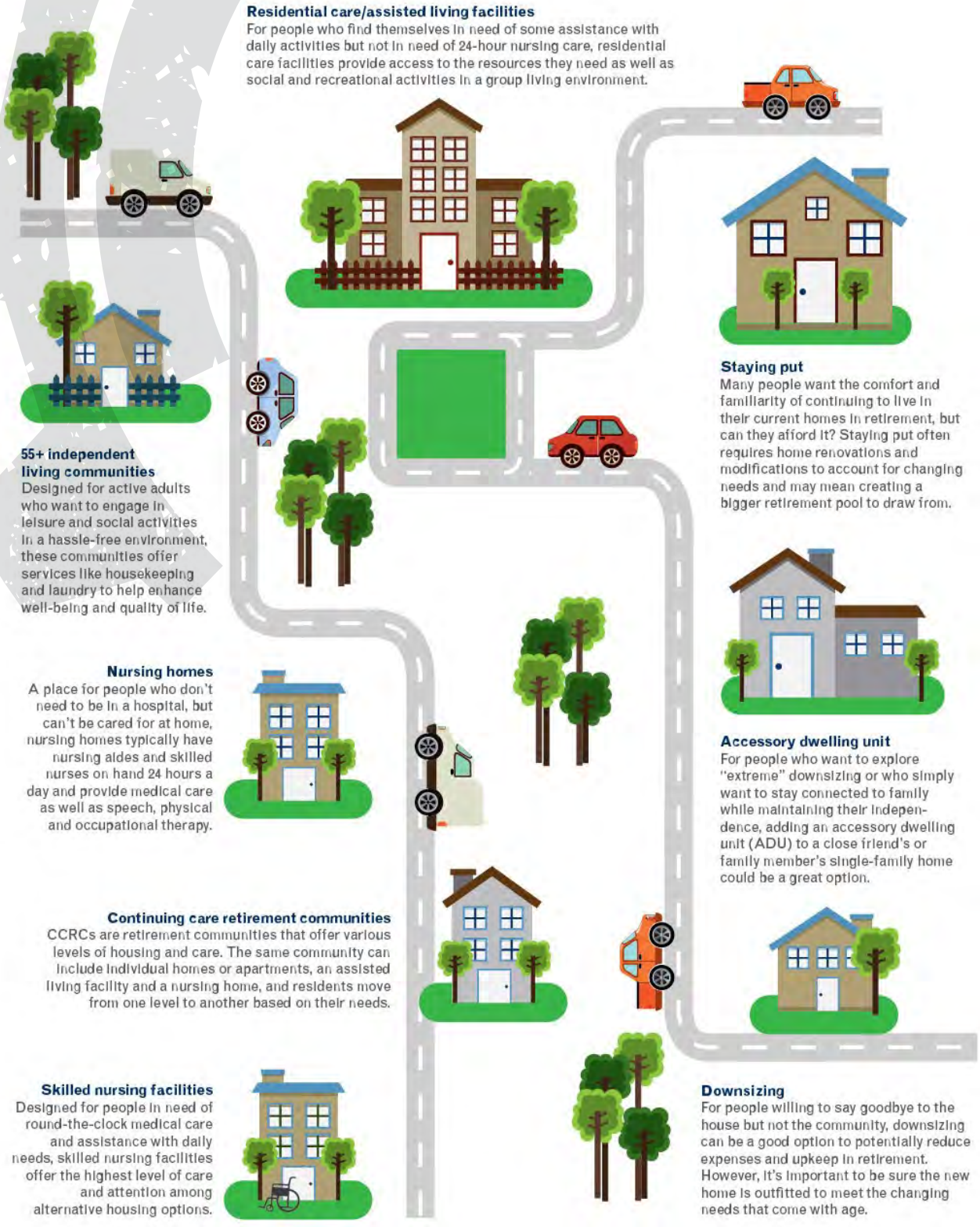
– options for in-home health care and/or assistance with activities of daily living (ADLs) if needed to preclude a move to congregate care.

Individual adults, of course, have their own set of preferences for housing and community. For example, a 2014 American Association of Retired Persons (AARP)

1 2014. Joint Center for Housing Studies of Harvard University. *Housing America's Older Adults - Meeting the Needs of an Aging Population.* Available at: http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/jchs-housing_americas_older_adults_2014.pdf

TFC Figure 34, Housing Options for Aging in Place

Source: Raymond James Wealth Solutions, *Building Competencies around Housing: Aging in Place*



survey found that most respondents give high priority to increased police presence and school improvements, but their rankings of the importance of access to various services and amenities range widely.[1]

Senior citizens living in locations without social connections, family, or other supports nearby may find themselves isolated as they become more physically vulnerable. For these reasons, it is critical that the public and private sector take steps to ensure that housing and health care systems support appropriate and cost-effective options for low-income older adults, and that communities provide housing, transportation, and service options for their older populations regardless of income.

Numerous cities and states are advancing livability principles through housing, transportation, and walkability initiatives, as well as through ordinances to promote accessibility in private homes. A broader conversation, however, is essential to help spread these initiatives so that increased numbers of older adults can benefit from them.

SUPPORTIVE HOUSING MODELS

Supportive housing encompasses a broad range of housing types, and different models are often associated with different expectations regarding size, cost, and the intensity of service delivery. The Section 202, Supportive Housing for the Elderly program provides federally-subsidized supportive housing for older adults. Tenants' rent payments are set at an affordable level, and many developments employ service coordinators to identify and connect residents with available supports.

Types of supportive housing for seniors include:

– **Assisted Living Residences** - provide private rooms or apartments for older adults and offer a level of care that can range from light "hospitality" services to the care provided by nursing facilities.

1 Housing America's Older Adults - Meeting the Needs of an Aging Population, Joint Center for Housing Studies of Harvard University.

TFC Figure 35,Example Site Plan for a Continuing Care Facility

Source: REES Associates, Pacific Plaza Continuing Care Planning Retirement Community

- **Adult Foster Care Homes** - offer services similar to assisted living residences but in smaller facilities, including single-family homes, that typically accommodate no more than six residents.
- **Continuing Care Retirement Communities** - offer several housing models on-site, enabling residents to transition from private homes to assisted living residences and nursing facilities as their needs change.
- **Congregate Housing** - provides apartment homes for older adults who are able to live independently but want hospitality-style services, such as light housekeeping.

STRATEGY 9.2.7: ***Enable Michigan City residents to age in the community by providing housing options and social support for seniors.***

ACTIONS AND INITIATIVES

1. Provide support so that older adults can age in place or age in community through a combination of affordable and accessible housing with linkages to services.
2. Continue to fund, staff, and expand upon adult day care centers, such as the Michigan City Senior Center to ensure seniors have adequate outlets for learning, promotion of health and well-being, socialization and volunteer opportunities
3. Assess feasibility of requiring all new residential construction to include certain accessibility features, and offer tax incentives and low-cost loans to help owners modify their homes to accommodate household members with disabilities.
4. Incorporate universal design principles in new and rehabilitated housing to facilitate access for aging adults.

The City of Michigan City needs to ensure that a range of services are available to older adults, including social and volunteer opportunities; education programs centered on health, finance, and housing maintenance; adult day care and meals programs; and health and wellness services. Meanwhile, Indiana Medicaid programs provide funding to enable low-income households to age in the community rather than in institutional facilities; as many are doing through Medicaid Home and Community-Based Services (HCBS) waivers. Indiana offers several Medicaid Home and Community-Based Services (HCBS) programs that target specific groups. HCBS programs allow members to live in a community setting and avoid institutional placement. To be eligible for any HCBS program, one must meet Medicaid guidelines and HCBS program-specific eligibility guidelines. HCBS programs include the following:

1. **The Aged and Disabled (AandD) Waiver** provides an alternative to nursing facility admission for adults and persons of all ages with a disability. The waiver is designed to provide services to supplement informal supports for people who would require care in a nursing facility if waiver or other supports were not available. Waiver services can be used to help people remain in their own homes, as well as assist people living in nursing facilities to return

Source: Michigan City Senior Center Facebook page

to community settings such as their own homes, apartments, assisted living or Adult Family Care.

2. **The Traumatic Brain Injury (TBI) Waiver** provides home and community-based services to individuals who, but for the provision of such services, would require institutional care. Through the use of the TBI, the Indiana Office of Medicaid Policy and Planning and the Indiana Division of Aging seek to increase availability and access to cost-effective traumatic brain injury waiver services to people who have suffered a traumatic brain injury.
3. **Community Integration and Habilitation Waiver (CIH)** provides Medicaid Home and Community-Based Services (HCBS) to participants in a range of community settings as an alternative to care in an intermediate care facility for individuals with developmental disabilities(ICF/IID) or related conditions. The goal of the CIH Waiver is to provide access to meaningful and necessary home and community-based services and supports, seeks to implement services and supports in a manner that respects the participant's personal beliefs and customs, ensures that services are cost-effective, facilitates the participant's involvement in the community where he/she lives and works, facilitates the participant's development of social relationships in his/her home and work communities, and facilitates the participants independent living.
4. **Family Supports Waiver (FSW)** provides services to participants in a range of community settings as an alternative to care in an intermediate care facility individuals with developmental disabilities(ICF/IID) or related conditions. The waiver serves persons with a developmental disability, intellectual disability or autism and who have substantial functional limitations. Participants may choose to live in their own home, family home, or community setting appropriate to their needs.
5. **Supervised Group Living (SGL)** is a residential option and alternative to waiver placements for eligible individuals with intellectual/developmental disabilities needing services. There are almost 500 SGL homes in the State of Indiana with a capacity to serve over 3,000 individuals.
6. **Adult Mental Health Habilitation Services** provides community-based opportunities for the care of adults with serious mental illness who may most benefit from keeping or learning skills to maintain a healthy safe lifestyle in the community. AMHH services are provided for individuals and their families, or groups of adult persons who are living in the community and who need help on a regular basis with serious mental illness or co-occurring mental illness and addiction disorders.

With better coordination, state and local government programs for older adults can save on costs and provide better outcomes.

STRATEGY 9.2.8: *Coordinate policies that can help older adults continue to live in their own homes as they age.*

ACTIONS AND INITIATIVES

1. Connect residents to social services through expansion of the Home and Community-Based Services Medicaid waiver program to make supportive housing a more affordable option.
2. Assist with home modifications for the elderly using a range of funding sources.
3. Assess the feasibility of creating a Michigan City chapter of Programs of All Inclusive Care for the Elderly (PACE);
4. As a result of changing demographics, the demand for housing will shift dramatically and the needs for services to help older adults age in place will grow exponentially.

STRATEGY 9.2.9: *Increase supply of housing for senior citizens, both rental and owner-occupied and enhance services for seniors.*

As discussed, as the Baby Boom generation enters retirement and as older seniors continue to live longer it will become increasing important to expand the supply of housing for seniors. The supply of affordable rental housing falls far short of the need, leaving many low-income older adults without affordable options. Currently, federally subsidized rental programs meet the needs of only about one in four eligible households regardless of age.

ACTIONS AND INITIATIVES

1. Propose amendments to the Zoning Ordinance to reduce requirements for parking (which often goes unused by senior housing residents).
2. Consider establishing a Senior Citizen Rent Increase Exemption (SCRIE) program, which would protect eligible seniors from rent increases. The program would be administered by the City's Community Development Department, which would establish income eligibility criteria.

Housing (H)

H Policy 1: Ensure that Michigan City residents have equal and unhindered access to housing regardless of race, color, religion, gender, familial status, disability, national origin, ancestry, marital status, creed or sexual orientation.

H Policy 2: Support programs and incentives that address the underlying causes of gentrification and displacement.

H Policy 3: Provide Housing Choice. Provide a variety of housing types, sizes, and densities to accommodate the needs of existing and prospective residents. This includes, but is not limited to, youth, college students, single professionals, families, empty nesters, seniors, and those of varying economic ability. Ensure there are options for convenient, affordable and dignified places to live.

H Policy 4: Utilize development regulations to reduce housing stratification and spur the development and preservation of affordable housing.

H Policy 5: Encourage new high density and age-targeted residential developments to be located in community and regional mixed use areas, or in proximity to supporting office and commercial services.

H Policy 6: Implementation of policies, design practices, and development incentives that encourage aging in place to give older residents the opportunity to stay in their community, if not their existing home, and easily access the necessary services of daily living and the other services that enable them to lead a healthy life

H Policy 7: Utilize attached single family and multi-family housing as a transition between intensive commercial/retail and office uses and single-family residential neighborhoods.

H Policy 8: Ensure Compatibility. Develop multi-family housing at a density and scale that is compatible with surrounding neighborhoods, available utilities, and roadway capacity. Larger multi-family developments should be located on sites with adequate space for off-street parking, accessory structures, adequate landscaped buffers, and recreational activity.

H Policy 9: Establish design standards and guidelines for development within areas that are planned for non-residential uses, mixed-uses, and multi-family uses to ensure high quality, compatible design within these areas. Standards and guidelines should address elements including, but not limited to, minimum lot size, building scale, building setbacks, lighting, landscaping, facade treatment, screening and fencing, signage, internal circulation, and building materials.

H Policy 10: Housing should be designed in ways that lessen the visual impact of garages and minimize the number of driveways along streets.

H Policy 11: Support higher housing densities in locations that are well connected by public transit, and are close to commercial, cultural and natural amenities.

H Policy 12: Encourage the development of low- to medium-density housing on community collectors to serve as a transition to surrounding low-density residential areas.

H Policy 13: Encourage the development of medium-density housing immediately adjacent to neighborhood commercial nodes to serve as a transition to surrounding low-density residential areas.

Multi-family Housing (MF)

MF Policy 1: Multi-family uses should not be located in large, high-density concentrations and clusters, but rather dispersed in small groupings around the city in a balanced manner that provides a mix of uses and densities.

MF Policy 2: Apartment developments should generally be no greater in size than either 30 acres or 600 units and shall be located at major thoroughfare intersections rather than between intersections (i.e., not mid-block).

MF Policy 3: Multi-family uses shall be located on only one corner of a major intersection, unless they are constructed as part of a mixed-use vertical development.

MF Policy 4: New larger, multi-family development built along key transportation corridors should be built in a "step down" fashion to achieve appropriate scale next to existing adjacent buildings in the established residential areas.

MF Policy 5: New multi-family zoning shall not be located within 1,320 feet (one-quarter mile) of any other multi-family zoning district.

MF Policy 6: Vary building orientation and massing to avoid lining up buildings along a street or property line. Building masses should vary between buildings as opposed to repeating the same building(s) throughout the site. Building variations should avoid lineal unbroken building lines. Utilize varied rooflines to provide interest. Building should not repeat the same rooflines (peaks). Use color and clusters of buildings to create distinct areas.

MF Policy 7: Balcony and patio locations oriented to common open space as opposed to parking lots and streets. Opportunities to capture views or vistas beyond the parking lot and street should be considered based upon a specific development.

MF Policy 8: Site elements such as electrical transformers and other ground mounted utility equipment, storage lockers, walled and gated garbage containers, gazebos, should be designed, constructed of materials, and/or painted to match the building to blend in with the project architecture or landscaping.

MF Policy 9: Subject to emergency access considerations, arrange parking in small courts near building groups as opposed to rows of parking surrounding the outside of the property. Landscaped areas and bufferyards should be 30 feet to 50 feet wide when parking is located along streets. Parking lot lighting should consist of full cutoff fixtures.

MF Policy 10: Carport structures should be constructed of durable materials that are compatible with the design quality of the principal buildings. Structures should be placed and designed to promote ease of use with a safety factor to discourage unintentional damage. Details should be submitted for structural integrity and colors. The fascia should be constructed to hang 6"-8" below the canopy.[1]

1 Chandler, Arizona, Planning and Zoning Policies. Available at: http://www.chandleraz.gov/default.aspx?pageid=122#MultifamilyHousingDevelopmentPolicy

On Neighborhoods

Providing quality housing and neighborhoods is fundamental to creating a desirable place to live. Neighborhoods are the foundation of any community as they are places where residents live, recreate, interact, and call home. When well-designed and protected, neighborhoods are a source of community pride. When poorly designed, marketed with few amenities, or allowed to decline over time, they detract from the appeal of the entire community. The condition, availability, and choice of housing are important to the integrity of neighborhoods and to the quality of life of residents. Sustainable, diverse, attractive, and vibrant neighborhoods enhance economic development, improve livability, and maintain property values and the City's tax base.

This is where the *Housing and Neighborhoods* element of the Comprehensive Plan links back to all other plan elements in terms of the interrelationship of physical factors like neighborhood design and character, buffering of residential areas from incompatible uses and development intensities, traffic calming, public transportation, convenient and safe circulation options for pedestrians and bicyclists, parks and recreational amenities, and overall community aesthetics. Attentiveness to neighborhood conditions by individual homeowners is essential to maintain residential stability over time. However, as some neighborhoods age, private covenants eventually lapse, and rental properties proliferate. Careful enforcement of City building and property maintenance standards can make all the difference in preventing a gradual erosion in conditions that may accelerate into blight if left unchecked.

Livable Neighborhoods

As previously discussed, the suburban development that occurred in Michigan City during the mid- to late-20th century represents a significant departure from the established town settlement pattern near the core of the city. Most new residential areas are developed as enclaves with several subdivisions and cul-de-sacs with similar houses and similar sized lots or groups of apartments. Moreover, the lack of connectivity of new development to other new and existing areas requires a dependency on automobiles for all transportation needs to shopping, employment and education. New housing and subdivision development needs to reflect the growing demand for neighborhood-style patterns that are once again integrated into the existing fabric of the community. Through innovative neighborhood design and planning, new development should offer ease of access and connectivity, accessibility to local services, transportation options, resource preservation, and provide a sense of place and societal wellbeing.

GOAL 10.0:

Complete, walkable and bike-able neighborhoods with safe and convenient access to the amenities, resources, and services needed in daily life.

OBJECTIVE 10.1: Support reinvestment in private and public property to enhance the aesthetics of the neighborhood and in turn increase the economic value and the quality of life of the neighborhood.

STRATEGY 10.1.1: ***Improve the quality of the City's housing stock and neighborhoods.***

ACTIONS AND INITIATIVES

1. Promote and curb appeal of neighborhoods, with consideration of elements such as lighting, trees and boulevards, streets and sidewalks, and well-maintained structures.
2. Encourage healthy and safe housing that provides high indoor air quality, noise protection, and is free of hazardous materials and conditions.
3. Reduce slum and blight conditions by promptly addressing vacant structures, strategically razing blighted buildings, and promoting the use of high quality materials in new construction.
4. Create public places that support and encourage neighborhood events, activities, and communication.
5. Expand opportunities for temporary and permanent installations of art of all types in neighborhoods.

STRATEGY 10.1.2: ***Increase density in and around the designated Business Development Centers.***

ACTIONS AND INITIATIVES

1. Encourage and incent live/work opportunities.

The Neighborhood Unit

The idea that neighborhoods need to be walkable communities that are connected and have access to basic services and amenities is not a new idea. In 1929 a planner in the New York City Planning Department, Clarence Perry introduced a concept that he referred to as "The Neighborhood Unit." The corresponding image, *Perry's Plan for a Neighborhood Unit*, is a sketch published by Perry in 1929 illustrating the relationships between the residential components of a neighborhood and the uses that could easily be traversed to and from by foot. Perry utilized the five-minute walk to define walking distances from residential to non-residential components, in particular Perry was very concerned about the walkability to and from schools.

Perry's intentions were calibrated to the human foot, not the automobile. Perry's Neighborhood Unit was conceptualized prior to an automobile-based society (1920s). His notes on the plan refer to walk distances, streets and a mix of uses. Note that there also is a fairly connected network of streets, another modern-day casualty from the road classification system. There are no cul-de-sacs in the diagram above or many intersecting streets on highways and arterials. With today's road classification standards, intersections with this frequency are not permitted on arterials, let alone highways. Therefore, *The Modern Day Neighborhood Unit*, provides a more realistic interpretation of the neighborhood unit.

Perry's Plan for a Neighborhood Unit

The Modern Day Neighborhood Unit

Source: Farr Associates

The Five Minute Walk:

A standard that is best described as the average distance that a pedestrian is willing to walk before opting to drive.

Promoting Quality Neighborhood Development

As new developments appear east and south of town, the City of Michigan City is presented with opportunities to guide neighborhood design. As much as these residential and mixed-use projects are a product of market demand, they are also influenced by the City's regulatory oversight. Most new residential areas are developed as independent subdivisions rather than as dynamic neighborhoods that are connected to other uses and destinations. Based on citizen concerns and comments about existing neighborhoods and development, it is important to use regulations and incentives to enhance future housing and site design. Such efforts, in conjunction with investments in infrastructure, parks, and public education, will make the City more attractive for future residential development.

OBJECTIVE 10.2: Increase the involvement of residents in their neighborhoods. Revitalize neighborhoods through the collaborative involvement of residents, businesses and government to determine the vision and priorities of the individual neighborhoods.

STRATEGY 10.2.1: ***Formalize the City's neighborhood planning program within the Planning and Redevelopment Department.***

In recent decades Americans have been focusing too much on the house itself and too little on the neighborhood . . . By reconsidering the design of our houses, we might begin again to create walkable, stimulating, more affordable neighborhoods where sociable pleasures are always in reach . . .

Source: Philip Langdon, A Better Place to Live, Charter of the New Urbanism (2000)

The City's Planning Department should consider formalizing a neighborhood planning program that incorporates affordable housing and low-income housing strategies and projects into its recommendations. Similar to the plan the City developed for Midtown, a neighborhood plan is the best scale for creating an inventory of existing affordable housing which should be preserved and the identification of potential redevelopment opportunities which would be the best sites for low-income, affordable and mixed-income projects. For those neighborhoods planning for significant growth, budget allocations and capital projects should support increasing transit accessibility, affordability and other neighborhood amenities like libraries, parks and schools.

ACTIONS AND INITIATIVES

1. Consider assigning a staff member from the City's Planning and Redevelopment Department or Community Development Department to be a liaison to neighborhood associations.

STRATEGY 10.2.2: ***Consider expanding the number of neighborhood associations throughout Michigan City.***

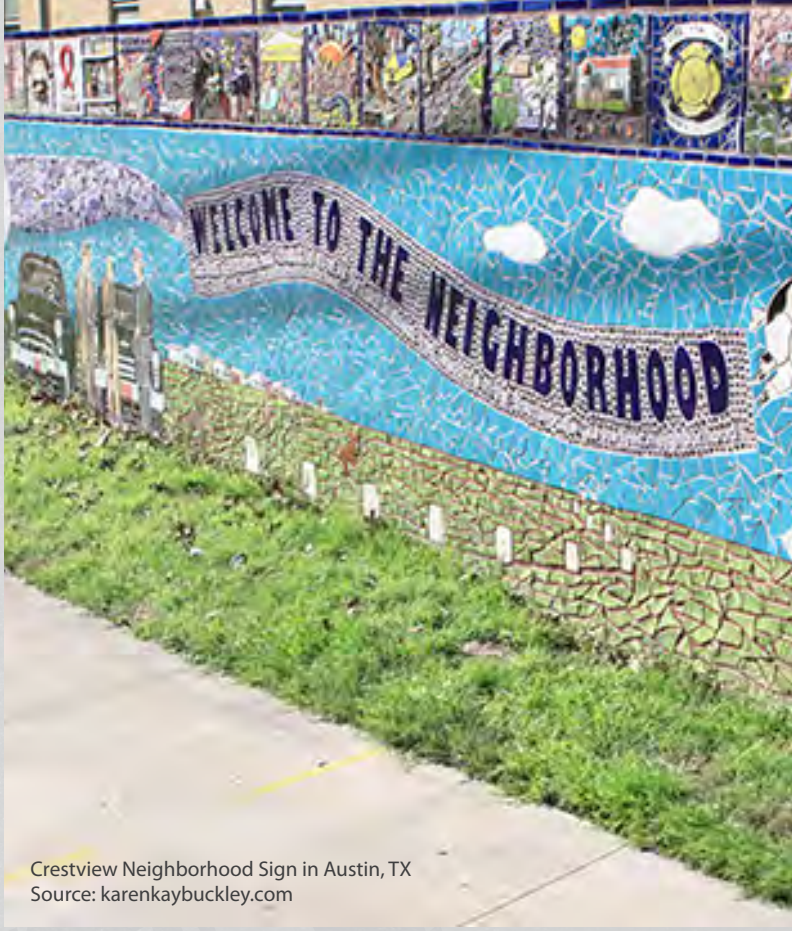
A neighborhood association is a group of residents who meet regularly to accomplish neighborhood goals. The association may include homeowners, renters, apartment residents, business owners, school and church officials, and members of non-profit organizations. Depending on the organizational goals, meetings may be held twice a year, once a quarter or every month. Neighborhood associations facilitate communication between residents and local government to support change, help organize volunteers for community projects, and organize improvement efforts. A neighborhood association is one of the best ways to build relationships between neighbors. Neighborhood associations help identify challenges and concerns, support change and improvement efforts, help resolve conflicts, provide volunteers for community initiatives, represent the neighborhood as a whole to elected officials and find resources to make the neighborhood a better place to live. Some additional benefits of having an organized association include:

- Facilitate achieving common neighborhood goals;
- Provide the neighborhood with a common voice and an effective means of communicating with government officials and other instrumental groups;
- Empowered neighborhoods can have input in events happening in their area. Members take part in the decision making that affects their neighborhoods;

Sidebar

What is the difference between a Neighborhood and a Subdivision?

Is a neighborhood different from a subdivision, or do these terms describe the same thing? The American Planning Association (APA) defines "neighborhood" in a variety of ways, including "a sub area of the city in which the residents share a common identity focused around a school, park, community business center, or other feature;" and "an area of a community with characteristics that distinguish it from other community areas and that may include schools, or social clubs, or boundaries defined by physical barriers, such as major highways and railroads, or natural features, such as rivers."[1] The APA defines "subdivision" as "the process of laying out a parcel of raw land into lots, blocks, streets, and public areas. In most states, a subdivision is defined as the division of a tract of land into five or more lots."[2] The latter definition suggests an action – to subdivide, that results in an assemblage of smaller units; compared to the former definitions of neighborhood which infer a place that is composed of key characteristics.



Crestview Neighborhood Sign in Austin, TX
Source: karenkaybuckley.com

Do all neighborhoods begin as subdivisions before they are endowed with some degree of social meaning and values; suggesting an evolutionary process over time? Hence the description that neighborhoods are perceived as being older, compared to subdivisions which are new. Or is the distinction between terms driven more by density, whereby neighborhoods are urban, and subdivisions are suburban? Is there a difference in design, whereby neighborhoods are interconnected to the surrounding area through a grid; compared to subdivisions which tend to end in cul-de-sacs. Neighborhoods feature small lots and pocket parks, compared to subdivisions which offer abundant green in the form of huge private front and back yards.

Do neighborhoods consist of tree-lined streets and sidewalks with picket fences, where everyone knows each other and shares the same world view, compared to subdivisions which consist of bland, cookie-cutter plots of land and endless rows of houses, where people don't know their "neighbors?" Though it is easy to draw the conclusion that subdivisions and neighborhoods have different cultural backgrounds, it's nearly impossible to learn where the semantic territory of one begins and the other ends.

These points are obvious technicolor generalities, and most of them bespeak a tenor that tacitly sneers upon the subdivision. This line-in-the-sand dichotomy does not escape the radar of those who value urban living, many of whom are seeking something that fits the above rigid standards for a neighborhood. If it lacks a certain *je ne sais quoi*, somehow it isn't a "real" neighborhood. Communities without an urban scale, old housing, or walkability far too often suffer the broad dismissal of lacking neighborhood-ness (and thus being a mere subdivision) by the lovers of cities. Meanwhile, those who live in the suburban developments that city-lovers deride often quietly avoid the "subdivision" appellation as though it were a pejorative. People are far more likely to promote their community as a real neighborhood rather than a subdivision, and virtually no civic groups have referred to themselves as a "Subdivision Association." The term carries a vague whiff of exurban blandness. In short, our cultural perceptions often cause us to infer that neighborhoods are to subdivisions what main streets are to strip malls.[3]

1 Davidson, Michael, and Fay Dolnick, 1999. A Glossary of Zoning, Development and Planning Terms. American Planning Association, Planning Advisory Service Report No. 491-492.

2 American Dirt, June 03, 2010. "There goes the neighborhood, Part 1: Separating the Typologies." http://dirtamericana.blogspot.com/2010/06/there-goes-neighborhood-part-i.html.

3 American Dirt, June 03, 2010. "There goes the neighborhood, Part 1: Separating the Typologies." http://dirtamericana.blogspot.com/2010/06/there-goes-neighborhood-part-i.html.

– Organize and help members work for preservation and improvements in their neighborhood;
– Planning and holding social activities for the neighborhood; and
– Organizing neighborhood improvement projects.

The City currently has 11 neighborhood associations, including the Main Street Association.

ACTIONS AND INITIATIVES

1. Consider establishing neighborhood associations within the following established neighborhoods around town:
   - St. Stans / Midtown
   - Marsh
   - Queens
   - Southpark / Jefferson
   - Edgewood
2. Recruit neighborhood associations to carry out specific responsibilities, including:
   - sidewalk inventories, including sidewalk location, condition, and connectivity (refer to Strategy 7.6.2, page 1.177);
   - street tree inventories, including type, size, and condition (work with City Forester);
   - street light inventories;
   - identifying drainage issues;
   - identifying neighborhood park enhancements;
   - identifying nuisance areas that degrade neighborhood character;
   - public lands (parcels, easements, rights-of-way) and potential locations for neighborhood gardens;
   - Crime Prevention Through Environmental Design (CPTED) analyses of potentially unsafe conditions, including vacant houses and blighted areas (work with Police Department to receive initial training; refer to Strategy 10.3.3, page 1.275).
3. Work with neighborhood associations to develop neighborhood enhancement plans, including gateway /entrance treatments and other means of forging neighborhood identity (refer to Strategy 10.3.2, page 1.272).

STRATEGY 10.2.3: *Work with developers to build livable and sustainable neighborhoods.*

Create new and enhance existing neighborhoods, emphasizing connectivity, walkability, a variety of land uses, and access to services and institutional uses. Transforming existing residential subdivisions into a more sustainable development pattern is difficult since they were not designed or built for flexibility. Some options for adapting existing subdivisions for improved livability include creating a network of connecting streets; adding parks and open space; constructing sidewalks; retrofitting wide roads with bike lanes; and assuring that needed services are located nearby. These changes will allow residents to use multiple modes of transportation and not rely exclusively on the automobile. Sites recommended for higher densities are typically along major roads where they will have access to current or future transit and are located near existing or future commercial areas. As with more urban neighborhoods, proposed higher-density residential developments are sometimes opposed by residents of nearby single-family residential areas. Mixed-use developments are recommended in activity centers.

ACTIONS AND INITIATIVES

1. Make existing and new suburban neighborhoods pedestrian- and bicycle-friendly by developing

Seven Essential Neighborhood Planning Processes

– *Start with Community Building*
– *Foster Leadership*
– *Plan for Implementation*
– *Take Advantage of the Available Tools and Resources*
– *Be Financially Realistic*
– *Communicate the Planning Process Effectively*
– *Make the Neighborhood's Social Capital Grow*

Source: "Involving the Community in Neighborhood Planning." Deborah Meyerson. Urban Land Institute. 2004.

interconnected street networks that include sidewalks and bike lanes. Study ways to connect contiguous neighborhoods to one another and revise subdivision requirements as necessary.

2. At the time of platting, require public access easements that provide for direct linkages and connectivity between developments and to recreational trails, parks, schools, commercial and civic institutions.
3. Adopt a street connectivity index that would increase the number of street connections in a neighborhood and improve directness of routes. The purpose of connectivity requirements would be to create multiple, alternate routes for automobiles and create more route options for people on foot and bicycles. Features of the ordinance should include:
   - an appropriate connectivity index (street links divided by street nodes);
   - requirements for connecting local and collector streets to adjacent developments to ensure a minimum level of external connectivity; and
   - requirements to establish pedestrian routes between land uses. This is particularly important where natural features make it impractical to connect streets.
   - Encourage the development of open spaces, parks and greenways that link existing and new subdivisions.
4. Incent more intense, mixed-use development to locate in activity centers and be connected to residential areas.
5. Develop and encourage the use of neighborhood design templates illustrating types of gateways, gathering places, open spaces, and in some cases, services for neighborhood residents.
6. Require open space ratios for residential districts to allow sufficient common areas to effectively separate and buffer incompatible adjacent uses. Provide density bonuses to offset the transition area.
7. Require a perimeter bufferyard around single family neighborhoods – regardless of the surrounding land use. A portion of the required open space would be used to meet this standard. The scale of the bufferyard would be commensurate with the intensity of the adjacent use. Arterial streets would be factored-in to ensure sufficient visual protection and to mitigate noise and other impacts.
8. Require sidewalks to be constructed on both sides of the street in all new subdivisions.

STRATEGY 10.2.4: *Create mixed-use neighborhoods with local small retail businesses and basic services within walking distance of housing.*

To reduce automobile trips, locate mixed-use, commercial areas within 1/4 to 1/2 mile radius of neighborhood edges.

ACTIONS AND INITIATIVES

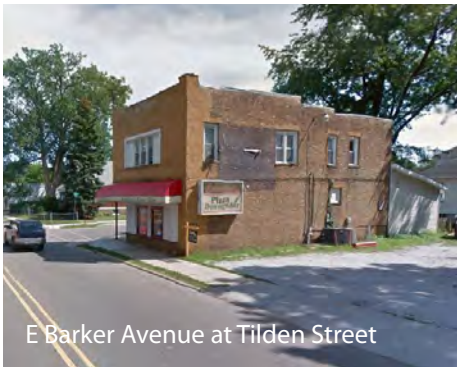
1. Use special care to plan uses at the edges of high-density commercial centers that are compatible in scale and access with existing neighborhoods.
2. Encourage shared parking facilities in high-density, transit oriented, mixed-use developments to reduce parking and environmental costs in new housing construction.
3. Consider revising / amending the Michigan City Zoning Ordinance Neighborhood Commercial (B1) district to incorporate provisions to enable small-scale (20,000-30,000 square foot parcels) neighborhood commercial/retail development within and/or adjacent to residential neighborhoods.

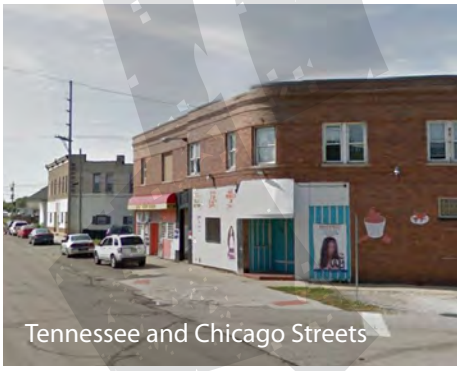
   As depicted in TFC Figure 36, *Neighborhood Commercial Examples* and TFC Map 19, *Neighborhood Commercial Preservation*, several of Michigan City's neighborhoods contain small commercial establishments. Significantly, most are "Mom and Pop" type corner stores. The building footprint typically takes-up the majority of the parcel. Parking is either on-street, in front of the building; relegated to a small lot to the side of the building, if there is room; or off-site. Buildings are typically two stories (formerly with residential on the second floor, or maybe storage), and constructed of brick. This is a building typology that should be perpetuated throughout the City, located on collector streets that enframe the edges of neighborhoods. Many of these stores are vacant, as they are considered non-conforming, due to lack of adequate parking. However, the stores are typically located in areas where the business owner could rely on pedestrian foot traffic.

   Currently, the B1 zoning district includes auto-urban commercial that typically occurs in strip centers along minor arterial commercial corridors, such as S. Franklin Street, or commercial centers such as Al's

TFC Figure 36, Neighborhood Commercial Examples
Source: Kendig Keast Collaborative and Google Maps Streetview

Lafayette and E 10th Streets


E Barker Avenue at Tilden Street


Tennessee and Chicago Streets

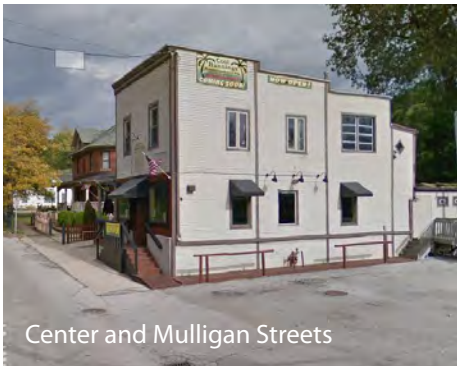
W Ripley and Ohio Streets

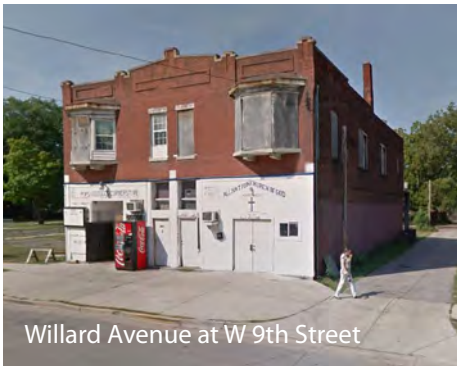
Elston Street and W Barker Avenue

Ohio and W Garfield Streets

W 9th Street at Manhattan Street

Wabash Street and W Barker Avenue


Center and Mulligan Streets


Willard Avenue at W 9th Street

Chicago Street at Western Avenue

LEGEND

- City Limits
- Neighborhoods and Subdivisions

Neighborhood Commercial Preservation Parcels

- Built Occupied
- Built Vacant
- Vacant Land
- 300 foot Radius minimum distance to parking areas

Zoning of Associated Parcels within a 500 ft Radius

- Residential
- Commercial
- Office

Lake Michigan

Sheridan Beach
Beachwalk
Lake Hills
Washington Park/ Hungry Hollow
Canada
CBD
Elston Grove
Memorial
Pottawattamie Park
Lakeland
Westside
Near Westside
Marsh
St. Stans/ Midtown
Midtown West
Greenwood
Queens
Eastport
Walker Street Playground
Ridgeland Park
Davidson Manor
Beechwood
White Oak Manor
Gardena Park
Old Greenwood
Southpark / Jefferson
Forest Manor / Knapp
Southwood
Edgewood
Hawthorne Park
Lakeside Glen
Edgewood Forest
Southshore Acres
Village Green
Barker Woods

Washington Park
Canada Park
Millennium Plaza
Charles R. Wescott Park
Hansen Park
Winding Creek Cove Park
Krueger Memorial Park
Friendship Botanic Gardens
Pottawattomie Country Club
Karwick Nature Park
Water Tower Park
Pullman Field
Joe Hawkins Memorial Park
Indiana Dunes National Lakeshore
Gill Field
Zilla Park
Ames Field
Barker Woods Nature Preserve

Client: City of Michican City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

MOMENTUM: MICHIGAN CITY 2040

THE FUTURE CITY

TFC Map 19, Neighborhood Commercial Preservation

0 750 1,500 3,000 Feet

ADOPTED November 20, 2018

Grocery just west of N. Karwick Road. While adjacent neighborhoods rely on this type of commercial/ retail development, it is not the same scale as the corner store type neighborhood commercial.

The objective is to stimulate small business, entrepreneurial activity; increase convenience through promoting mixed-use, walkable, neighborhood environments; reduce automobile traffic; and develop a building typology that references Michigan City's heritage, while providing an additional residential dwelling type.

STRATEGY 10.2.5: *Create Neighborhood Conservation Districts for Established Neighborhoods.*

The purpose and intent of Neighborhood Conservation districts (NC) is to create zoning and subdivision regulations that most closely mirror the existing land use form and character of what is currently on the ground. This type of zoning district is designed for established neighborhoods that want to maintain their character and do not expect substantial growth within the neighborhood area due to little or no available developable land. The theory behind this concept is to preserve the existing neighborhood as it is for the future. Neighborhoods that are happy with their current form and character are key candidates for this type of zoning. Neighborhoods interested in redevelopment do not fall into this category. Michigan City is a community that has many established neighborhoods, that would be good candidates for a NC district.

Neighborhood Conservation zoning districts can be established as a base district. However this could also be done through an overlay zoning process. The advantages of using the overlay zoning concept include not having to rezone the base district which would most likely require a lengthy public review process. If one did however need to go through the public review process, it is likely that there would not be substantial resistance from the public because each zone would be geared to maintain its current form.

In order to effectively identify neighborhoods to be zoned as NC, it is recommended that the City convene a community meeting to determine whether residents would prefer their neighborhoods to be given this structure. There are several neighborhoods within Michigan City that currently fit the profile for being an NC district. Additionally, with the City's future growth more neighborhoods will develop within the City limits that will be ready for this status. For this reason the designation of NC districts should always be an ongoing process after the completion of the initial districts. Depending upon the specific neighborhoods that are designated to be an NC district, it is possible that there will need to be the creation of sub-districts within the overall NC district in order to properly capture the distinct character differences between different areas.

ACTIONS AND INITIATIVES

1. Consider revising / amending the Michigan City Joint Zoning Ordinance (Appendix C) to incorporate Neighborhood Conservation (NC) districts for established neighborhoods which are not anticipated to undergo significant gentrification.
2. Utilize TEC Map 35: *Neighborhoods and Subdivisions* to begin considering likely NC districts.
3. Reflect a suburban character type, e.g. suburban commercial, for nonresidential development adjacent to low-density neighborhoods. Incorporate suburban design standards to ensure improved compatibility, such as:
    - comparable building heights or, alternatively, performance standards allowing increased height on larger parcels with increased separation and open space requirements;
    - building design standards relating to roof type and material, wall materials and colors, and architecture that is "residential" in massing, character and appearance;
    - floor area ratios to control building bulk and scale;
    - site design standards relating to the placement of parking, material storage, and service uses;
    - environmental standards for noise, lighting, debris, etc.

OBJECTIVE 10.3: Promote compatible new development and redevelopment through architecture, design and neighborhood amenities that add to the quality of the neighborhood.

NEIGHBORHOOD INTEGRITY

Established and mature neighborhoods often lack the size, design, and amenities of newer residential developments. However, older neighborhoods offer intangibles such as history, material culture, and often, a stronger sense of place and community. In Michigan City, some older neighborhoods have

Mueller Community, Austin, TX

Mueller is a new urbanist community in Austin, Texas. Austin's municipal airport, is been redeveloped into a mixed-use community with four mixed-use residential neighborhoods organized around and within convenient walking distance of the Town Center. The 4,900 homes cover a wide range of building types, owned and rented, that foster a population with diverse demographic and economic characteristics. At least 25 percent of all the homes for sale and for rent at Mueller will be offered as part of the Mueller Affordable Homes Program. Each neighborhood contains a park as a focal point with resident-serving amenities and with direct visual and pedestrian linkages to the Town Center. There are approximately 140 acres of public open space and 13 miles of hike and bike paths and lanes. The Mueller Town Center includes shops, plazas and live/work space, and includes 650,000 square feet of retail space. Mueller is home to nearly 10,000 people as well as major medical employers like Dell Children's Hospital, The University of Texas at Austin's Dell Pediatric Research Institute, Seton Headquarters, and the Ronald McDonald House.

Mueller is the first Texas community to be certified through the USGBC LEED for Neighborhood Development program, achieving a silver designation in 2009.

illustrative Plan of Mueller Development

been well-maintained, while many others require infill development, infrastructure improvements (streets, sidewalks, street lights, drainage), and further revitalization efforts. While the impacts of history, neglect due to poverty, and inappropriate surrounding land uses may make recovery difficult for some neighborhoods, most offer an opportunity for renewal and long-term viability.

STRATEGY 10.3.1: *Promote opportunities for neighborhood improvements and housing stock rehabilitation.*

ACTIONS AND INITIATIVES

1. Incent redevelopment in target areas through a tax deferment program that rewards infill redevelopment in Michigan City neighborhoods. Such a program could target lots that have recently demolished structures so that those lots are put back onto the market and tax rolls.
2. Form a target-area capital investment program focused on infrastructure improvements within at-risk neighborhoods. The purpose of this program is to provide a dedicated source of annual funding for use in making improvements and leveraging private reinvestment through rehabilitation, redevelopment, building additions, and/or infill development.
3. Focus on park and recreation improvements as a means for elevating neighborhood viability. In concert with the *Parks, Recreation and Open Space* element of the Comprehensive Plan, highlight the importance of clean, safe, well-maintained, and vibrant neighborhood parks as an anchor for strong, established neighborhoods where residents and young people use public spaces and interact on evenings and weekends. Another significant neighborhood-scale open space amenity is the creation of neighborhood gardens, which can be located in existing parks or as a temporary use on vacant lots.
4. Pursue alternative code enforcement methods in an endeavor to be more proactive and ensure positive outcomes. Consider use of an advocacy program to aid in code compliance rather than citing non-compliant property owners. A key element may be the cross-training of enforcement advocacy officers in conflict management/resolution.

STRATEGY 10.3.2: *Enhance neighborhood identity through edge and perimeter treatment.*

Provide neighborhood identity and pride through special street signage and/or potential installation of small monument signs and landscaping at entries to older neighborhoods that have never had these identity features.

ACTIONS AND INITIATIVES

1. Implement attractive gateway signage and landscape compositions at principal neighborhood entrances.

TFC Figure 37, Neighborhood Signage

Neighborhood and special district signage enhancements, Houston, TX.

"Jandoor Gardens" neighborhood entrance feature, Houston, TX.

2. As Michigan City's Engineering Department replaces street identification signage, install decorative signage to distinguish streets within particular neighborhoods from streets outside of neighborhoods.

STRATEGY 10.3.3: *Promote neighborhood safety.*

ACTIONS AND INITIATIVES

1. Apply crime prevention through environmental design (CPTED) principles to both public and private development projects. Encourage land use arrangements and street patterns that provide more eyes on the street.
2. Encourage site layouts and building designs that encourage proprietary attitudes and natural surveillance over shared and public spaces.
3. As part of the Michigan City Police Department's Neighborhood Watch program, initiate and provide technical guidance to a City-wide, "Map Your Neighborhood" program focused on identifying and mapping areas within neighborhoods that are conducive to crime that may be addressed through implementation of crime prevention through environmental design (CPTED) best practices. In light of the initial success of this program, there should be an effort to further build upon its work and expand the program to other neighborhoods. Through the organization and success of this program there may be follow up opportunities for further neighborhood planning and technical guidance (refer to Strategy 9.2.4).

HOW DO WE DETERMINE WALKABILITY AND IDEAL NEIGHBORHOOD SIZE TODAY?

The Congress for the New Urbanism (CNU) and the U.S. Green Building Council (USGBC) LEED for Neighborhood Development (LEED ND) program reaffirms Perry's theory of neighborhood design in terms of walk distances and amenities (see USGBC LEED ND Sustainable Neighborhood Development Checklist and LEED ND: walking distance to basic services in a neighborhood sidebars). Moreover, LEED ND standards use 1/4 and 1/2 mile walk distances (approximate five to ten minute walk times) to destinations (services, transit stops, civic, parks, and schools) as a standard for walkability. Today, a Web-based software program, Walk Score, rates cities on how walkable they are; ranging from "Walker's Paradise," to denote a very walkable environment, to "Car-Dependent." This online tool is for people to assess whether they want to live or visit a place based on its degree of walkability.

STRATEGY 10.3.4: *Ensure safe routes to schools from Michigan City's neighborhoods.*

Safe Routes to School programs consist of efforts by parents, schools, community leaders, and local and state governments to improve the health and well-being of children by enabling and encouraging them to walk and bicycle to school.

In 2009, 13 percent of children five to 14 years of age walked or bicycled to school, compared with 48 percent of children in 1969. In 1969, 41 percent of children in grades K–8 lived within one mile of school; 89 percent of these children usually walked or bicycled to school. In 2009, 31 percent of children in grades K–8 lived within one mile of school; 35 percent of these children usually walked or bicycled to school.[1] Reduced physical activity rates are associated with obesity and chronic disease, problems that disproportionately affect low-income and minority children. When students are able to walk or bike to school, they are more likely to get the recommended 60 minutes of daily physical activity, which can help reduce child obesity and related health issues.[1]

ACTIONS AND INITIATIVES

1. Analyze the relationship and proximity of Michigan City's public and private schools relative to the City's neighborhoods. Determine the routes and degree to which children can walk and/or cycle safely to and from school.
2. Inventory the presence and condition of pedestrian facilities, including sidewalks, handicapped ramps, on-street bike lanes, lighting.

STRATEGY 10.3.5: *Promote restoration activities within Michigan City's historic neighborhoods.*

ACTIONS AND INITIATIVES

1. Continue to encourage restoration of residential buildings within the City's Elston Grove Historic District and other historically significant neighborhoods according to the U.S. Secretary of Interior's Standards for Rehabilitation.

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1 National Center for Safe Routes to School. The Decline of Walking and Bicycling. http://guide.saferoutesinfo.org/introduction/the_decline_of_walking_and_bicycling.cfm. Accessed 2018.

Walk Score®

A neighborhood's walkability plays an important role in a community's physical health and the strength of its social ties. A walkable environment connects residents to basic services such as housing, retail, entertainments, parks and open space, and ideally office space within a quarter-mile radius. Pedestrian-friendly land use patterns and interconnected pathways result in safe connections among community amenities, and ultimately, improve residents' quality of life.

Walk Score® is an online assessment tool relied on to evaluate the walkability of neighborhoods, districts, and cities across the country. According to the creators of Walk Score, the mapping software awards points based on the distance to the closest amenity in each category. The maximum number of points is awarded to amenities 1/4 mile away and declines as the distance approaches one mile—no points are awarded for amenities further than one mile. Cities are scored from 0–100. Similar to LEED ND's "diverse uses," Walk Score® uses nine pedestrian-friendly amenities, including grocery stores, restaurants, parks, and schools. As seen by the respective scores, Michigan City ranks squarely with its comparison communities as a car-dependent city.

Comparison Cities	Walk Score®
Michigan City, IN	**37, Car-Dependent**
Bay City, MI	**50, Somewhat Walkable**
Duluth, MN	**34, Car-Dependent**
Holland, MI	**43, Car-Dependent**
Lorain, OH	**36, Car-Dependent**
Marquette, MI	**47, Car-Dependent**
Muskegon, MI	**43, Car-Dependent**
Sheboygan, WI	**52, Somewhat Walkable**

90 - 100	**Walker's Paradise**
	Daily errands do not require a car
70 - 89	**Very Walkable**
	Most errands can be accomplished on foot
50 - 69	**Somewhat Walkable**
	Some errands can be accomplished on foot
25 - 49	**Car-Dependent**
	Most errands require a car
0 - 24	**Car-Dependent**
	Almost all errands require a car

Source: https://www.walkscore.com/

Crime Prevention Through Environmental Design (CPTED)

Crime Prevention Through Environmental Design (CPTED) is defined as a multi-disciplinary approach intended to deter criminal behavior through environmental design and urban design methods and foster positive social interactions.

In the 1970s C. Jeffery Ray, a criminologist formally introduced the concept of CPTED and his work was the foundation of the CPTED guidelines. Later, in 1996, Oscar Newman conducted studies that established a definitive connection between crime and the built environment. Through his work he came up with the term 'defensible space' and wrote the book *Design Guidelines for Creating Defensible Space*. He defines 'defensible space' as "a residential environment whose physical characteristics—building layout and site plan—function to allow inhabitants themselves to become key agents in ensuring their security."

The table below highlights the ten key principles of CPTED. The key principles cover natural and passive strategies like streetscape features, landscape design, maintenance, and community involvement creates a more desirable place to live and a better quality of life, increasing pedestrian activity and the number of people utilizing the public realm, all while improving safety, reducing the fear of crime and the need for constant and strong police presence.

Source: http://www.metrolinx.com/mobilityhubs/en/search/safetysecurity.aspx

TEN KEY COMMUNITY CPTED PRINCIPLES

Natural Surveillance	Natural Access Control	Territorial Reinforcement	Physical Maintenance	Order Maintenance
The design and placement of physical features to maximize visibility and surveillance.	The physical guidance of people and vehicles.	The use of physical attributes to delineate space and express a positive sense of ownership.	The repair, replacement, and general upkeep of a space, building, or area.	The attention to minor violations and reduction of opportunities for inappropriate behavior.
Activity Support	**Social Capital**	**Land Use and Community design**	**Target hardening**	**Natural Imperatives**
The planning and placement of safe activities.	The social trust, norms, and networks people draw upon to solve common problems, foster civic engagement, and discourage inappropriate behaviors.	The distribution, location, and amount of land for various uses; their density and intensity; and the design elements, strategies, and overall character of a planning area.	The making of potential targets resistant to criminal attack.	Ensuring access to necessary goods and services including natural light, clean air and water, healthy foods, physical activity, employment, and housing.

Source: FEMA 430, Site and Urban Design for Security: Guidance against Potential Terrorist Attacks (2007) Appendix A Defensible Space and CPTED: Origins and Applications , and APA Quick Notes Community CPTED, https://www.planning.org/pas/quicknotes/open/pdf/QN42.pdf

STRATEGY 10.3.6: ***Evaluate future residential development using the USGBC's LEED for Neighborhood Development (ND) Rating System.***

In 2007, the USGBC introduced LEED for Neighborhood Development (ND) as a means of taking the green certification concept beyond individual buildings and applying it to the neighborhood context. Co-developed by the Natural Resources Defense Council, the Congress for the New Urbanism, and the U.S. Green Building Council, LEED-ND takes a broad approach to neighborhood sustainability, reflecting the most current research and ideas about smart, green, sustainable, and well-designed neighborhoods.

LEED-ND contains a set of measurable standards that collectively identify whether a development or proposed development of two buildings or more can be deemed environmentally superior, considering the development's location and access, its internal pattern and design, and its use of green technology and building techniques. These standards include prerequisites (required as a baseline for sustainable neighborhood development) and credits (additional best practice standards for sustainable neighborhood development). LEED-ND encourages strategies that conserve resources such as reinvesting within existing neighborhoods, cleaning up contaminated sites, protecting natural areas, and facilitating connections to the surrounding community. The LEED-ND Rating System is organized into three basic sections:

- Smart Location and Linkage (SLL) - where to build;
- Neighborhood Pattern and Design (NPD) - what to build; and
- Green Infrastructure and Buildings (GIB) - how to manage environmental impacts.

Smart Location and Linkage (SLL): Where to Build

Selecting and planning for the location of development is fundamental to environmental sustainability and an important determinant of how much residents will walk or drive. Even if a building or larger development uses high-performance, green construction techniques, a poor location that destroys natural areas, requires people to drive long distances, or exposes people to toxic substances will likely overshadow the benefits of green construction. Redeveloping previously developed sites and "infill" sites (which are surrounded by previously developed land) is a key smart growth strategy.

Neighborhood Pattern and Design: What to Build

Once planners or developers have decided where to build, they have to decide what to build. Should there be homes? Shops? Parks? Which activities will the neighborhood be designed for? What will it look like, and how will it feel to walk through? The Neighborhood Pattern and Design section of LEED-ND addresses some of these topics. It encourages strategies like walkable streets, diverse and compact neighborhoods, high quality public spaces, reduced dependence on automobiles, and community participation in design.

While it is important to separate and buffer incompatible land uses there are advantages to mixing residential, commercial, and live-work land uses. The diverse uses of blended neighborhoods tend to support each other and reinforce a sense of neighborhood character, while decreasing the need to travel long distances for goods, services, or work. Uses can be mixed within the same neighborhood—such as when homes are located next to a corner store—or even within the same building—such as live-work spaces or ground-level shops with housing or office space above them.

Additional categories within Neighborhood Pattern and Design include Walkable Streets, Reduced Parking and Transportation Demand, Bicycle-Friendly Design, and Mixed Uses and Community Spaces.

Green Infrastructure and Buildings: How to Manage Environmental Impacts

Even if a neighborhood has a great location and layout, it won't have excellent environmental performance without thoughtful and innovative green design. The Green Infrastructure and Buildings section includes strategies such as incorporating energy and water efficiency, reusing older buildings, recycling materials, reducing stormwater runoff, and eliminating pollution sources.

Beyond actually pursuing LEED-ND certification for a proposed development project, another approach is to evaluate the quality of existing neighborhoods using the LEED-ND checklist. For most neighborhoods, this process will involve three main steps:

1. **Evaluate the Neighborhood.**

   Work with local governments or other community organizations to conduct an audit of a neighborhood using the LEED-ND categories,

prerequisites and credits. A checklist at the end of the *A Citizen's Guide to LEED for Neighborhood Development* can be used to aid the evaluation (refer to sidebar).

2. **Focus on Strengths and Weaknesses.**

   Identify areas where the neighborhood or community performs well under LEED-ND. Where it does not, solicit stakeholder input on community needs.

3. **Respond with a Plan.**

   Propose retrofits, targeted redevelopment, infrastructure improvements, or other measures that build on the neighborhood's strengths and address its weaknesses. The level of detail and effort can vary widely—from an informal list of suggestions to a detailed design and policy proposal that becomes the backbone of a neighborhood plan. If a neighborhood is already the focus of a planning effort, participation in that process is essential to ensure that it addresses the needs one has identified and protects the neighborhood's strengths.[1]

1 Natural Resources Defense Council, A Citizen's Guide to LEED for Neighborhood Development. Available at: *https://www.nrdc.org/sites/default/files/citizens_guide_LEED-ND.pdf.*

USGBC LEED-ND Sustainable Neighborhood Development Checklist

LEED for Neighborhood Development is a rating system that integrates the principles of smart growth and new urbanism along with green building techniques applied at the building and neighborhood scale. The goal is to successfully enhance and protect the overall health (physical and economic) and natural environment of our communities through well-placed and designed development. There are several economic and environmental benefits of well-designed and located communities including: houses in walkable locations have higher home values, proximity to transit increases property value, and smart growth neighborhoods require less cost in public services. Environmental benefits of smart growth neighborhoods include preservation of rural and farm land; a reduction in vehicle miles traveled and auto emissions.

The informal checklist (below) summarizes all credits and prerequisites in the LEED-ND Rating System. The checklist can be used to assess the strengths and weaknesses of a development proposal, site plan, existing neighborhood, or even a zoning code or neighborhood plan. It can be used as a source for standards and thresholds to include in plans, regulations, designs, or topic-specific policy efforts. The checklist is organized into five categories, Smart Location and Linkage, Neighborhood Pattern and Design, Green Infrastructure and Buildings, Innovation and Design Process, and Regional Priority. Please note that this checklist is an abbreviation of the full LEED-ND program prerequisites and credits, all of which requires sophisticated verification of compliance with standards and provides a much more authoritative evaluation. The checklist can be found within the document entitled, *A Citizen's Guide to LEED for Neighborhood Development*, available to download on the Natural Resources Defense Council website.

LEED® FOR NEIGHBORHOOD DEVELOPMENT

110 TOTAL POINTS POSSIBLE

SMART LOCATION & LINKAGE — 27 POSSIBLE POINTS

PREREQ 1	Smart Location	REQ
PREREQ 2	Imperiled Species and Ecological Communities	REQ
PREREQ 3	Wetland and Water Body Conservation	REQ
PREREQ 4	Agricultural Land Conservation	REQ
PREREQ 5	Floodplain Avoidance	REQ
CREDIT 1	Preferred Locations	●●●●●●●●●●
CREDIT 2	Brownfield Redevelopment	●●
CREDIT 3	Locations w/ Reduced Automobile Dependence	●●●●●●●
CREDIT 4	Bicycle Network and Storage	●
CREDIT 5	Housing and Jobs Proximity	●●●
CREDIT 6	Steep Slope Protection	●
CREDIT 7	Site Design for Habitat / Wetland & Water Body Conservation	●
CREDIT 8	Restoration of Habitat/Wetlands and Water Bodies	●
CREDIT 9	Long-Term Cnsrvtn. Mgmt. of Habitat/Wetlands & Water Bodies	●

NEIGHBORHOOD PATTERN & DESIGN — 44 POSSIBLE POINTS

PREREQ 1	Walkable Streets	REQ
PREREQ 2	Compact Development	REQ
PREREQ 3	Connected and Open Community	REQ
CREDIT 1	Walkable Streets	●●●●●●●●●●●●
CREDIT 2	Compact Development	●●●●●●
CREDIT 3	Mixed-Use Neighborhood Centers	●●●●
CREDIT 4	Mixed-Income Diverse Communities	●●●●●●●
CREDIT 5	Reduced Parking Footprint	●
CREDIT 6	Street Network	●●
CREDIT 7	Transit Facilities	●
CREDIT 8	Transportation Demand Management	●●
CREDIT 9	Access to Civic and Public Spaces	●
CREDIT 10	Access to Recreation Facilities	●
CREDIT 11	Visitability and Universal Design	●
CREDIT 12	Community Outreach and Involvement	●●
CREDIT 13	Local Food Production	●
CREDIT 14	Tree-Lined and Shaded Streets	●●
CREDIT 15	Neighborhood Schools	●

GREEN INFRASTRUCTURE & BUILDINGS — 29 POSSIBLE POINTS

PREREQ 1	Certified Green Building	REQ
PREREQ 2	Minimum Building Energy Efficiency	REQ
PREREQ 3	Minimum Building Water Efficiency	REQ
PREREQ 4	Construction Activity Pollution Prevention	REQ
CREDIT 1	Certified Green Buildings	●●●●●
CREDIT 2	Building Energy Efficiency	●●
CREDIT 3	Building Water Efficiency	●
CREDIT 4	Water-Efficient Landscaping	●
CREDIT 5	Existing Building Use	●
CREDIT 6	Historic Resource Preservation and Adaptive Reuse	●
CREDIT 7	Minimized Site Disturbance in Design and Construction	●
CREDIT 8	Stormwater Management	●●●●
CREDIT 9	Heat Island Reduction	●
CREDIT 10	Solar Orientation	●
CREDIT 11	On-Site Renewable Energy Sources	●●●
CREDIT 12	District Heating and Cooling	●●
CREDIT 13	Infrastructure Energy Efficiency	●
CREDIT 14	Wastewater Management	●●
CREDIT 15	Recycled Content in Infrastructure	●
CREDIT 16	Solid Waste Management Infrastructure	●
CREDIT 17	Light Pollution Reduction	●

INNOVATION & DESIGN PROCESS — 6 POSSIBLE POINTS

CREDIT 1	Innovation and Exemplary Performance	●●●●●
CREDIT 2	LEED Accredited Professional	●

REGIONAL PRIORITY CREDIT — 4 POSSIBLE POINTS

CREDIT 1	Regional Priority	●●●●

40–49 POINTS: CERTIFIED 50–59 POINTS: SILVER 60–79 POINTS: GOLD 80+ POINTS: PLATINUM

FOR MORE INFORMATION SEE THE *LEED REFERENCE GUIDE FOR GREEN NEIGHBORHOOD DEVELOPMENT*

LEED ND: walking distance to basic services in a neighborhood

Promoting walking is an important aspect of the LEED ND. Several prerequisites and credits concern the walking environment and help determine whether a project neighborhood is eligible. The LEED definition of 'Walk Distance' is the distance that a pedestrian must travel between origins and destinations without obstruction, in a safe and comfortable environment on a continuous network of sidewalks, all weather-surface footpaths, crosswalks, or equivalent pedestrian facilities. The walking distance must be drawn from an entrance that is accessible to all building users.

WALK DISTANCE

The table below are some example standards for walkability. A certain percentage of the project neighborhood needs to be within 'Walk Distance' of these destinations:

1/4 MILE	1/2 MILE	1 MILE
–	– 7 Diverse uses*	
– Bus or Streetcar stops	– Bus Rapid Transit, Light or Heavy Rail Stations, or Ferry Terminal	
	– Existing full-time-equivalent jobs	
– Civic or passive-use space, such as a square, park, or plaza, at least 1/6 acre in area	– Outdoor recreation facility at least 1 acre in area, or a publicly accessible indoor recreational facility	
	– Elementary or Middle School	– High School

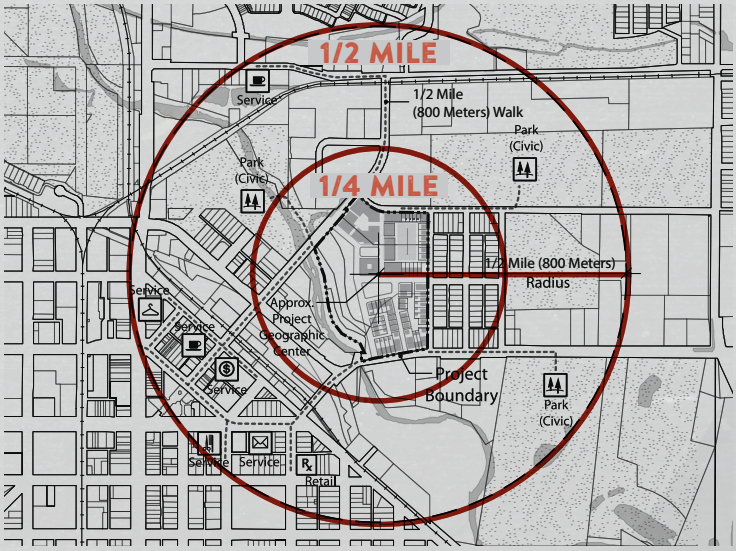
*Diverse Uses include supermarkets, community-serving retail (hardware store or pharmacy), services (bank, gym, or laundry), and Civic and Community Facilities (parks, post office, or places of worship).

WALKING ENVIRONMENT

In addition to 'Walk Distance', the walking environment is important in order to encourage pedestrian activity and ensure safe paths to destinations:

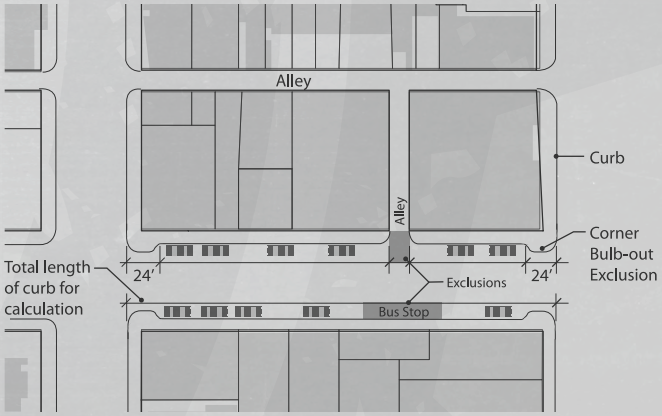
- A building entry on the front façade faces a public space, such as a street, square, park, paseo, or plaza, but not a parking lot, and is connected to sidewalks or equivalent provisions for walking.
- Building-height-to-street-width ratio of 1:3
- Continuous sidewalks
- Diverse building frontages, small percentage of garages and blank walls
- Frequent building entries
- Reduced setbacks
- Ground floor commercial windows kept visible
- On street parking
- Target speeds so that pedestrians are safe to walk on sidewalks and use crosswalks

WALK DISTANCE ILLUSTRATION



This Smart Location and Linkage diagram illustrates a pedestrian network with walking routes and distances from dwellings and nonresidential uses to Diverse Use* destinations.

WALKING ENVIRONMENT ILLUSTRATION



This Neighborhood Pattern and Design diagram demonstrates on street parking layout and sidewalk design as well as building placement and setbacks.

Source: USGBC

Housing and Neighborhood Programs

Several of the comparison communities provide housing and neighborhood-related programs that warrant further investigation to determine whether they are applicable to Michigan City.

BAY CITY, MICHIGAN

1. **Vacant Property Inspection Program** - actively monitor neighborhoods for potential concerns, and submit data to Code Enforcement for action as necessary. The inspection program applies to all properties vacant for 90+ days. City field inspectors will document conditions of vacant properties, and report back property owner regarding what remedial activity needs to happen to stabilize and secure the property.

HOLLAND, MICHIGAN

1. **Home Energy Retrofit Program** - helps homeowners in the City of Holland make energy efficiency improvements. The Home Energy Retrofit Program is a financial partnership between Holland Energy Fund and homeowners. City of Holland homeowners who invest at least $10,000 to increase the energy efficiency of their homes are eligible to receive a 10 percent rebate grant from Holland Energy Fund. The Holland Energy Fund was created as a nonprofit corporation to facilitate and finance aspects of the City of Holland's comprehensive, long-range *Community Energy Plan*.
2. **Smoke Detector Requirements (Point of Sale and New Construction / Remodeling)** - requires hardwired, battery back-up, interconnected smoke detectors be installed prior to the sale or transfer of a single family home. In 2008, condominiums were also required to install smoke detectors and obtain a Smoke Detector Certificate of Compliance prior to the sale or transfer of the property.
3. **Rental Housing Program** - requires routine rental housing inspections. All rental units are required to be registered, and are inspected on a three year or six year basis to ensure compliance with this Code. Compliance for commercial and owner occupied residential properties is expected and enforced on a complaint basis. A Certificate of Compliance will be awarded when the property meets compliance with the Housing-Property Maintenance Code. Inspections are conducted to ensure the health, safety and welfare of the occupants and public. Failure to comply could result in re-inspection fees (which are prohibited in the State of Indiana), a civil infraction ticket, the property being placarded or a misdemeanor complaint for renting without a rental certificate of compliance.
4. **Central Neighborhood Enhancement Program** - provides technical assistance and capital for "enhancement projects" which will significantly improve the aesthetics and functionality of the home to improve its marketability and curb appeal. The Enhancement Program is available to single family and two-family owner occupied homes in the Central Neighborhood District, regardless of household income. The City will provide technical assistance and 50 percent of the project cost up to $4,000 to help homeowners enhance their homes. Types of Projects include, but not limited to:
    - new siding
    - major exterior improvements
    - new Additions
    - new two-stall garages
    - dead tree removal
    - new porches
    - historic preservation
    - demolition of dilapidated structures
    - complete facelifts
5. **Neighborhood Mini Grant Program** - supports neighborhood initiatives by providing a grant of up to $1,500 that accomplishes the following things:
    - improves the long-term quality of life of residents in the City of Holland; and
    - builds long-term neighborhood capacity, opportunity, and leadership, as well as generate more collaboration among residents.

MUSKEGON, MI

1. **Rental Rehabilitation Program (RRP) Grant -** the objective of which is to increase and preserve the supply of decent, safe, sanitary and affordable rental housing. The RRP program offers assistance to rental property owners in the City of Muskegon by providing up to $15,000 to match the owner's contribution of the rehabilitation in order to make necessary improvements and upgrades, bringing

the property unit up to code. RRP funds may be used for improvements to single-family or multi-family units (no more than four units in a multi-family structure allowed). RRP funds must be used to rehabilitate units for residential purposes only. Mixed-use structures are allowable, provided that 51 percent of the rented floor space is used for residential purposes. All of the rental units assisted with HOME RRP grant funds must be occupied by low income families (incomes at or below 60 percent of Area Median Income (AMI) during obligation period).

2. **Neighborhood Stabilization Program -** provides "disaster relief" for cities and their neighborhoods. Congress created the Neighborhood Stabilization Program to help cities, counties and states deal with community problems that are the result of the mortgage foreclosure crisis in the nation. Generally, the money must be used to buy, renovate, and resell or demolish foreclosed and abandoned homes. The Michigan State Housing Development Authority (MSHDA) governs the use of funds and what specific redevelopment activities to undertake in Michigan. The City of Muskegon has participated in the MSHDA's Neighborhood Stabilization Program (NSP1). While some of the funds were granted toward projects that focused on the rehabilitation of existing housing, some funding was also used to demolish blighted structures. As a result, many of the City's neighborhoods have undergone significant razing of detached houses. In some areas, entire blocks have been razed or demolished.

SHEBOYGAN, WI

1. **Neighborhood Association Program** - is a geographically-based partnership to improve conditions in a neighborhood. It includes homeowners, renters, and landlords, as well as representatives from businesses, faith-based groups, non-profits, and schools. The members of the association should represent the entire community and all of its issues and assets. Members get together to discuss issues and identify solutions to address those concerns. Through their work, members develop the stability, credibility, and political influence necessary to be an effective force in making a stronger neighborhood. Neighborhood Association activities may include:
   - Community events/neighborhood cleanups
   - Crime prevention activities
   - Neighborhood improvement projects
   - Researching development issues
   - Volunteer projects and opportunities

   Sheboygan's Neighborhood Association Program is administered in part by Sheboygan Neighborhood Pride (SNP), which is a community resource empowering citizens to work together to improve their neighborhoods, increase safety, and enhance the quality of life in the community.
2. **Neighborhood Revitalization** - are interdepartmental meetings which are held to strategize and deal with ongoing issues in neighborhoods. The departments that are represented include the City's Police Department, City Development, Building Inspection, City Attorney's office, Mayor's office, Department of Public Works, and the City Administrator's office. This collaboration of departments have allowed a lot of specific neighborhood issues to be discussed, from vacant houses, to trash, to abandoned vehicles, to building conditions; the objective of which is to generate plans to address these concerns. The City's Neighborhood Revitalization planning program and meetings have been going on for the last three years.
3. **Landlord Training Program** – trains prospective and current landlords about how to screen tenants, what to look for as it relates to drugs and when to report issues, among others. This program has trained over 150 landlords over the past five years.

Neighborhoods (N)

N Policy 1: Neighborhoods are designed to promote social interaction and foster a safe, comfortable environment.

N Policy 2: Provide for a Mix of Different Housing Types. Require developers to provide diverse housing types within one development without sacrificing the existing image and character of the surrounding area.

- Planned Residential Neighborhoods are intended to offer residents of different housing types an opportunity to interact with one another on the same sidewalks, public open spaces, parks, and community buildings.
- Ensure that a Planned Residential Neighborhood, while offering a variety of housing types, is large enough to not adversely impact adjacent existing residential developments.
- A minimum of three dwelling types is necessary to assure social and economic diversity.
- Use a variety of architectural styles and layouts, including dwellings with front porches or stoops.
- The perimeter of planned residential neighborhoods should be sensitive to existing developed residential properties.

N Policy 3: When Neighborhood Commercial uses are deemed appropriate, such service should be located at the edge of the neighborhood, preferably at the intersection of adjacent collector streets. Likewise, public institutions, such as schools and churches, when an integral part of the neighborhood, must be located on major thoroughfares or near the intersection of major thoroughfares. Both the neighborhood commercial center and the church will serve a larger area than the immediate neighborhood, and both involve periods of heavy traffic and parking concentrations, which, unless properly accommodated, can adversely affect the adjacent residential areas.

N Policy 4: Use planning and development regulations to protect residential neighborhoods from encroachment of incompatible activities or land uses that may have a negative impact on a residential living environment.

N Policy 5: Design neighborhoods adjacent to the City's parks and greenways system to facilitate public access to and use of its park and recreational facilities, while minimizing potential conflicts between park users and residents of the neighborhood. Consider issues of community character, compatibility of land use, residents' security and safety, and efficient service provision in reviewing development proposals.

N Policy 6: The neighborhood street network should be designed to offer a variety of ways to reach any point within the subdivision, decreasing the amount of traffic on any one street, and creating an environment for the pedestrian with reduced travel distances.

- Provide street connectivity that disperses traffic across the street network.
- Cul-de-sacs should be limited and used only when topography, environmental issues, or parcel shapes prevent other possible street connections.

N Policy 7: Neighborhoods should employ a compact, walkable street pattern design that maximizes the advantages of mixed-use development, promotes public transit use, and reduces vehicles miles traveled.

N Policy 8: Encourage Proper Lot Orientation. Encourage subdivision design in which peripheral lots face inward toward the neighborhood, of which they are a part, especially those lots which are adjacent to collectors or thoroughfares. No home shall front on a designated thoroughfare.

N Policy 9: Support preservation strategies that respect the heritage, context, design and scale of older neighborhoods while recognizing the evolution of those neighborhoods' built form.

N Policy 10: Establish a neighborhood-planning program for targeted portions of the City's core area, in order to address such issues as land use compatibility, parking and circulation, connectivity, recreational improvements, and neighborhood restoration.

N Policy 11: Amend the City's Zoning Code to incorporate a Neighborhood Conservation overlay district in order to eliminate nonconformities, and more closely monitor and discourage inappropriate conversions of housing as needed for neighborhood stabilization.

N Policy 12: Redevelopment of suburban areas to make them more walkable and bikeable through plans, regulations, and incentives that encourage more compact development forms.

N Policy 13: Open Space. Residential neighborhoods should contain large areas of useable open space such as parks, school playgrounds, or required environmental areas such as stream corridors. The street pattern should be designed to allow the maximum number of residential lots possible to either back up to or front on green space.

- Children should be able to walk from their homes to small open spaces, playgrounds, or other similar features.
- There should be a centrally located large community place.
- Both active and passive parks are important.

N Policy 14: Promote Neighborhood Identity. Encourage the formation of a neighborhood identity that includes the residents of all types of housing within the development.

N Policy 15: Express neighborhood character in open space designs. The public realm of every neighborhood should serve and express its unique character and culture. Consider neighborhood needs in programming and arranging spaces and amenities that support distinct and neighborhood activities and events.[1]

1 2017. San Francisco Urban Design Guidelines. San Francisco Planning Department. Available at: www.sfplanning.org

Focus Area 7:

Sustainability, Resilience, and Community Wellness

Guiding Principles

Sustainability Principle 1: Livable Built Environment. All elements of the built environment, including land use, transportation, housing, energy, and infrastructure, work together to provide sustainable, green places for living, working, and recreation, with a high quality of life.

Sustainability Principle 2: Harmony with Nature. The goals and policies of the Comprehensive Plan should ensure that contributions of natural resources to human well-being are explicitly recognized and valued, and that maintaining their health is a primary objective.[1]

Sustainability Principle 3: Resilient Economy. Plans incorporating sustainability goals, strategies and recommendations employ environmental inventories and analyses to adopt sustainability standards, incorporate best-practice approaches to the management of systems needed to support communities, and prepare land use plans and regulations to maintain the health of natural systems as a primary priority.[2]

Sustainability Principle 4: Interwoven Equity. The goals and policies of the Comprehensive Plan should ensure fairness and equity in providing for the housing, services, health, safety, and livelihood needs of all citizens and groups.[3]

Sustainability Principle 5: Healthy Community. The goals and policies of the Comprehensive Plan should ensure that public health needs are recognized and addressed through provisions for healthy foods, physical activity, access to recreation, health care, environmental justice, and safe neighborhoods.[4]

Sustainability Principle 6: Foster Innovation. Sustainable communities capture opportunities and respond to challenges. Local governments in these communities cultivate a spirit of proactive problem solving to provide access to futures otherwise unobtainable and to enable the risk-taking inherent in innovation.

1 Godschalk, AICP, David, and William Anderson FAICP, 2012. Sustaining Places: The Role of the Comprehensive Plan. Planning Advisory Service Report No. 567. American Planning Association.
2 Ibid.
3 Ibid.
4 Ibid.

Sustainability Principle 7: Responsible Regionalism. The goals and policies of the Comprehensive Plan should ensure that all local proposals account for, connect with, and support the plans of adjacent jurisdictions and the surrounding region. Plans for sustainable places works within the context of regional resources, capacities, and facilities to coordinate goals and programs across jurisdictional boundaries.[5]

Sustainability Principle 8: Authentic Participation. The planning process should actively involve all segments of the community in analyzing issues, generating visions, developing plans, and monitoring outcomes.[6]

Sustainability Principle 9: Accountable Implementation. The Comprehensive Plan should ensure that the responsibilities for carrying out the Plan's strategies are clearly stated, along with metrics for evaluating progress and monitoring performance in achieving outcomes.[7]

Resilience Principle 10: People. Communities are products of human relationships. What a community is now and what it will be in the future both result from decisions made by people interacting, negotiating, and working together. Trust and deep relationships are crucial to holding communities together year after year and making resilience durable – but relationships can be challenging to build, especially in diverse communities.[8]

Resilience Principle 11: Embrace dissent and diversity. Resilience building cannot turn a blind eye to the political and economic processes that determine what gets done, how it gets done, who decides, and who benefits. People of all interests and means must be able to participate in and benefit from resilience building; indeed, if they are to build true resilience, communities must embrace dissent and diversity.[9]

Resilience Principle 12: Systems Thinking. Systems thinking – simultaneously seeing the parts, the whole, and the relationships within a system - is essential for

5 Godschalk, AICP, David, and William Anderson FAICP, 2012. Sustaining Places: The Role of the Comprehensive Plan. Planning Advisory Service Report No. 567. American Planning Association.
6 Ibid.
7 Ibid.
8 Lerch, Daniel, 2015. Six Foundations for Building Community Resilience. Post Carbon Institute.
9 Ibid.

understanding the complex, interrelated crises now unfolding and what they mean for similarly complex communities. Communities are thoroughly integrated sub-systems of a single global socio-ecological system. They are connected to or influenced by external factors like regional water supplies, national energy policy, and global climate change. Conversely, local economic activity, relationships among different social groups, local cultural patterns, etc.; influence the community from the inside out.[10]

Resilience Principle 13: Adaptability. A community that adapts to change is resilient. But because communities and the challenges encountered are dynamic, adaptation is an ongoing process. When complex systems are resilient in the face of disruption it is because they have the capacity to adapt to changing circumstances, thanks to system characteristics such as diversity, modularity, and openness. In human systems, resilience-building efforts aim to cultivate such characteristics.[11]

Resilience Principle 14: Transformability. Some challenges are so big that it's not possible for the community to simply adapt. Fundamental, transformative changes may be necessary. Communities generally adapt as the world around them changes. But if adaptation happens too slowly or it is constrained, challenges can outpace the ability to cope and eventually threaten overall resilience. Resilience building usually tries to maintain the basic function and structure of a system in the face of disruption. Transformational efforts, however, are purposefully disruptive to the system, changing some of its functions and structures so that it can build resilience in ways more suited to the new reality.[12]

Resilience Principle 15: Courage. As individuals and as a community, people need courage to confront challenging issues and take responsibility for their collective future. Community resilience building is not an engineering problem solvable just by knowledge and skill. It is a social undertaking, involving thousands of people and their most meaningful relationships, hopes, and fears. Resilience-building efforts need to cultivate courage in both individuals and the community as a whole to confront challenging issues and take responsibility for their collective future.[13]

Resilience Principle 16: Recovery. Encourage land use decisions that improve the ability of individuals, communities, economic systems, and the natural and built environment to recover from natural and human-made disasters, climate change, and economic shifts. Integrate resilience into the City's planning processes.

Prologue

There is broad recognition that demographic and economic shifts are spurring lifestyle and preference changes with respect to what people want out of their communities, and therefore what they expect from the planning and design professions: e.g., the preference of both Millennials and retirees to live in more walkable cities and the increasing awareness of the economic and social aspects of sustainability. This also corresponds to an increasing recognition that the Post World War II sprawling development patterns in this country are not sustainable: financially, environmentally, or socially.

There is also a growing consensus that there is a need to further diversify this country's energy portfolio with increasingly affordable, renewable sources of energy (wind, solar, and hydro) at a variety scales. However, as companies scramble to find new sources of energy to meet an increasing global energy demand, there is growing concern and debate about the environmental risks associated with resource extraction technologies, such as hydraulic fracturing; deep water oil drilling; and the hazards associated with transmission of volatile product over long distances.

In the coming decades, sustainability will play a key role is responding to and planning for these trends. Michigan City's governmental leadership and officials must be aware of these trends as they make decisions to implement sustainable development within the local and regional community.

10 Lerch, Daniel, 2015. Six Foundations for Building Community Resilience. Post Carbon Institute.
11 Ibid.
12 Ibid.
13 Lerch, Daniel, 2015. Six Foundations for Building Community Resilience. Post Carbon Institute

GOAL 11.0:

The systems and elements that compose Michigan City's built environment work synergistically to provide sustainable, green places for active living, working, and playing.

Introduction

It is challenging to compartmentalize sustainability and resilience into a Comprehensive Plan element, when the themes of sustainability and resilience are woven throughout the various elements that compose this Comprehensive Plan, as exhibited in IMP Table 1, *Plan Scoring Matrix*. Indeed, the foundations of sustainability and smart growth, from which to build a resilient and healthy, enduring community have been discussed throughout the Plan, including:

- ensuring compact and contiguous growth as opposed to leap frog development;
- promoting entrepreneurship and workforce development to ensure a diverse and vibrant local economy;
- incenting companies to operate more productively with fewer inputs and less waste and by-products;
- economic development policies designed to attract production activity that will fill gaps in existing regional supply chains, and provide additional economic opportunities for local goods and services;
- providing environmental stewardship to sustain ecological diversity;
- promoting walkability and active transportation to ensure a healthy community;
- providing a range of housing options and various densities of residential development to accommodate all stages of life;
- incenting the development and preservation of complete neighborhoods that exemplify sustainable living practices with open spaces, walkable streets, diverse housing, local employment, and local-serving businesses that meet the daily needs of residents, reduce vehicle trips and greenhouse gas emissions, and create a more resilient social network;
- utilize the U.S. Green Building Council LEED for Neighborhood Development (ND) criteria for developing sustainable neighborhoods;
- incenting the development of energy efficient, green buildings utilizing the U.S. Green Building Council's LEED Green Building Rating System™.
- investing in infill development and redevelopment, including building-on and expanding Downtown / Main Street efforts and linking them to the revitalization of adjacent neighborhoods;
- developing green infrastructure in terms of pedestrian greenways, to improve connectivity; and the implementation of low impact development strategies, tools and techniques, including green streets, to enhance urban biodiversity, improve water quality, and reduce the need for grey infrastructure;
- encouraging community gardens and intensive local food production; and reducing food deserts by incenting the sale of healthy foods in neighborhood retail groceries, to promote healthy food consumption;
- encouraging transit oriented, mixed-use development around the 11th Street Station; which reduces vehicle miles traveled, traffic congestion, greenhouse gases emitted, and improves air quality.
- continually planning for the future by maintaining the currently and relevancy of the Comprehensive Plan by periodically amending the Plan as necessary, and ensuring that the City's Code of Ordinances provide the appropriate regulatory and incentive-based provisions to ensure that the Plan's policies, goals, strategies and courses of action are implemented.

For the purposes of this Comprehensive Plan, the following definition of sustainability is used:

Improving the quality of people's lives while living within the capacities of supporting natural and human systems.

Source: The World Conservation Union (IUCN), United Nations Environment Programme (UNEP), and the World Wildlife Fund for Nature (WWF), 1991. Caring for the Earth: A Strategy for Sustainable Living. (Gland, Switzerland: 1991).

The list could be expanded, and should be, when considering the development of an annual sustainability reporting program, which will be discussed later in this element. Indeed, virtually all of the strategies that promote sustainability have more than one benefit — also referred to as co-benefits. Sustainability strategies save money, conserve resources for future generations, improve public health, respond to climate change and make communities more attractive places to live.

Given the rise of sustainability as a concept over the last decade or so, there are many different versions of definitions of sustainability. Most definitions reference the need to respect environmental, economic, and social conditions. Another common element is managing resources for both the current and future generations.

The concept of sustainability, or sustainable development, has significantly evolved in its understanding and application. Sustainability is an important lens through which to evaluate a range of issues facing the planet's global community; including the lifecycle of items manufactured and consumed; the structures, spaces, and infrastructure that compose Michigan City's built environment; and the management of the unique ecosystems and natural areas that sustain life on this planet. It has also become associated with concepts of efficiency and equity. Sustainability practice has become the means through which to monitor, evaluate, and benchmark how we manage resources, measure environmental impacts, and evaluate whether we are living within or beyond our means and that of future generations.

Sustainability reporting and integrated reporting provide significant opportunities for innovation. As public agencies become accountable for their sustainability performance and integrate non-financial issues into their governing strategies and practices, innovation occurs across operations. Sustainability reporting provides a wider view of an organization than that of financial reporting alone. Informed by key stakeholders, sustainability reporting helps organizations uncover key risks and areas for innovation.

Source: Global Reporting Initiative, 2012. Focal Point Australia. Executive Summary of The Australian GRI Conference on Sustainability and Integrated Reporting; in Public Sector Sustainability Reporting: Remove the Clutter, Reduce the Burden.

OBJECTIVE 11.1: Ensure that sustainability / resilience principles, policies, and strategies are followed and advanced within the Planning Area in order to accommodate the City's present environmental, economic, and social needs without compromising the ability of future generations to do the same.

Sustainability and Land Use Planning

The principles and theoretical framework of sustainability and resilience provide common threads for understanding and addressing challenges related to Michigan City's natural, social, and built environment. Land use planning determines how communities are built by placing controls (regulations and incentives) on what property owners can do with their property. Competing demands for the same space and resources can generate conflict. Local officials must balance these competing demands as they make decisions impacting the future of their communities. This sustainability element is intended to address a several rising concerns. Some of the issues that have spurred changes in the way that communities are planned and built include:

- longer commutes;
- rising gasoline prices;
- growing traffic congestion and declining mobility;
- loss of farmland, wildlife habitat and natural resources as low-density development spreads into formerly undeveloped areas;
- air quality and climate-change issues associated with vehicle emissions and energy use in buildings;
- inefficient water use and water-intensive landscaping; and
- rapid growth that may outpace investments in infrastructure and services resulting in an increased need for maintenance and replacement.

STRATEGY 11.1.1: *Promote and encourage life-cycle thinking.*

Perhaps the greatest way to advance conscientious, informed sustainability thinking and acting within Michigan City's citizenry is to promote a greater awareness about what may be termed, life-cycle thinking; that is, considering the full lifecycle of the products purchased, consumed, and discarded; beginning with considering how a product is made, the energy expended to fabricate the product; the product's full lifespan; and how the product may be used after its lifespan, with respect to post-consumer applications and the energy required to break it down and reuse it.

STRATEGY 11.1.2: *Promote consumer product awareness, increase recycling rates, and reduce the amount of substances entering into landfills.*

ACTIONS AND INITIATIVES

1. Continue to promote the LaPorte County Solid Waste District's curbside and other recycling programs available to Michigan City residents, including:
   - hazardous waste collection
   - 5-in-1 collections
   - electronics recycling
   - compost, site and yard waste
2. Refer to the LaPorte County Solid Waste District's website for additional information: http://www.solidwastedistrict.com/.
3. Lead an aggressive recycling program within City government and quantify the results for the City's annual sustainability report.

STRATEGY 11.1.3: *Adopt policies to promote the construction of high-performance, green buildings within the Planning Area.*

ACTIONS AND INITIATIVES

1. Continue to monitor evolving trends and practices in building codes, land development, and public facilities arenas related to high-performance, "green" building and operational standards (including for energy efficiency; water conservation, capture, and re-use; waste reduction and recycling, renewable energy generation, etc.) to ensure that the City's codes and policies promote and do not discourage such activity in Michigan City. The US Green Building Council (USGBC) is an important resource, along with other governmental and non-profit resources.
2. Adopt a City-wide policy to review and evaluate the construction or remodeling of new and existing public buildings in responding to the minimum requirements to achieve the EPA's Energy Star rating.

3. Incent green building in the City's subdivision ordinance. Most incentives are based on a "bonus" system where there are relaxed standards or expedited administrative procedures as a reward for providing a public amenity. In such a project, the green design features would be considered a public amenity even though they are not public in the same sense as a plaza, fountain, or pedestrian walkway. The "bonus" can focus on the height of buildings, floor area ratio (FAR) requirements, parking ratios, or setbacks. Develop and adopt a long-term municipal energy strategy to include an energy plan that enumerates reduction goals based on current energy usage.

   For the programming and design of public buildings, consider:

   - Encouraging solar-oriented (passive and active) design in development.
   - Evaluate the potential for geothermal technologies application.
   - Utilize chemical-free and toxic-free building materials as readily available.
   - Remove regulatory obstacles to using recycled materials for building.

STRATEGY 11.1.4: *Promote energy efficiency and conservation.*

Energy generation is the second largest source of greenhouse gas emissions. Strategies to conserve energy and use it more efficiently in district operations and the community help reduce greenhouse gas emissions. In addition, energy efficiency and conservation measures save money and resources.

ACTIONS AND INITIATIVES

1. Establish an energy efficiency and conservation policy that provides employees with behavioral guidelines for energy efficient use of the facility such as turning lights, copiers and computers off, appropriate thermostat use, etc.
2. Establish energy efficiency and conservation protocols for building custodial and cleaning services and other contract employees.
3. Adopt and implement a policy to reduce "plug" load in district facilities by removing personal equipment such as desk lamps and space heaters or installing smart power strips.
4. Audit energy use of district buildings to identify opportunities for energy savings through efficiency and conservation measures.
5. Work with energy provider to access technical assistance and financial incentives, such as facility audits, rebates, on-bill financing, loans, savings-by-design and demand management programs.
6. Use energy management software to monitor real-time energy use in district buildings to identify energy usage patterns and abnormalities.
7. Conduct commissioning and retro-commissioning studies of municipal buildings, including equipment such as heating, ventilation and air conditioning (HVAC) and lighting systems to ensure they are operating as designed and installed.
8. Collaborate with MCAS schools and Purdue Northwest University to co-sponsor students to conduct energy audits and/ or retrofits for district buildings, businesses or homeowners.[1]

STRATEGY 11.1.5: *Promote the use of the Residential Renewable Energy Tax Credit.*

The Bipartisan Budget Act of 2018, signed in February 2018, reinstated the tax credit for fuel cells, small wind, and geothermal heat pumps. The tax credit for all technologies now features a gradual step down in the credit value. A taxpayer may claim a credit of 30 percent of qualified expenditures for a system that serves a dwelling unit located in the United States that is owned and used as a residence by the taxpayer. Expenditures with respect to the equipment are treated as made when the installation is completed. If the installation is at a new home, the "placed in service" date is the date of occupancy by the homeowner. Expenditures include labor costs for on-site preparation, assembly or original system installation, and for piping or wiring to interconnect a system to the home. If the federal tax credit exceeds tax liability, the excess amount may be carried forward to the succeeding taxable year. Refer to the sidebar (page 292) for applicable technologies.

ACTIONS AND INITIATIVES

1. Develop printed media, such as brochures and utility bill inserts, which can be distributed to Michigan City residents. Provide information on the tax credit on the City's Green Building website.

1 Institute for Local Government, 2016. Sustainability in Special Districts (Available at: http://www.ca-ilg.org/sites/main/files/file-attachments/sustainability_best_practices_2016_0.pdf)

Residential Renewable Energy Tax Credit

The maximum allowable credit, equipment requirements and other details vary by technology, as outlined below:

SOLAR-ELECTRIC PROPERTY

- 30% for systems placed in service by 12/31/2019
- 26% for systems placed in service after 12/31/2019 and before 01/01/2021
- 22% for systems placed in service after 12/31/2020 and before 01/01/2022

There is no maximum credit for systems placed in service after 2008. Systems must be placed in service on or after January 1, 2006, and on or before December 31, 2021. The home served by the system does not have to be the taxpayer's principal residence.

SOLAR WATER-HEATING PROPERTY

- 30% for systems placed in service by 12/31/2019
- 26% for systems placed in service after 12/31/2019 and before 01/01/2021
- 22% for systems placed in service after 12/31/2020 and before 01/01/2022

There is no maximum credit for systems placed in service after 2008. Systems must be placed in service on or after January 1, 2006, and on or before December 31, 2021. Equipment must be certified for performance by the Solar Rating Certification Corporation (SRCC) or a comparable entity endorsed by the government of the state in which the property is installed. At least half the energy used to heat the dwelling's water must be from solar in order for the solar water-heating property expenditures to be eligible. The tax credit does not apply to solar water-heating property for swimming pools or hot tubs. The home served by the system does not have to be the taxpayer's principal residence.

FUEL CELL PROPERTY

- 30% for systems placed in service by 12/31/2019
- 26% for systems placed in service after 12/31/2019 and before 01/01/2021
- 22% for systems placed in service after 12/31/2020 and before 01/01/2022

The maximum credit is $500 per half kilowatt (kW). Systems must be placed in service on or after January 1, 2006, on or before December 31, 2021. The fuel cell must have a nameplate capacity of at least 0.5 kW of electricity using an electrochemical process and an electricity-only generation efficiency greater than 30%. In case of joint occupancy, the maximum qualifying costs that can be taken into account by all occupants for figuring the credit is $1,667 per 0.5 kW. This does not apply to married individuals filing a joint return. The credit that may be claimed by each individual is proportional to the costs he or she paid. The home served by the system must be the taxpayer's principal residence.

SMALL WIND-ENERGY PROPERTY

- 30% for systems placed in service by 12/31/2019
- 26% for systems placed in service after 12/31/2019 and before 01/01/2021
- 22% for systems placed in service after 12/31/2020 and before 01/01/2022

There is no maximum credit for systems placed in service after 2008. Systems must be placed in service on or after January 1, 2008, on or before December 31, 2021. The home served by the system does not have to be the taxpayer's principal residence.

GEOTHERMAL HEAT PUMPS

- 30% for systems placed in service by 12/31/2019
- 26% for systems placed in service after 12/31/2019 and before 01/01/2021
- 22% for systems placed in service after 12/31/2020 and before 01/01/2022

There is no maximum credit for systems placed in service after 2008. Systems must be placed in service on or after January 1, 2008, and on or before December 31, 2021. The geothermal heat pump must meet federal Energy Star criteria. The home served by the system does not have to be the taxpayer's principal residence.

STRATEGY 11.1.6: *Consider purchasing climate-friendly products.*

Local agencies are large consumers of goods and services. As such, their purchasing practices can have a significant impact on the environment. By purchasing products or procuring services that reduce greenhouse gas emissions relative to competing goods and services, local agencies can remain fiscally responsible while promoting practices that conserve natural resources.

Adopt and implement a procurement policy that establishes standards for purchasing climate-friendly products and services. Examples may include:

- Office and cleaning supplies and equipment that minimize environmental impacts and that do not have a negative effect on human health, such as:
  - paper products that contain a minimum percentage of postconsumer recycled content;
  - cleaning products and services recognized with the GreenSeal or EcoLogo;
  - new equipment that meets Energy Star or comparable energy efficiency standards;
  - computers that meet the highest feasible Electronic Product Environmental Assessment Tool (EPEAT) certification level;
  - computer and lighting controls that reduce energy and computer idle time.
  - rechargable batteries, where appropriate.
  - recyclable or reusable cups, plates and utensils.
- Green Building materials that create a healthier and more sustainable environment, such as:
  - building and landscaping materials and systems that exceed the CALGreen building code;
  - carpeting, furnishings or plastic items that contain a minimum percentage of recycled content;
  - paint or carpets that contain low or no volatile organic compounds (VOC);
- Fleets that reduce environmental impact, such as:
  - fuel efficient, dual fuel or alternative fuel fleet vehicles;
  - vehicles that have GPS or trip planning devices;

ACTIONS AND INITIATIVES

1. Review current purchasing practices to identify possible green procurement opportunities.
2. Adopt ENERGY STAR® purchasing standards for all new computer equipment, appliances and equipment.
3. Conduct employee awareness training on the purchasing and use of green products and services.
4. Establish an interdepartmental team to promote policy implementation, track policy adherence and suggest additional items to be included in the policy.
5. Consider participating in multi-district procurement pools that have a climate-friendly purchasing component.
6. Consider life cycle pricing to ensure that the maintenance, operating, insurance, disposal and replacement cost of the product or service is considered when evaluating purchase options.
7. Ensure that minimal packaging materials are used by the City and its departments, and that all packaging materials are recycled, non-toxic and/or reusable, where feasible.

CONTRACTING

8. Require consultants, contractors and grantees to use recycled products and supplies, when feasible.
9. Require service providers to follow climate-friendly practices, or include a preference in selecting and contracting with service providers to those that use climate-friendly practices.
10. Require parks maintenance staff or contractors to adopt water-friendly practices, if applicable.
11. When feasible, consider the greenhouse gas emission impacts associated with transportation distances when determining which business or service providers to award contract.
12. Provide incentives for the use of fuel-efficient, dual-fuel or alternative fuel vehicles for City contracts for services involving vehicles, such as buses, waste hauling and recycling, and construction.
13. When issuing proposals for services, request firms to show current green certifications that demonstrate their technical knowledge and commitment to sustainability.[1]

1 Institute for Local Government, 2016. Sustainability in Special Districts (Available at: http://www.ca-ilg.org/sites/main/files/file-attachments/sustainability_best_practices_2016_0.pdf)

STRATEGY 11.1.7: *Promote green tourism programs within the Planning Area.*

Partner with the Convention and Visitor's Bureau to attract and expand business-related eco-tourism programs and activities, such as those related to the proposed Trail Creek Blueway (Strategy 3.2.3), biking along the City's recreational trails, taking hikes within the City's nature preserves, or visiting Tryon Farms, the City's planned cluster development and other outdoor activities.

ACTIONS AND INITIATIVES

1. Inventory all of the green / ecotourism-related programs and activities within the Planning Area.
2. Develop a thematic tourism program and promotional media to market the program.

STRATEGY 11.1.8: *Encourage community and individual actions to mitigate climate change.*

Providing reliable and objective information helps inform residents about the causes, impacts and possible responses to climate change. Involving the community in the development of proposed sustainability policies and programs builds buy-in and awareness. Providing practical information that helps individuals reduce their greenhouse gas emissions empowers them to take action and make a difference.

ACTIONS AND INITIATIVES

1. Develop and implement a community climate change education program that provides community members with basic information about climate change. Contact The Climate Reality Project (www.climaterealityproject.org) to invite speakers trained on the science of climate change to make presentations on climate change mitigation and adaptation strategies and recommendations. Request a presentation at: https://realityhub.climaterealityproject.org/registration.
2. Work with homeowners associations to host neighborhood informational workshops to:
    - educate residents and businesses about sustainability opportunities, such as those from energy efficiency and water conservation;
    - gather and share experiences, expertise, strategies and ideas for the development of a healthier and more sustainable community.
3. Inform the public about the environmental, community and financial benefits of actions that reduce greenhouse gas emissions.
4. Include information in City mailings, websites and other media about actions that individuals and businesses can take to address climate change.
5. Use the City's social media channels to inform the community about City sustainability activities.
6. Distribute give-away items, such as reusable bags and compact fluorescent light bulbs, to encourage environmental responsibility.
7. Provide programs and/or incentives to individuals, groups and businesses that adopt practices that reduce their carbon footprint. Incentives can be financial or nonfinancial, such as official recognition of participants' efforts.[1]

STRATEGY 11.1.9: *Encourage Michigan City Area Schools (MCAS) to pursue and adopt the Green Schools designation.*

The Green School Initiative[2] is mostly a volunteer effort that relies on parents, teachers, staff, and school board members to implement green school programs that reduce the environmental footprint of schools.

1. Train teachers, parents, facility directors, school board members and others in the Green School approach.
2. Provide tools and resources to support schools in reducing their environmental footprint.
3. Advocate for state policies that support healthy and sustainable schools and environmental literacy.

STRATEGY 11.1.10: *Consider developing a green building resources center (GBRC).*

As growth accelerates in Michigan City it will be important to be ahead of the construction curve and make sure that future development is consistent with the policies and objectives of the City. It will be important to have the requisite resources on hand to provide guidance and direction to the real estate development and construction community regarding environmentally-friendly building materials and products, and energy-efficient, green building construction practices.

1 Institute for Local Government, 2016. Sustainability in Special Districts (Available at: http://www.ca-ilg.org/sites/main/files/file-attachments/sustainability_best_practices_2016_0.pdf)
2 Green Schools Initative, www.greenschools.net

ACTIONS AND INITIATIVES

1. Draft a program, schedule, and budget for developing the Center. Topical areas can follow the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) credit areas, and include:
   - Sustainable Sites
   - Water Efficiency
   - Energy and Atmosphere
   - Materials and Resources
   - Indoor Environmental Quality
2. Identify an appropriate location for the Center. The most appropriate location for the Center would be within City Hall. However there may be other appropriate locations within other departmental buildings, such as the Sanitary District or Water Department.
3. Develop a green building webpage on the City's website which would feature information on green building best practices, energy efficient materials, relevant workshops and presentations, etc.
4. Investigate how other cities have developed green building resources centers; for example, refer to the City of Houston's GBRC, at https://www.codegreenhouston.org/.
5. Officially designate a City staff member as the Sustainability Coordinator responsible for coordination of sustainability activities and administration of the Green Building Resource Center.

STRATEGY 11.1.11: *Consider joining the Climate Mayors network.*

Climate Mayors (aka the Mayors National Climate Action Agenda) is a Mayor-to-Mayor network of U.S. Mayors collaborating on climate. It is led by Mayor Garcetti of Los Angeles. There are no binding commitments as a Climate Mayors member, only that cities pursuing actions to achieve an emissions reduction target through:

– Developing a community Greenhouse Gas (GHG) inventory;

– Setting near- and long-term targets to reduce emissions;

Over 400 mayors and cities across the country have signed on to the Mayors Climate network.

CLIMATE MAYORS

Source: climatemayors.org

– Developing a Climate Action Plan aligned with the City's targets.

Over 400 mayors and cities across the country have signed on to the Mayors Climate network. There is precedent in Indiana; the following mayors have become signatories:

– Mayor Karen Freeman-Wilson, City of Gary, IN
– Mayor Tom Henry, City of Fort Wayne, IN
– Mayor Pete Buttigieg, City of South Bend, IN
– Mayor John Dennis, City of West Lafayette, IN

To find out more about the Mayors Climate network go to: http://climatemayors.org.

ACTIONS AND INITIATIVES

1. Utilize the Paris Agreement Adoption Toolkit to advance the objectives of the City relative to the Climate Mayors network objective. The toolkit includes resources for U.S. cities and Mayors joining the Climate Mayors and agreeing to advance the spirit and goals of the Paris Climate Agreement.

STRATEGY 11.1.12: *Develop annual Sustainability reports to quantify and track progress in advancing sustainability and resilience.*

Utilize measurement and reporting methods in sustainability reports to determine the overall effectiveness of sustainability actions and communicate status and progress to the public.

ACTIONS AND INITIATIVES

1. Promote the development of data and information systems for issue identification, to gauge program effectiveness and gaps, and planning development. This effort should include information about adequacy and future demand for infrastructure, services, land, and building inventory.
2. Report achievements of green procurement program to staff and policy makers annually.
3. Develop a strategic framework of indicators and metrics and utilize to measure and track progress in achieving sustainability resilience goals.

STRATEGY 11.1.13: *Adopt a regional approach to implementing sustainability and resilience strategies.*

Although the specific actions needed to achieve sustainability will vary across communities and regions depending on their individual characteristics, the approach to working towards sustainability is similar.

1. Assess the community's existing natural and built environment and economic and social systems. This will help provide an understanding of the strengths, gaps, and obstacles.
2. Identify the desired goals for the community.
3. Create an agreed-upon course of actions or a plan to achieve those goals. Many communities are turning to sustainability plans or integrating sustainability into their comprehensive plans to serve as a "roadmap" for addressing and implementing sustainability actions.
4. Consider whether strategic regional partnerships would be more effective than an isolated local initiative.

ACTIONS AND INITIATIVES

1. Promote regionally coordinated approaches to sustainability that are tailored to meet the goals of each specific community and incorporate a systems thinking approach that equally focuses on environmental, social, and economic outcomes.

STRATEGY 11.1.14: ***Investigate the sustainability plans of cities with similar economic, environmental, social, and political contexts to understand and adapt local and regional sustainability strategies that have proven to provide measurable impact.***

While no single approach guarantees urban sustainability, it is valuable to assess the diversity of best practices being implemented in urban and metropolitan regions to determine their transferability to other urban areas. Managing tradeoffs among the environmental, economic, and social dimensions of sustainability—while aiming to maximize total net benefits relative to costs—is an important part of the sustainability process. A series of comparison communities were presented and discussed within *The Existing City* report. Each comparison community combines uniqueness and generality in the sense that whereas no two cities are identical, many share some common traits and common problems, such as road congestion or lack of adequate housing diversity. The following is a summary of how Michigan City's comparison communities are advancing sustainability efforts within their own communities.

DULUTH, MINNESOTA

1. **Duluth is a member of the State's GreenStep Cities program.** Minnesota GreenStep Cities is a voluntary challenge, assistance and recognition program to help cities achieve their sustainability and quality-of-life goals. This free continuous improvement program, managed by a public-private partnership, is based upon 29 best practices. Each best practice can be implemented by completing one or more actions at a 1, 2 or 3-star level, from a list of four to eight actions. These actions are tailored to all Minnesota cities, focus on cost savings and energy use reduction, and encourage civic innovation.

   For more information, go to: https://greenstep.pca.state.mn.us/.

2. **The City of Duluth joined the Climate-Smart Municipalities program.** Duluth's ultimate goal for participation in this program is to further develop the aspirational yet pragmatic Energy Plan through which the City can drive effective collaboration and implementation internally, locally, regionally and at the state-wide level; all toward the achievement of scalable yet meaningful reductions in energy consumption and greenhouse gas emissions by 2050. The goals of Duluth's participation include:

   - Lead the community effort to reduce present and future impacts on global climate.
   - Align and partner with the regional public sector.
   - Develop capital, operational and governance policy, plans, and procedures that support and advance the conservation of energy resources and promotes environmental sustainability within the community and region.
   - Align, consolidate, and refine our energy and sustainability strategy.
   - Educate the public.
   - Reduce our energy consumption and meaningfully address our massive carbon footprint.
   - Develop a specific plan for implementation.

   For more information, go to: http://www.duluthmn.gov/energy/climate-smart-municipalities/.

3. Energy Plan. Duluth's Energy Plan is centered around metrics: by 2050, the City plans to make an 80 percent reduction in greenhouse gas (GHG) emissions from municipal operations compared to an emissions analysis conducted in 2008. This means that over the next 32 years, the City will need to reduce annual emissions by 10 percent of 2008 levels – that's about 15,000 tons of CO2 – every four years, or every mayoral term. There are four key parts of the City's strategy for achieving the goals set in the Energy Plan: policy, conservation & efficiency, renewables, and utilities.

   For more information, go to: http://www.duluthmn.gov/energy/energy-plan/.

SHEBOYGAN, WISCONSIN

1. The City of Sheboygan became the 11th community to join the Green Tier Legacy Charter, which is a unique partnership between Wisconsin communities, non-profit organizations, and state agencies working together to develop and implement sustainability measures. Under the Charter, municipalities take actions and share information to achieve superior environmental stewardship by focusing on water

resources management and/or sustainability practices. By collaborating, communities are able to move further, faster, toward reaching their sustainability goals. As a Green Tier Legacy Community, the City of Sheboygan adopted a Sustainability Plan, with a five-year action agenda, focused on the following topics:

- Energy
- Local food
- Natural resources
- Atmosphere
- Waste
- Land Use and Planning
- Transportation
- Economic Development
- Government

For more information, go to: http://www.sheboyganwi.gov/wp-content/uploads/2015/03/Sustainability-Plan.pdf.

2. **The Sustainable Sheboygan Task Force.** The Sustainable Sheboygan Task Force (SSTF) was created by the Mayor of Sheboygan and the Sheboygan Common Council in August 2008 to study and make recommendations regarding strategies to be adopted by the City for creating and maintaining a sustainable Sheboygan, focusing on such topics as recycling, green purchasing, energy conservation, waste management, sustainability measures, and raising community awareness on environmental stewardship, that will result in cost savings and reduced consumption of resources throughout the City.

   For more information, go to: http://www.sheboyganwi.gov/residents/sustainable-sheboygan-task-force/.

MUSKEGON, MICHIGAN

1. **Sustainable Muskegon website.** The Sustainable Muskegon website was developed bu the City's Sustainability Office, within the Department of Public Works. The website is intended to be a clearinghouse of sustainability information and best practices for Muskegon County residents and West Michiganders.

   For more information, go to: http://www.sustainablemuskegon.org/.

HOLLAND, MICHIGAN

1. **City of Holland Sustainability Report.** The City of Holland's Sustainability Committee has prepared a seven-pillar framework report with "lenses" to help City residents evaluate and make more sustainable choices. This framework model has been used as a way to share information about the City's journey to become a more sustainable community.

   For more information, go to: https://www.cityofholland.com/sustainability/city-holland-sustainability-report.

2. **City of Holland Urban Tree Canopy (UTC) Assessment.** The City developed a comprehensive inventory and assessment of the trees planted within municipal rights-of-way and on private property. Based on the trees' size and character, metrics were developed regarding each tree's performance in improving air quality; reducing stormwater runoff and improving water quality; and contributions to energy savings, with respect to passive solar enhancements, evapotranspiration, and climatic cooling.

   For more information, go to: https://www.cityofholland.com/sites/default/files/fileattachments/holland_urban_tree_canopy_assessment_2013.pdf.

Conclusion

Advancing sustainability will not be easy, nor will it happen automatically. It requires systems thinking, constant innovation, and diligent assessment and adaptation. The City's leaders and planners should remain cognizant of the rapid pace of factors working against sustainability and should prioritize sustainability initiatives with an appropriate sense of urgency to yield significant progress toward urban sustainability. The City of Michigan City believes in doing its part and setting a positive example, and will use the Sustainability element to improve operations and pursue the sustainability-focused strategies and recommended courses of action within this Comprehensive Plan.

Urban Tree Canopy (UTC) Assessment

What is the Urban Forest and Urban Tree Canopy?

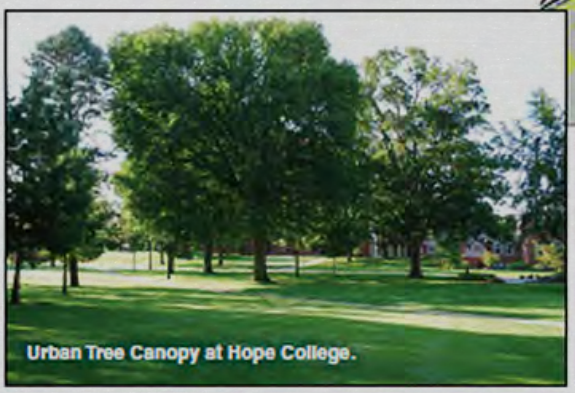
The Urban Forest consists of all public and private trees and shrubs in our community. This includes trees in yards, parks, open spaces, along streets and other land where trees are present. One way to understand the value of urban forests is by envisioning the layer of leaves, branches and tree sterns when viewed from above. This layer is called Urban Tree Canopy (UTC).

Urban Tree Canopy along Euna Vista Drive.

Land Cover Surfaces

This map shows the four major surface types:

1. Trees
2. Other pervious surfaces such as grasses, shrubs, gardens, and crops.
3. Water
4. Impervious or Unclassified Surfaces such as roads, parking lots, buildings, open fields, wetlands and the airport.



Urban Tree Canopy at Hope College.

Surface Types

Tree Canopy | Pervious Surfaces | Water | Impervious or Unclassified Surfaces

Project Funded By:

Macatawa Area Coordinating Council
A Cooperative Effort Among Units of Government

MACATAWA WATERSHED PROJECT

Grand Valley State University
Robert B. Annis Water Resources Institute

On Resilience

OBJECTIVE 11.2: Continue to track the evolution of resilience theory, practice, and application as it pertains to implementing *Michigan City Momentum 2040* Comprehensive Plan.

The term, resilience, has largely been used when evaluating natural systems, and has only recently been used within the context of land, urban, and regional planning and design where it has essentially been used to connote a more practical approach to sustainability, while focusing on practices of hazard mitigation and business continuity to recognize and address issues and responses related to climate change. For the purposes of this Comprehensive Plan, resilience can be defined as:

The capacity of a system to absorb a spectrum of disturbances and reorganize so as to retain essentially the same function, structure and feedbacks – to have the same identity.[1]

The theoretical ties between resilience thinking and practice and community planning are certainly compelling and worth noting - the idea that a community can essentially, 1) *absorb and reorganize* in order to function, while maintaining its original identity; or, 2) *decouple* from the larger regional system for a period of time, in order to maintain its identity and sustain vital systems that enable it to function. Both approaches will require a community to maintain robust and functioning physical, social, and economic infrastructure in place to withstand threats to its identity.

For the purposes of this Comprehensive Plan, the concept of resilience has not matured enough to the point where it has immediate application, beyond hazard mitigation and business continuity planning and response. From a social standpoint, however, resilience practice has applicability, from the standpoint of the neighborhood unit. In that cities are composed of a series of neighborhoods, districts, and corridors, it would make sense that any initial response to a major event, such as the aftermath of a hurricane, tornado, or earthquake, occur at the neighborhood level; where the actions most likely taken are not by FEMA or U.S. Coast Guard personnel, but by neighbors helping each other to get through the predicament at hand. As the strength of a chain is based upon its weakest link, neighborhood resilience requires a strong social infrastructure, or network, so as to identify members who may suffer the most, or be the least resilient, to a sudden turn of events. Neighborhood resilience practice may range in application from knowing which neighbors have generators, to who will be supplying coffee in the morning, to knowing who is bed-ridden and in need of immediate medical assistance. Activities undertaken as part of resilience practice can be grouped into three broad steps: *describing* the system, *assessing* its resilience, and *managing* its resilience.

STRATEGY 11.2.1: *Develop resilient neighborhoods.*

ACTIONS AND INITIATIVES

1. Work with homeowners associations to identify neighborhood residents who may require assistance and should be checked on during, or immediately after an unplanned, disruptive event.

STRATEGY 11.2.2: *Assist local businesses with the development of business continuity plans.*

When business is disrupted, it costs businesses money. Lost revenues plus extra expenses means reduced profits. Insurance does not cover all costs and cannot replace customers that defect to the competition. A business continuity plan to continue business after a major disruptive event is essential.

ACTIONS AND INITIATIVES

Development of a business continuity plan includes five principal steps:

1. Conducting a business impact analysis (refer to Strategy 10.2.3) to identify time-sensitive or critical business functions and processes, and the resources that support them.
2. Identify, document, and implement a plan for recovering critical business functions and processes.
3. Organize a business continuity team to compile and implement a business continuity plan to manage a potential future business disruption.
4. Conduct training for the business continuity team and testing and exercises to evaluate the plan's recovery strategies.
5. Develop recovery strategies for information technology so technology can be restored in time to meet the needs of the business.

1 Walker, Bryan, and David Salt, 2012. *Resilience Practice: Building Capacity to Absorb Disturbance and Maintain Function*. Island Press, Washington.

Information technology (IT) includes many components such as networks, servers, desktop and laptop computers and wireless devices. The ability to run both office productivity and enterprise software is critical. Manual workarounds should be part of the IT plan so business can continue while computer systems are being restored.[2]

STRATEGY 11.2.3: ***Assist businesses in developing business impact analysis and recovery plans.***

Work with Ivy Tech Community College and A.K. Smith Area Career Center to develop a professional business continuity planning/training curriculum; which would provide technical assistance in the development and implementation of a business impact analysis.

The purpose of conducting a business impact analysis (BIA) is to predict the consequences of a disruption in a business function and/or process; and develop recovery scenarios and staged implementation strategies. Likely business disruption scenarios

ACTIONS AND INITIATIVES

1. Conduct a supplemental risk assessment to identify potential loss scenarios up and down the supply / delivery chain.
2. Identify potential interruptions to operations due to the delay or failure in the supply /delivery of particular goods or services.

Predicting the economic impact of an event on a business provides the basis for investment in recovery strategies as well as investment in prevention and mitigation strategies.

On Community Wellness

According to the *2016 One Region Indicators Report: Quality of Place in Northwest Indiana* report, while indicators related to environment, education, public safety, arts and culture, and government reflect improving trends; health indicators reflect s needed improvement. By several measures, Lake County and LaPorte County were among the least healthy counties in Indiana, even though the region experienced improvements in health during this period. While social and economic factors influence health outcomes (i.e., lower rates of high school graduation; higher unemployment, greater number of children living in poverty), Northwestern Indiana counties had less access to recreational facilities and healthy food options, but more fast food restaurants in 2013.[3]

While it is recognized that smoking and opioid use are a serious health issues in LaPorte County and Michigan City, encouraging people not to smoke is beyond the scope and objectives of this Comprehensive Plan. This Plan broadly focuses on the polices that can be emplaced to encourage the highest and best use of land, and to provide the residents of Michigan City with physical options, related to how they can improve their quality of life and economic wellbeing. For example, because not everyone can afford a membership to the local gymnasium it is the City's responsibility to provide safe, well-lighted public parks and facilities, such as recreational trails and on-street bike lanes, where people have the option of getting some exercise, if they so choose .

As will be discussed, the same holds true regarding healthy food habits. It is the City's responsibility to encourage, and possibly incent, neighborhood corner stores to provide healthy options such as fresh fruits and vegetables, alongside the junk food, in order to provide people with a choice, even though, at the end of the day, the patron may still buy the bag of chips and package of Twinkies or Ding Dongs. The City may not be able to enforce health, but it can encourage wellness.

The Healthcare Foundation of LaPorte (HFL) identifies health as, "a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity," as defined by the World Health Organization.

2 Ready, 2016. U.S. Department of Homeland Security website. (Available at: https://www.ready.gov/business/implementation/continuity).

3 One Region, *2016. One Region Indicators Report: Quality of Place in Northwest Indiana.* (Available at: http://www.oneregionnwi.org/wp-content/uploads/2017/05/One-Region_Executive-Summary.pdf)

Sidebar

Community Health, by the Numbers

According to the Indiana Indicators database, in LaPorte County (population: 110,029):

- **24.7 percent** of children under 18 live in poverty.
- **53.8 percent** of children enrolled in public schools are eligible for free lunch.
- **18.1 percent** of adults report that they are in poor to fair health.
- **Smoking**
  - **20.3 percent** of adults report they are smokers.
  - **22.8 percent** of births occur where the mother smoked during pregnancy.
  - **57.9 deaths per 100,000 population due to lung cancer**, compared to 55.1 in the State, and 44.7 in the U.S.
- **Drug Use**
  - **Drug Overdose:** According to the most recent estimates from the Indiana State Department of Health, between 2012 and 2016, nearly 100 residents of LaPorte County died of a fatal drug overdose.
  - **Opioid Use:** According to Indiana University's Center for Health Policy (IUCHP), opioid use within LaPorte County's treatment population has seen a137 percent increase since 2010 (2010: 24.0 percent, compared to 2017: 56.9 percent).
  - **Injection Drug Use:** According to IUCHP, the percentage of the treatment population in LaPorte County reporting injection drug use has risen by 188 percent (2010: 11.5 percent, compared to 33.1 percent).
- **35.0 percent** of adults in LaPorte County are obese, compared to 31.7 percent in the State (Healthcare Foundation of LaPorte, 2018).
- **76.2 percent** of LaPorte County residents live reasonably close to a park or recreation facility, compared to 76.6 percent of residents in the State, and 83.1 percent of residents in the U.S. (Healthcare Foundation of LaPorte, 2018).
- **Food Access**
  - **Food Environment Index:** Regarding food access and food insecurity, on a scale of 0 (worst) to 10 (best), LaPorte County received a score of **6.9**, compared to the State value of 7.0, and U.S. value of 7.7 (Healthcare Foundation of LaPorte, 2018).
  - **Food Insecurity Rate: 15.5 percent** of LaPorte County residents experienced food insecurity at some point during the year, compared to 14.4 percent in the State, and 13.7 percent in the U.S. (Healthcare Foundation of LaPorte, 2018).
  - **Child Food Insecurity Rate: 22.1 percent** of children in LaPorte County residents experienced food insecurity at some point during the year, compared to 19.1 percent in the State, and 19.3 percent in the U.S. (Healthcare Foundation of LaPorte, 2018).
- **50.4 percent** of mothers in LaPorte County received early prenatal care, compared to 69.3 percent in the State, and 76.7 percent in the U.S. (Healthcare Foundation of LaPorte, 2018).
- **Mental Health Provider Rate** (number of mental health providers per 100,000 population): In LaPorte County, there are **85 providers**, compared to 143 in the State and 214 in the U.S.
- 69 of 92: Of 92 counties in the State, with 1 being the healthiest, **LaPorte County is ranked the 69th healthiest county overall** (http://www.countyhealthrankings.org/app/indiana/2018/rankings/outcomes/overall).

HFL recognizes that wellness is the "active process through which people become aware of, and make choices toward, a more successful existence" and the six dimensions of wellness are emotional, occupational, physical, social, intellectual and spiritual as developed by the National Wellness Institute.[1]

Ten2030: The Vision of HFL is to be within Indiana's top ten healthiest communities by 2030. The three piers of HFL's Ten2030 program are *Healthy Living*, *Healthy Children*, and *Healthy Minds*. Regarding Healthy Living, as stated on the HFL website (http://www.ten2030.org), obesity and weight-related chronic diseases prevent people from living long and fulfilling lives. The many negative consequences of unhealthy weight, poor diet and physical inactivity can lead to serious health risks, greater medical costs and a lower quality of life. Reducing the negative effects of poor physical health and its impact on our community is a key component of the HFL's mission of empowering residents to live healthy and well. *Healthy Living* is therefore a strategic focus area and HFL is committed to helping LaPorte County residents improve their physical health.

Regarding *Healthy Children*, the health of La Porte County's children is one of HFL's greatest priorities. The lifelong benefits of good childhood health, for both individuals and communities, have led HFL to identify *Healthy Children* (prenatal to end of high school) as an HFL strategic focus area.

Regarding *Healthy Minds*, behavioral and mental health are a vital component of a person's wellbeing. Mental health disorders, substance abuse and tobacco use negatively impact overall health and quality of life and can place a burden on entire communities.

OBJECTIVE 11.3: Value and promote healthy living in Michigan City.

STRATEGY 11.3.1: *Continually monitor community health.*

Continue to monitor the Healthcare Foundation of LaPorte Priority Tracker on the Ten2030 website; and the Franciscan Health's Community Health Needs Assessment (https://www.franciscanhealth.org/communityhealth), and One Region's annual Indicators Report (http://www.oneregionnwi.org/indicators-report/).

1 Healthcare Foundation of LaPorte website (Available at: https://hflaporte.org/grants/)

Being Intentional About Health Outcomes

Tools such as the Health Impact Assessment (HIA) and the Healthy Development Measurement Tool (HDMT) are used to quantify and qualify the public health impacts of proposed policies, plans, or development projects.

- **Health Impact Assessments** helps communities assess the potential effects of a proposed policy, plan, program, or project on community health, including the distribution of benefits and costs within the community. HIAs recommend strategies for monitoring and managing health and bring public health issues to decision makers outside of the public health field, such as in transportation and land use. HIAs can be voluntary or regulatory processes that focus on health outcomes. Local HIAs have been conducted by the Nashville Area Metropolitan Planning Organization, such as the Hamilton Springs Transit Oriented Development School Siting HIA completed in 2013.
- **The Healthy Development Measurement Tool** is an evaluation instrument used to assess and address health needs in urban development plans and projects with the goal of achieving a higher-quality social and physical environment that advances good health. Created by the San Francisco Department of Public Health, the HDMT has six core objectives: environmental stewardship, sustainable and safe transportation, social cohesion, public infrastructure, adequate and healthy housing, and a healthy economy.

Source: ULI - Intersections: Health and the Built Environment

ACTIONS AND INITIATIVES

Analyze demographics and health statistics within the Planning Area (Michigan City and LaPorte County).

1. Monitor health metrics within the Planning Area to track changes over time and inform policy and regulatory decision-making.
2. Coordinate with State Department of Health and Franciscan Health Michigan City on public health and environmental justice issues related to land use.
3. Engage communities in health assessments and education about land use processes, conflicts, stakeholder roles and responsibilities, and regulatory powers and constraints.

STRATEGY 11.3.2: *Encourage eligible organizations to apply for grants to encourage community wellness.*

The Healthcare Foundation of LaPorte provides grants of up to $25,000 under three principal categories: Strategic, Responsive, and Capacity Building. **Strategic Grants** are focused on promoting healthy living, the goals of which include:

Healthy Living:

- reducing obesity and weight-related chronic diseases;
- improving access to healthy foods and reducing food deserts;
- increasing community-wide focus on active living and fit lifestyles.

Healthy Children:

- decreasing the number of low birthweight births;
- decreasing the number of uninsured children;
- reducing childhood obesity;
- reducing teen births;
- improving education about tobacco and drug usage and their consequences;
- increasing safety in homes and schools;
- increasing access to mental healthcare for children;
- increasing the number of children and parents making informed decisions about good childhood health and its lifelong benefits.

Healthy Minds:

- increasing access to treatment for mental health issues and substance abuse;
- decreasing drug and tobacco usage.

Responsive Grants promote Healthy LaPorte, the goals of these grants are for programs that do not fall within one of our three Strategic Grants Focus Areas and include:

- expanding successful existing programs that improve the health and wellness of the residents of the City of La Porte and surrounding areas;
- attracting new initiatives to attend health and wellness needs identified within the City of La Porte and surrounding areas;
- creating collaborations to better attend health and wellness needs identified within the City of La Porte and surrounding areas.

Capacity Building Grants promote Healthy Partners, the goals of which include:

- increasing the impact of non-profit organizations in our area;
- strengthening and growing community organizations' knowledge, infrastructure, management and governance.

STRATEGY 11.3.3: *Consider conducting periodic health impact assessments of neighborhoods within Michigan City.*

Utilize the Changelab Solutions' Healthy Comprehensive Plan Assessment Tool (HCPAT) to develop periodic Health Impact Assessments (HIAs) of Michigan

City's residents (the HCPAT is available at: http://healthyplanning.org/).

The HCPAT is an evaluation tool that planners, public health professionals, and community advocates can use to assess the strength of health-related policies in their comprehensive plans. The evaluation covers evidence-based policies best practices in four key domains, which cover a range of topics.

1. **Environmental Health:** air, water, and soil pollution, inside and outside air quality, water quality, water access, stormwater, runoff, vehicle emissions, heat island, brownfields, soil contamination, noise pollution, climate change, greenhouse gas (GHG) emissions, energy efficiency, alternative energy, sustainability, and conservation.
2. **Complete Streets:** transit/pedestrian/bike-friendly, alternative transportation, vehicle miles traveled (VMT), traffic/trip reduction, transportation demand management (TDM), parking, injury prevention, and safe routes to school.
3. **Complete Neighborhoods:** smart growth, infill, transit oriented development (TOD), affordable housing, mixed-use development, mixed-income neighborhoods, parks, recreation, open space, limiting alcohol and tobacco access, public safety, and schools.
4. **Healthy Food Systems:** agricultural preservation, local food, urban farms and gardens, farmers' markets, food retail outlets (including corner stores, supermarkets, and restaurants), public purchasing/procurement, and nutrition education.

Upon completion of the HIA evaluation, a downloadable plan report will be generated which will have scores based on key indicators, which can serve as the basis for evaluating health-related policies to promote community wellness.

ACTIONS AND INITIATIVES

As recommended on the Changelab Solutions HCPAT website (http://healthyplanning.org//learn-more), use the report, as well as the indicators associated with the Healthcare Foundation of LaPorte to:

1. Assess early, mid-term, or adopted plans.
2. Prioritize efforts to educate community members, planners, and policymakers.
3. Write comment letters to elected officials about draft plans.
4. Use the tool as a checklist for plan development.
5. Include in Community Health Improvement Plans or Community Health Needs Assessments.
6. Make the health case for policies to address low-scoring domains.
7. Identify needs for capacity building in low-scoring areas.
8. Assess policy gaps that could be tied to new funding opportunities.
9. Encourage staff to consider a Health in All Policies approach.
10. Introduce a new framework for local health planning efforts.
11. Compare Michigan City with other communities.
12. Highlight planning and advocacy successes reflected in high-scoring policy areas.
13. Engage and educate local elected officials around public health and built environment issues.
14. Target improvements in future plan updates.
15. Identify opportunities to advance health equity in the community.

On Healthy Foods

To preface this section of the Sustainability element, which focuses on ensuring that Michigan City is a healthy, thriving community, there are several relevant and sobering terms that will be used, the definitions of which paint a picture of the spectrum of food-related needs individuals and families face on a daily basis:

1. **Food Security:** All household members have access at all times to enough food for an active, healthy life.[1]
2. **Food Insecurity:** One or more household members are unable to acquire adequate food at some point during the year because of insufficient money and other resources for food.[2]
3. **Low Food Security:** A majority of food-insecure households avoid substantial reductions or disruptions in food intake, in many cases by relying on a few basic foods and reducing variety in their diets. Households with low food security report reduced quality, variety, or desirability of diet with little or no indication of reduced food intake.[3]
4. **Very Low Food Security:** In this more severe form of food insecurity, one or more household members report multiple indications of disrupted eating patterns and reduced food intake at least some time during the year because they cannot afford enough food.[4]

LOCAL FOOD PRODUCTION

What Is Local Food? There is no standard geographic definition of "local" when it comes to defining a local food system. Rather, each community defines the term "local" in a way that helps community members identify food that supports particular social, economic, and/or environmental goals that will vary from place to place. Therefore, at the outset of a local food system project, it is helpful to define the geographic scale of what is "local," including the underlying goals and values that support that definition. Often, the scale for "local" can be different for production and distribution. For example, a project's primary goal might be to support a specific county's farmers, but those farmers' best chance for

1 Economic Research Service, 2015. Food Security in the U.S. U.S. Department of Agriculture. (Available at https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us.aspx).
2 Ibid.
3 Ibid.
4 Ibid.

Why do so many convenience stores sell mostly unhealthy items like junk food, alcohol, and cigarettes?

It hasn't always been this way. Until the 1960s, many neighborhoods had small-scale stores that sold primarily healthy foods and other necessities. The shift to current patterns of large supermarkets in wealthier areas and very small stores with primarily unhealthy items in low-income areas is due to various social and economic trends. These include middle class flight from urban areas, economic development patterns that favored suburbs over urban cores, and aggressive promotion of unhealthy items by manufacturers. Grocery industry changes also played a major role. A trend toward very large supermarkets made it hard to find new store sites in urban areas; and increased control of the grocery supply chain by a few large companies eliminated many grocery distributors that once served smaller stores.

In addition to these broader trends, corner store owners tend to favor items that are easy for them to order, stock, and sell, which are primarily unhealthy items with a long shelf life. Alcohol and tobacco products are very easy to stock, have high profit margins, and are distributed almost everywhere. In contrast, it can be hard for small-scale stores to identify distributors that sell healthy foods, and stores that want to place a small order may have trouble meeting distributors' minimum order requirements or getting decent prices. Stocking perishable items also requires more labor and skills, and carries more risk of losses. And too often, there is a vicious cycle in which distributors and/or store owners assume that their customers are not interested in buying healthy food and residents don't expect to find healthy items at the corner store.

Sourc:e: Healthy Corner Stores Network (2010)

success might be to sell their products to a more distant county that has a larger, higher income population. [5]

STRATEGY 11.3.4: *Engage the community in developing a healthy foods program.*

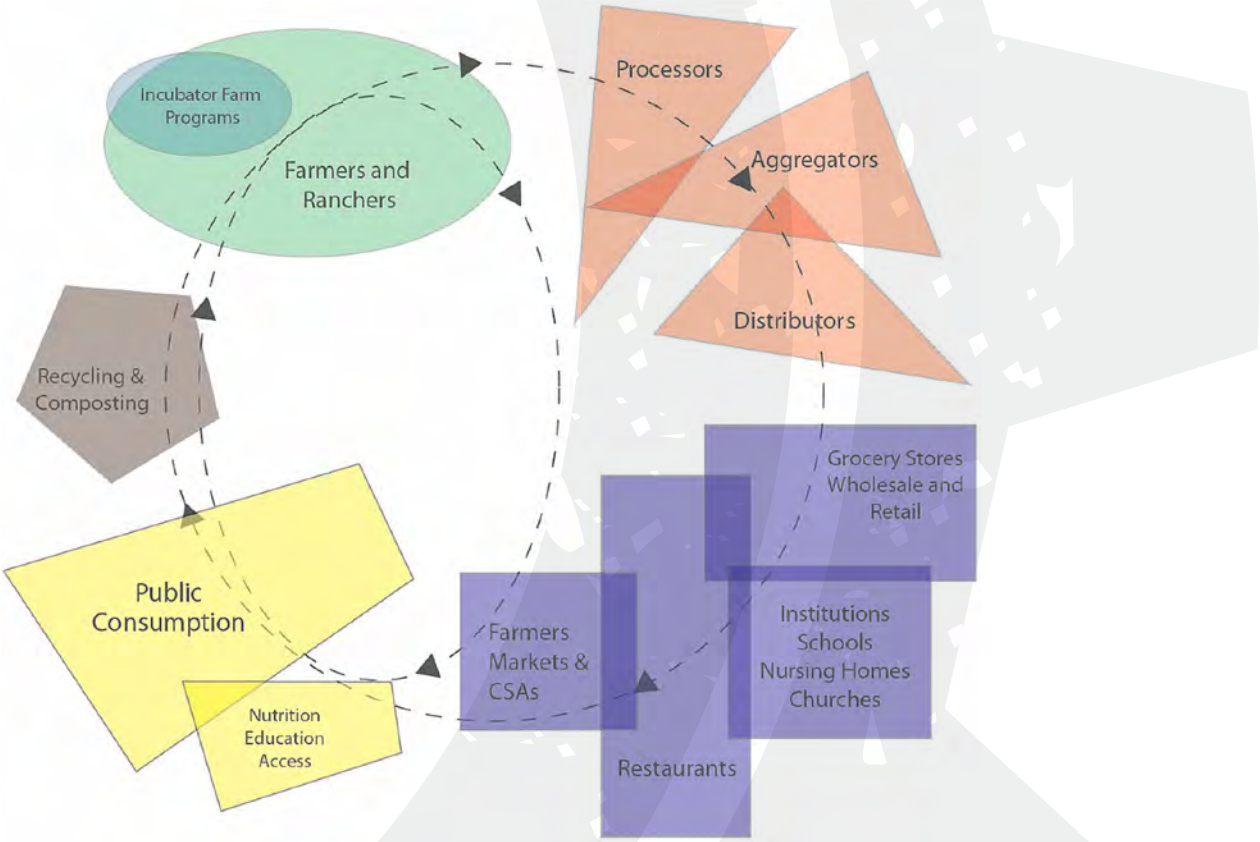
When it comes to identifying locally and regionally grown foods, Michigan City and LaPorte County residents are an important resource. Consider convening neighborhood and community workshops to identify and map local farms where produce and livestock are raised. Communities that are early in their food systems planning and communities with a lot of players who have not been well coordinated can benefit from diagramming the local food system.

ACTIONS AND INITIATIVES

1. In a community workshop setting, consider conducting a food system/community asset mapping exercise. This exercise helps community stakeholders identify the various components and relationships of the existing food system. It shows where new components are needed and where new relationships could be formed.
2. TFC Figure 38, *Food System Diagramming Template*, developed by the EPA, provides a graphic understanding of the potential roles and players within a local food system. The diagram below illustrates how elements of a local food system are connected. The smaller dashed oval on the left shows a common local food system where a market, community supported agriculture program (CSA), and/or educational programs connect farmers with consumers. However, this model does not serve institutional buyers (such as hospitals and colleges) or restaurants well. The larger circle shows a more advanced local food system where an organization such as a local food hub helps connect local farmers

5 Environmental Protection Agency, 2017. Local Foods, Local Places Toolkit: A Guide to help Communities Revitalize using Local Food Systems. (Available at: https://www.epa.gov/sites/production/files/201710/documents/lflp_toolkit_508-compliant.pdf).

TFC Figure 38, Food System Diagramming Template



with institutional and restaurant buyers. The local food hub helps serve these buyers by aggregating produce, processing it (through freezing, chopping, packaging, etc.), and finally distributing it.[1]

3. Ensure land use and development regulations encourage community gardens and farmer's markets to facilitate the production of fresh and minimally processed healthy foods and expand community access to the gardens and markets.

STRATEGY 11.3.5: *Develop a "Buy Local" program.*

Promote area food production, sales, and consumption. A meal travels an average of 1,500 miles in order to reach the American consumer. Shipping costs add to the price of food. Studies have shown successful locally-owned businesses significantly recirculate money back into their base economies. This fact is found to be true in spent laborer wages, business net profits, procurement of local goods and services, and charitable giving.

ACTIONS AND INITIATIVES

1. As discussed in the Land Use and Character element, to the extent possible preserve large blocks of productive agricultural lands: Minimize the loss of prime farmland from premature conversion to non-agricultural uses. Preserving prime agricultural lands within the Planning Area. The action translates into many policies, from those that deal with contiguous and compact urban growth to limiting via regulation and cooperative agreements large lot non-sewered subdivisions.
2. Farmer's Markets: Continue to support the Downtown farmer's market and at other locations. Farmer's markets not only give the community a venue to purchase area food, but offer valuable social opportunities from meeting farmers to learning about how the food was grown, meeting artists within the community, and listening to local musicians.
3. Allow temporary fresh produce stands within the Planning Area, as long as they comply with state statutes, City/County Health Department codes and zoning provisions. Produce stands provide similar opportunities as Farmer Markets.
4. Increase community food development. Work with citizens to convert vacant City-owned lots to community food plots and gardens. Not only does this beautify an unused or blighted property, but it provides a place for neighbors to interact and take ownership of their neighborhood. Encourage more private gardens and food plots on residential, business, and institutional properties. In partnership with the LaPorte County Purdue Extension Service, develop brochures to promote the Extension Service' Master Gardener program (refer to http://www.lpmastergardener.com/), to provide local food experts, community organizations and schools, to provide proper education. Businesses and institutions, such as schools and churches could directly benefit by lowering their food costs by providing their own garden food to their employees or students. It may also be advantageous for them to buy local food in bulk partnership at wholesale grower auctions which support area farmers.
5. Local Food as Identity: Encourage community promotion of local food. It provides a healthy alternative to processed food, deepens appreciation for food in particular, and creates a natural tie to the land and environment. Dairy products and other notable foods from the county and region should be sold/promoted more in local retailing to leverage tourism and economic return for the Northwestern Indiana region.

STRATEGY 11.3.6: *Develop a Healthy Corner Stores program in the Planning Area.*

The Healthy Corner Stores Network (HCSN) has not developed an 'official' definition of a healthy corner store, and network participants use a range of criteria in their projects. Some organizations have developed specific standards that stores must meet in order to earn some type of healthy corner store designation. These standards typically include requirements to stock certain types of items (such as whole grain bread, low-fat milk, or fresh produce) and/or a minimum number of healthy items (such as six types of fresh produce). In Hartford, Connecticut standards for "Healthy Food Retailers" are based on the percentage of shelf space dedicated to healthy foods, and increasing that percentage each

1 Environmental Protection Agency, 2017. Local Foods, Local Places Toolkit: A Guide to help Communities Revitalize using Local Food Systems. (Available at: https://www.epa.gov/sites/production/files/201710/documents/lflp_toolkit_508-compliant.pdf).

FARMER'S
MARKET
Michigan City Mainstreet Association
SATURDAY MORNINGS
MAY-OCTOBER

year. The New York City Department of Health has developed standards for three levels of "Star Bodegas," which also creates incentives for stores to make ongoing improvements. Some healthy corner store standards require stores to actively promote healthy foods, or to restrict or eliminate ads for tobacco and alcohol. Some require stores to follow relevant laws and codes, including health and environmental standards. In general, existing healthy corner store standards are fairly modest, reflecting the current reality that most corner stores sell primarily unhealthy items.[1]

ACTIONS AND INITIATIVES

1. Share information with convenience / corner store owners about the potential returns from selling fresh, healthy products. Profit margins on dairy, bread, meat, and fresh produce often range from 25 percent to 50 percent or more. The profit margin for value added fresh products like cut fruits or salads can be more than 100 percent.
2. Encourage corner store owners to sell fresh produce that are important ingredients to local ethnic cuisine. Encourage the producers to also approach ethnic restaurants as a potential market for their particular produce.
3. Encourage Local organizations and agencies (e.g., Unity Foundation, Habitat for Humanity, LaPorte County Purdue Extension Service, Boy Scouts America Lasalle Council [Eagle Scout project] to work with corner store owners can help make physical improvements to stores by cleaning, painting, and setting up healthy food displays. They can help stock healthy items or cover part or all of the cost of initial orders. Local groups also can promote healthy foods through signage, advertising, store demos and tastings, community outreach, and/or media work. Additionally, the Redevelopment Commission or Economic Development Corporation of Michigan City, through a micro-loan program (refer to Strategy 2.3.2) local may provide grants or loans for infrastructure or business development; and local universities may offer free services to small businesses (refer to Strategy 10.2.3).
4. Encourage neighborhood residents to demonstrate interest in healthy options. They can ask store owners to add healthy items or find out what products their neighbors would like to buy through community meetings or surveys.
5. When choosing neighborhood corner stores to work with, consider the quality of the store, the store's physical infrastructure and capacity to improve it, the location relative to schools and MCT bus stops, the store's relationship with the community, and the store owner's experience with selling fresh produce or other healthy items, and their potential to be innovative and learn new skills.[2]

   Utilize TFC Map 20, *Neighborhood Commercial and Grocery Locations.* The yellow dots indicate neighborhood commercial - convenience / corner stores that participate in the Supplemental Nutrition Assistance Program (SNAP) program; which provides food assistance to low and no income people and families living in the United States
6. Consider tax incentives to promote healthy stores.

1 Healthy Corner Stores Network, 2010. Healthy Corner Stores Q & A (Available at: http://thefoodtrust.org/uploads/media_items/healthy-corner-stores-q-a.original.pdf)

2 Healthy Corner Stores Network, 2010. Healthy Corner Stores Q & A (Available at: http://thefoodtrust.org/uploads/media_items/healthy-corner-stores-q-a.original.pdf).

LEGEND

- City Limits
- Comprehensive Plan Area
- Neighborhoods and Subdivisions
- Grocery Stores (SNAP Program)
- Neighborhood Commercial

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Lake Michigan

PORTER COUNTY
LA PORTE COUNTY

Shoreland Hills
Kimball Woods
Birch Tree Farms
The Shores
Long Beach Cove
Lakeland
Sheridan Beach
Beachwalk
Lake Hills
Washington Park/ Hungry Hollow
Tryon Farm
Mayfield Place
The Woodlands
Tall Timbers
Canada
CBD
Memorial
Potawattamie Park
Elston Grove
Eastport
Westside
Near Westside
St. Stans/ Midtown
Marsh
Queens
Midtown West
Greenwood
Davidson Manor
Beechwood
Mott's Woods
Cushman Acres
White Oak Manor
Southpark/ Jefferson
Old Greenwood
Gardena Park
Edgewood Forest
Coolspring Acres
Trail Creek
Southshore Acres
Forest Manor/ Knopp
Southwood
Edgewood
Hawthorne Park
Lakeside Glen
Village Green
Barker Woods
Suburban Estates
Edgville
Oakwood Manor
Southgate

12 20 94 212 421 35

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

MOMENTUM: MICHIGAN CITY 2040
THE FUTURE CITY

TFC Map 20, Neighborhood Commercial and Grocery Locations

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Policies

Sustainability and Resilience (SR)

SR Policy 1: Develop strong social networks to ensure communities are more resilient to disasters and other types of crises, with a special focus on vulnerable populations.

SR Policy 2: Resilience. Encourage land use decisions that improve the ability of individuals, communities, economic systems, and the natural and built environment to recover from natural and human-made disasters, and economic shifts.

SR Policy 3: Ensure that rezoning requests (or other development approvals) for land uses that are not consistent with *Future Land Use Map*, except for previously established land uses, are not approved until the Comprehensive Plan has been amended. Approve amendments to the *Future Land Use Map* only when they meet the spirit and intent of the goals, objectives, and policies stated within the Comprehensive Plan, and when they are in the community's best interest. Thereafter, rezoning proposals for inconsistent land uses should not be considered until the goals and objectives of the Comprehensive Plan have been amended to achieve consistency. In those cases, the City should process rezoning requests and *Future Land Use Map* amendments concurrently.

SR Policy 4: Periodically evaluate zoning and site development review and approval processes, and revise as needed to ensure the following: (1) adequate opportunity is provided for public input in appropriate development projects; (2) consistency and predictability are maximized for all parties involved in the process; and (3) the process helps to achieve the goals and implement the policies of the Comprehensive Plan.

SR Policy 5: Employ sustainable principles and practices in building design. By choosing building materials and systems that help conserve resources and reduce carbon emissions, new projects can better support the health of natural systems.

- Use building materials that are made of recycled or renewable resources and/or from local sources.
- Employ passive solar design in facade configurations, treatments, and materials.
- Reuse existing structures to reduce the use of natural resources.

SR Policy 6: Reliability and resiliency. Public facilities and services are reliable, able to withstand or recover from catastrophic natural and manmade events, and are adaptable and resilient in the face of long-term changes in the climate, economy, and technology.[1]

SR Policy 7: Maintain emergency preparedness capabilities.

SR Policy 8: Utilizing measurement and reporting methods in sustainability plans to determine the overall effectiveness of actions and to communicate status and progress to the public.

SR Policy 9: Maintain strong social networks to ensure communities are more resilient to disasters and other types of crisis, with a special focus on vulnerable populations.

SR Policy 10: Maintain strong social networks to ensure communities are more resilient to disasters and other types of crisis, with a special focus on vulnerable populations.

1 2016. Chapter 8, Public Facilities and Services. City of Portland Comprehensive Plan.

Policies

Community Health (CH)

CH Policy 1: Engage and empowerment of the public in planning for healthy communities. This includes increasing familiarity with health data and community organizations as well as the social and environmental determinants of health and health inequities. In particular, it means working with populations experiencing health inequities and strengthening their capacity for collective efficacy.

CH Policy 2: Encourage cross-sector collaboration to facilitate ongoing dialog, education, and awareness among allied health, planning and services sectors to help communities understand how short- and long-range policy, land use, infrastructure, and other decisions affect the public health of the entire community, and to drive ongoing positive health outcomes.[1]

CH Policy 3: Encourage decision makers to incorporate into their planning work a Health-In-All-Policies (HiAP) framework that integrates public health perspectives into their decision making and project and policy work. This includes integration of health into key planning documents (e.g., comprehensive plans and special area plans) and the use of tools that identify the health impacts of proposed changes (e.g., health impact assessments).[2]

CH Policy 4: Ensure that public health needs are recognized and addressed through provisions for healthy foods, physical activity, access to recreation, health care, environmental justice, and safe neighborhoods.

CH Policy 5: Equitable access to affordable housing, employment, healthcare, education, child care, and a healthy environment, through collaborative and comprehensive planning

CH Policy 6: Local food production and farming practices that conserve important agricultural lands and limit pollution, provide the opportunity for extensive access to fresh food to all residents within their market area, and help promote healthy living practices.

CH Policy 7: Engagement of local residents in planning for more walkable and bikeable urban environments, including place-based health strategies that facilitate the design of healthy communities and healthy housing for people of all ages and abilities.

CH Policy 8: Policies, incentives, and design guidelines that expand access to healthy food, such as expanding access to locally grown food by using public or other available vacant land for community gardening and urban agriculture, and economic development strategies to attract full service grocery stores to underserved communities.

CH Policy 9: Development of trail systems and other publicly accessible community amenities in urban, suburban, and rural areas that enable residents to participate in robust exercise.

CH Policy 10: Implement a comprehensive system of emergency medicine and rescue services.

1 2017. Healthy Communities Policy Guide. American Planning Association. Chicago.
2 Ibid.

Focus Area 8:

Land Use and Community Character

Guiding Principles

Land Use Principle 1: Ensure Equity. The goals and policies of this Plan should ensure fairness and equity in providing for the housing, services, health, safety, and livelihood needs of all citizens and groups. Land use, transportation, and urban form decisions should facilitate equitable access and distribution of resources. Encourage land use decisions that reduce existing disparities, minimize burdens, extend benefits, and improve socio-economic opportunities for underserved and under-represented populations.

Land Use Principle 2: Preserve Community Character. As Michigan City continues to grow, strive to preserve the attributes of the community's unique, post-industrial character and identity, the beauty of its natural environment, and the integrity of its neighborhoods and Downtown business district, while minimizing the adverse effects of growth.

Land Use Principle 3: Preserve Resources. To the extent possible, preserve active agricultural land uses. Consider their value to future generations. Consider their value to the community in case of a national emergency threatening the integrity of the food supply. And think of the value of agriculture as open space.

Land Use Principle 4: Mix of Uses. Promote mixed use development and redevelopment at a range of spatial scales. Locate retail, office, residential, institutional, and recreational uses within walking distance of each other in compact neighborhoods with pedestrian-oriented streets. Land use diversity will:

- Protect existing investments while providing opportunities for individual initiative and choice;
- Promote independence of movement, especially for the young and the elderly;
- Provide safety in commercial areas, through around-the-clock presence of people; and
- Reduce the need for automobile use by enabling shorter trips.

Land Use Principle 5: Development Pattern. Land uses, densities and regulations promote efficient development patterns which, in turn, reduce municipal, state governmental and utility costs.

Land Use Principle 6: Development Intensities. Maintain land development intensities sensitive to both the capacity of the transportation network and established land use policies. Ensure that new development, both residential and nonresidential, will be compatible with existing land uses in terms of use, density and intensity, building heights, scale, and off-site effects.

Land Use Principle 7: Transportation Efficiency. Establish land use patterns which increase transportation efficiency, encourage transit use and decrease automobile dependency.

Land Use Principle 8: Livable Centers. Areas of community focus are established, which contain a mixture of compatible land uses providing for housing, commercial, institutional/public services, and recreation and leisure activities.

Land Use Principle 9: Community Identity. Enhance community identity through adherence to and enforcement of specific design standards, which revitalize municipal districts, neighborhoods and corridors; and establish City gateways and entryways to special districts.

Land Use Principle 10: Engender a Sense of Place. Maintain and enhance Michigan City's natural, cultural, scenic and heritage assets in accordance with preservation guidelines and development standards.

Land Use Principle 11: Cultural Expression. Cultivate the growth of cultural and artistic expression and appreciation in Michigan City. Incorporate arts / artistic expression in the public realm through public and private investment as a means of enhancing both existing and new developments.

Prologue

WHAT IS LAND USE PLANNING?

Land can be viewed as a shared natural resource, much like air and water, that should be conserved, cared for, and utilized with due regard to its effect on public health, safety and welfare. The purpose of land use planning is to select, organize and implement specific land uses in a spatial configuration that will best meet the needs of the people while safeguarding resources for the future.

Land use planning is the process of making choices and understanding the trade-offs resulting from those choices through the lens of multiple perspectives. By taking into account multiple perspectives - fiscal, economic, aesthetic, environmental, and others - decision makers can make better-informed decisions regarding the health, longevity and prosperity of their community. This land use element of the Comprehensive Plan recognizes the changes that have taken place in the City over time, and the challenges and opportunities that lie ahead. There can be no blueprint for change; which therefore requires the process of land use planning to be iterative and continuous. Land use planning aims to make the best use of limited resources by:

- assessing present and future needs and systematically evaluating the land's capacity to supply them;
- identifying and resolving conflicts between competing uses, between the needs of individuals and those of the community, and between the needs of the present generation and those of future generations;
- seeking sustainable options and choosing those that best meet identified needs;
- planning to bring about desired changes; and
- learning from experience.

Identity is the extent to which a person can recognize a place or recall a place as being distinct from other places – as having a vivid, or unique, or at least a particular, character of its own.

- Kevin Lynch

Introduction

The land use element serves as a guide for defining the character of development within and around the City. It identifies undeveloped or redevelop-able land areas in the City that are suitable for various types of uses, such as residential, retail, commercial, industrial, institutional, recreation and open space. It also defines the densities and intensities of these use categories. The land use element is typically composed of text and maps - the text identifies policies that need to be applied in order to bring about the desirable combination of land uses in the City, while the maps illustrate the spatial application of these policies. Together, the policies and associated TFC Map 22, *Future Land Use* (hereafter referred to as the *Future Land Use Map*, can be considered the centerpiece of the entire Plan.

ISSUES AND CHALLENGES

The following is a sampling of the significant land use issues that will be addressed within the Land Use and Character element:

- **Lack of integration.** For most of Michigan City's residents, housing and places of employment have not been well-integrated. As depicted in *The Existing City* report's various land use maps, the pattern of land use in Michigan City's reflects a distinct separation between large areas of residential and non-residential uses. This separation of housing and employment further burdens the roadway system as people must commute often considerable distances between home and work.
- As development continues to radiate outward from Michigan City's core area, travel times become longer, and thoroughfares become more congested. The City must strive to strike a balance between centralized and decentralized growth and development.
- While most of the City's arterial thoroughfares function efficiently in moving people and goods throughout the City, and provide convenient access

to residential and non-residential land uses, some corridors in gateway locations, such as U.S. Highway 421 / S. Franklin Street and U.S. Highway 12, have become over-developed for commercial use, and, in many cases, are lined with under-performing, marginal strip retail and services; creating both the need and opportunity for vibrant, new mixed-use redevelopment.

- As summarized in the *Housing and Neighborhoods* element, growth, changing demographics, and an evolving economic base require a greater diversity of housing choices in both infill locations and in new neighborhoods.
- With land use planning comes the challenge of balancing property rights and local reactions to what may be perceived as undesirable land uses. An associated challenge, particularly in more rural areas, is dealing with landowners who believe they should be able to do what they want with their land. People's sense of private property rights often drives these reactions. Providing people with opportunities to expand their awareness and education of particular issues may assist in reducing negative reactions to proposed land uses and regulations.

Future growth and development must be accommodated with an efficient, economical, and integrated land use pattern. The following guiding principles are intended to help inform the organization of land uses within the Planning Area.

GOAL 12.0:

A balanced mix of land uses and development patterns that support a healthy community comprised of livable neighborhoods, vibrant economic districts, compatible industrial areas, and appealing open spaces.

Michigan City Land Use Designations

This land use element uses six broad land use designations to characterize types of development in Michigan City:

1. Residential
2. Commercial / Office
3. Industrial
4. Public / Institutional
5. Parks / Open Space
6. Undeveloped

The character classification (e.g., rural, suburban, auto-urban, urban) of each land use designation will influence the land use category.

RESIDENTIAL LAND USE DESIGNATION

Housing plays an essential role in fulfilling the vision for the future of Michigan City. The character of the housing stock shapes the quality of life in Michigan City. As identified in *The Existing City* report, residential land uses compose 7,050.0 acres, or 21.9 percent of the lands within the Planning Area; of which 3,250.4 acres, or 25.7 percent, is within the City limits. More land area is allocated to housing than any other type of non-residential land use, combined.

Housing provides the foundation for economic growth. Business growth requires employees. Employees require housing. People living in Michigan City provide the demand for goods and services. Housing provides the customer base needed to support business retention and expansion.

Housing Typologies

The *Housing and Neighborhoods* element of the Comprehensive Plan recommends a diverse housing stock that enables people to live in Michigan City for their entire life. Each stage of life produces different housing demands. Young adults seeking to locate to (or remain in) Michigan City often face challenges in purchasing a home, let alone finding a home that suits their lifestyle. At this stage in life, the amount of income and assets may pose barriers to home ownership. As a result, this age group depends on apartments and other forms of rental housing.

As age, economic status and family size increase, people often seek to own a house. To a large degree, the smaller and older homes in Michigan City can fill the role of a starter home. Townhomes can also provide a more affordable form of entry level, owned housing. Families may "move up" to larger homes during their lifetime. This transition reflects the need for more space and the capacity to support additional housing expense. As people age and children leave home, housing needs change.

"Empty nesters" may seek to downsize with smaller homes and less maintenance. Other older residents may need housing that includes varying levels of support services.

COMMERCIAL / OFFICE LAND USE DESIGNATION

Several economic factors play a role in land use planning. From an economic perspective, commercial land use provides the community with goods and services, jobs, and a tax base. Commerce is an integral part of Michigan City's vision for the future. Aside from needing to offer a variety of housing - jobs, shopping, health care, religious, and recreation opportunities - all play a role in citizens' quality of life and economic wellbeing. Indeed, all of these factors influence the formulation and implementation of the Comprehensive Plan.

Commercial Typologies

Michigan City strives to be a great place to conduct business. Achieving this vision requires strong commercial nodes and districts. Commercial businesses are not a single, uniform commodity. Commercial land uses typically fall into two broad categories:

- **Retail.** These businesses provide for the sale of goods and commodities to the public. The interaction between the business and the customer (shopping) is an essential factor in this type of commercial land use. Retail uses typically produce the highest amount of vehicle trips among commercial land uses. Traffic, access and visibility are important variables which influence the location of retail uses.
- **Services.** Service-oriented businesses provide a wide range of professional services. Examples of professional service businesses include law, health care, banking, consulting, accounting and real estate. Services typically entail less business/customer

interaction than retail. Many services can be obtained without visiting the premises of the business. The nature of the interaction with the customer influences the location for service businesses, as well as the programmatic and spatial configuration of the facilities.

Planning for Commercial Development

Commercial land uses can be organized in a spatial hierarchy similar to residential uses: parcel, strip, downtown, and district. Each element of this commercial hierarchy caters to a specific type of consumer, and as a result, impacts the spatial character of the built environment.

Parcel: Many commercial development issues occur at the parcel level. Michigan City is largely composed of a collection of individual businesses. The nature of these businesses makes the individual parcel a primary focus of commercial land use. Several important considerations guide the development of a parcel for commercial use.

- The building should be oriented to the street and provide access to the customer, whether on foot or in an automobile.
- The layout of the parcel must address both character and function. An ample supply of parking makes it convenient to obtain the goods and services.
- Building materials, facades and signage combine with the public streetscape to create an attractive, legible setting.
- Consideration must be given on how to define the edges of commercial areas and provide separation between the commercial parcel and adjacent residential uses.

The "pad" pattern is based on individual parcels and businesses. In this pattern, each lot contains a single building and each building contains a single business. All elements of the development pattern (building orientation, parking, street access) are driven by the needs of each parcel and business. In this pattern, pedestrian movement occurs at the street and from parking lot to store entrance. Pedestrian movement between businesses is difficult to encourage in a pad level of configuration, as compared to an attached, strip level of organization.

Strip: The "strip" pattern contains a series of businesses linked together in a common structure. The strip commercial use typically occurs on a single parcel and provides shared parking. The strip may have a single, consistent facade or contain connected, but individual storefronts. The use of shared parking can reduce the number of spaces and the total paved area of the lot. The strip also allows for fewer curb cuts (street access points) and a more coordinated approach to traffic circulation and access management.

Typical Parcel-type commercial development in Michigan City. (Image courtesy of Bing Maps)

Typical Strip commercial development in Michigan City. (Image courtesy of Bing Maps)

Downtown: The "downtown" pattern combines elements of both pad and strip to create a vibrant environment full of commercial and entertainment activity. The downtown is a collection of individual businesses (pad) joined together (strip) with minimal setbacks from the street and virtually no side setbacks. This pattern orients the storefront directly onto the sidewalk and street, unlike the previous patterns that typically rely on parking between building and street. This pattern creates a strong relationship between pedestrian and vehicular activities.

District: Commercial districts are shaped and defined by several factors. Businesses cluster together to take advantage of a common customer base. For example, service stations, lodging and restaurants oriented around an interchange seek to capture a share of the market from the highway. Districts enhance the ability to coordinate land uses, especially the relationship between commercial and residential. A district approach also creates the potential to share parking and reduce the amount of paved surface.

The Comprehensive Plan uses three types of commercial land use character classifications to guide development: Suburban (Neighborhood) Commercial, Auto-Urban (General) Commercial, and Mixed-Use. The differences between these categories is based on the market, location, scale and size, infrastructure capacity/ support characteristics, and the character of adjacent development. The Comprehensive Plan seeks to provide an adequate supply of each category in locations that support the overall principles and objectives of the Plan.

INDUSTRIAL LAND USE DESIGNATION

Industrial areas are important elements of Michigan City's identity and its future. As summarized in *The Existing City* report, because of the City's geographic location within the region; the communities that are included within its trade area; and with the advent of the double-tracking of the South Shore Commuter Rail Line, Michigan City has the potential to become a major employment center between Chicago and South Bend. Building on these opportunities is a key aspect of the community's vision. The employment generated by local industry brings people to live in Michigan City. These people create the demand for housing and provide the market for commercial development. Industry is also a market driver for local commercial businesses. Industry creates tax base with which to finance local government operations and infrastructure. Planning for industrial land uses focuses on several factors, including:

- the ability for existing businesses to expand their operational footprint;
- minimizing environmental impacts (e.g., noise, odor, particulate emissions and traffic conflicts with nonindustrial land uses);

Michigan City's Downtown District is focused along Franklin Street. (Image courtesy of Bing Maps)

The Old Mill District in Bend, Oregon is a mixed-use district that formerly housed lumber mills. (Image courtesy of Google Earth)

– providing transportation access for employees; as well as for highway, rail and air transportation in order to ship products and receive materials for processing; and
– the supply, quality, condition and reliability of municipal utilities needed to support operations.

The Comprehensive Plan places emphasis on the expansion of existing industries. These businesses and the City share an interest in the future prosperity of the community. With the knowledge and acceptance of the community, growing these businesses should be easier than attracting new businesses. A related strategy is promoting the creation of new satellite businesses that may spin-off of existing industries or seek a location close to these industries. A recent industrial development trend, the development of eco-industrial parks, spatially co-locates industry clusters, whereby, in principle, the waste stream of one industry becomes the feedstock of another industry. The Michigan City Economic Development Corporation (MCEDC) is interested in achieving these kinds of synergies as it makes for the efficient use of land, reduces energy consumption, reduces traffic and subsequent greenhouse gas emissions, and increases profitability for the businesses.

Heavy Industrial land use classification covers the majority of industrial production and manufacturing land uses in Michigan City; while Business Park is used to classify light industrial land uses that are primarily associated with some product assembly, warehousing and distribution. Industrial areas are located in proximity to major highway and railroad corridors to help facilitate industrial commerce activities. As indicated on the City's *Official Zoning Map* (11/09/2010), there is significant heavy industrial and light industrial expansion potential along U.S. Highways 12, 20, and 35. U.S. Highway 20 is designated as a heavy haul route for industrial distribution.

PUBLIC / INSTITUTIONAL LAND USE DESIGNATION

Institutional uses, such as governmental buildings, schools, libraries, and places of public assembly (e.g., churches) can be part of the neighborhood environment. Churches can be found in many Michigan City neighborhoods. The Comprehensive Plan and its *Future Land Use Map* (TFC Map 22, *Future Land Use*) identifies large churches as an institutional land use; while smaller, perhaps more transient churches are categorized as a residential use. New churches can be allowed in residential areas under certain conditions. Criteria for locating a church in a residential land use area include:

– *Size:* Large church buildings and site areas can disrupt neighborhood cohesion. Churches in low density residential areas should not be more than 80 to 100,000 square feet in lot area.
– *Parking:* Without adequate on-site facilities, parking may spill on to neighborhood streets.
– *Traffic:* Traffic increases during peak use times. These times may not be limited to specific days of worship as churches are often used for a variety of types of community assembly. Churches should be oriented to and accessed by way of collector or arterial streets.
– *Lighting and Signage:* Site lighting and signage needs may resemble commercial uses. These site factors should be managed to fit the character of the surrounding residential development.

For the purposes of the *Future Land Use Map*, uses that might otherwise be considered "special uses," such as water towers, wastewater treatment plants, solid waste landfills, airports, and electric transmission substations, are also classified as Public / Institutional.

PARK / OPEN SPACE LAND USE DESIGNATION

As discussed in the Parks and Environment focus area, the adequate provision of parkland and open space for a growing population is critical and should be factored-in to all new development as so much necessary infrastructure. The Parks / Open Space designation has been utilized to identify existing parks and proposed greenway corridors. The future location of proposed parks has not been disclosed on the *Future Land Use Map*.

RURAL / UNDEVELOPED LAND USE DESIGNATION

The Undeveloped Land use designation refers to all lands within the Planning Area that are outside the five-year growth areas designated on TFC Map 1, *Growth Sequencing*; and are therefore considered outside the 20-year horizon of the Plan. Based on the Coolspring and Michigan Township Zoning Maps, most of the land designated on the *Future Land Use Map* that is designated as Undeveloped is currently zoned Residential.

Michigan City Land Use Character Classifications

A character-based approach to community planning looks beyond the basic designation and use of land (residential, commercial, industrial, public / institutional, etc.) to consider the scale, placement and design of buildings and associated planning of sites, as well as the aggregation of uses within neighborhoods, districts, and corridors. Whether new development or redevelopment, and whether private or public construction, the pattern of land use – including its intensity, appearance, and physical arrangement on the landscape – will determine the character and will ultimately contribute to the image of the entire community over the long term.

In the community character spectrum, the four main character designations are Rural, Suburban, Auto-Urban, and Urban. These are common terms that should bring immediate images to mind as one thinks of traveling from the city center to the outskirts of a typical community. Over the years, and particularly since the advent of widespread automobile ownership in the 1920s to 1930s, sizable portions of many communities have developed in an "Auto-Urban" pattern, which falls in the range between Urban and Suburban.

Community character accounts for the physical traits one can see in an area which contribute to its "look and feel." A character-based approach to land use planning focuses on key variables, including development intensity, which encompasses the density and layout of residential development; the scale and form (bulk) of non-residential development; and the amount of building and pavement coverage (degree of impervious cover) relative to the extent of open space and natural vegetation or landscaping. How the automobile is accommodated is a key factor in distinguishing character types, including street design, parking, and the resulting arrangement of buildings on sites.

It is this combination of basic land use and the characteristics of the use that more accurately determines the real compatibility and quality of development, as opposed to land use alone. Aesthetic enhancements such as the design of buildings, landscaping and screening, sign control, and site amenities also contribute to enhanced community character.

As outlined in the *Vision Statement*, Michigan City has expressed its desire to become an economically balanced, highly attractive, family-oriented, and well-maintained urban community composed of a variety of neighborhoods that provide a blend of housing types which support all stages of life. To implement these provisions, a means of converting this statement of future intent into land use policies and development regulations must be formulated. A community character analysis was used to characterize existing development within the Planning Area and to document the land use patterns and design elements that form the character of individual developments and the community as a whole.

CHARACTER THEMES

Each of the following community character types described below is present within the Planning Area with varying degrees of significance. The more readily identifiable character categories include:

- Urban character in Downtown;
- Auto-urban (general) character of commercial development along S. Franklin Street / U.S. Highway 421, E. Michigan Boulevard, U.S. Highway 20, and other arterial routes;
- Industrial character along the southern portion of Ohio Street, the southern end of E. Michigan Boulevard, as well as along U.S. Highway 12, east of Downtown;
- Suburban (General) Residential character of neighborhoods throughout the community;
- Scattered areas of larger lot Rural Residential; and
- Undeveloped, rural agricultural character largely outside of the City Limits, east of town and south of Interstate 94.

The range of community character classifications and their land use categories are as follows:

- **Class: Rural**
  - Rural / Undeveloped (R/U)
  - Rural Residential (RR)
- **Class: Suburban**
  - Suburban (General) Residential Character (SR)
  - Business Park Character (BP)
- **Class: Neighborhood Conservation (NC)**
  - Neighborhood Commercial Character (NCC)
- **Class: Auto-Urban**
  - Auto-Urban Multi-family Residential Character (MF)
  - Auto-Urban (General) Commercial Character (GC)
- **Class: Urban**
  - Central Business District Character (CBD)
  - Mixed-Use Character (MU)
  - Urban Multi-Family Residential Character (UMF)
- **Class: Industrial (I)**
  - Light Industrial Character (LI)
  - Heavy Industrial Character (HI)
- **Class: Public / Institutional (PI)**
- **Class: Park / Open Space (P)**

LAND USE CLASSIFICATIONS

In the following several pages, each land use classification is described in detail, with respect to development types, predominant characteristics, intensities, and applicability of current zoning districts (as defined within the 11/24/2010 *Zoning Ordinance*). This classification system has been applied to each parcel within the Planning Area. In some cases, though seldom, a large parcel may have more than one recommended land use. Together, these land use classifications and categories compose the *Future Land Use Map* (TFC Map 22, *Future Land Use*).

Class: Rural

RURAL / UNDEVELOPED (R/U) LAND USE CATEGORY

The Rural / Undeveloped land use category consists of lands that are sparsely developed, the primary uses of which consist of mainly agricultural and semi-wilderness forested lands interspersed with very low-density residential (homes are customarily an accessory to agriculture). The landscape is accented by a few farmsteads, outbuildings, and gently rolling hills, which contribute to its rural character.

Landscapes possessing Rural / Undeveloped character within the City limits are primarily found in areas to the east of Pottawattamie Park, flanked between Johnson Road to the south and U.S. Highway 12 to the north.

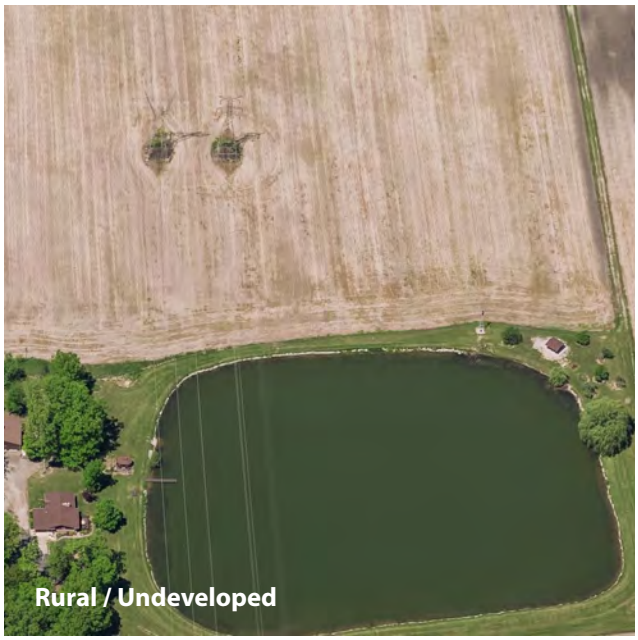
The Rural / Undeveloped land use classification within the Planning Area also indicates lands that are not intended to be developed within the next 20 years, primarily because future growth can be accommodated within those areas identified within TFC Map 1, *Growth Sequencing*, and additional land for development is not needed.

Development Types:

- Agricultural uses;
- Agriculture-focused commercial retail;
- Agricultural storage and support uses, e.g., barns and related outbuildings;

Characteristics:

- Rural character resulting from wide open landscapes, with minimal sense of enclosure and views to the horizon unbroken by buildings in most places;



Rural / Undeveloped

- Typically no centralized water or sanitary sewer service available; thus requiring the utilization of on-site septic systems. Also, much greater reliance on natural drainage systems, except where altered significantly by agricultural operations;
- Potential for conservation developments that further concentrate the overall development footprint through cluster designs, with increased open space set-aside to preserve sensitive lands, maintain the overall rural character, and buffer adjacent properties.

Applicable City Zoning Districts:

- Agriculture (A1)
- Agriculture (A2)

Class: Rural

RURAL RESIDENTIAL (RR) LAND USE CATEGORY

Development of rural residential can be found outside of the Michigan City limits within the Planning Area. A Rural Residential (RR) character exhibits low-density development on larger properties, thereby producing a visual openness. As a result of larger lot sizes, open space and vegetation are intended to be the more dominant views. The buildings remain the most apparent, dominant forms, with the landscape assuming a designed and apparent, yet secondary role. Depending on the size of the home and its percent of coverage and location on the lot, the Rural Residential character category may more closely resemble a larger version of the typical suburban character. To achieve a Rural Residential character, the design of these subdivisions must actively seek to imitate more rural areas through the use of rural street cross sections without sidewalks, significant open space throughout the development, the use of rural fence types and/or hedgerows to divide properties, the preservation or planting of native vegetation along property boundaries, and generous building setbacks on all sides.

As in other cities, Michigan City has fringe areas that have developed with residential intensities that are not appropriate to the location or level of public services available, which is why these areas still fall within the Rural Residential character classification on the *Future Land Use Map*.

Development Types:

- Large lot, single family detached residential.
- Planned development to accommodate conservation and cluster designs (i.e., Tryon Farm);
- Residential dwellings set back from rural roads;
- Outbuildings are for leisure activities (e.g., pool houses, cabanas, recreational vehicle and boats storage) and landscape maintenance (lawn mowers).
- Some agricultural storage and support uses, e.g., barns and related outbuildings;
- Ornamental landscape enhancements and manicured lawn areas;

Rural Residential

Characteristics:

- Scattered residential development on relatively large acreages, resulting in very high open space ratios and very low site coverage (sometimes with residential "estate" areas providing a transition from rural to suburban densities);
- The automobile is often celebrated as the driveway is a dominant element in the composition of the manicured landscape. Garages are often free-standing and situated to the side or rear of the main dwelling.

Density / Height Guidelines:

- 1.8 to 2.9 dwelling unit per acre (DU/ac).

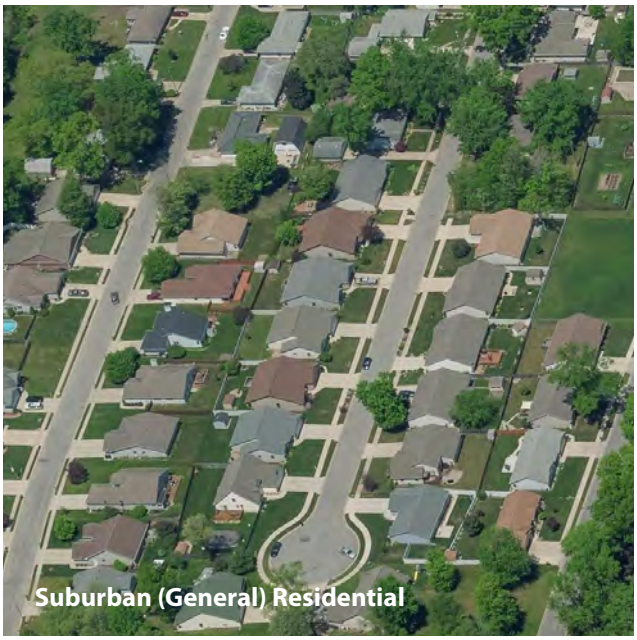
Applicable City Zoning Districts:

- Single Family Residential (R1A)

Class: Suburban

SUBURBAN (GENERAL) RESIDENTIAL (SR) LAND USE CATEGORY

This designation pertains to current and future residential development and includes detached residential dwellings; attached housing types (subject to compatibility and open space standards, e.g., duplexes, triplexes, townhomes, and patio homes); planned developments (with a potential mix of housing types and varying densities, subject to compatibility and open space standards), etc.


Suburban (General) Residential

Development Types:

- Detached residential.
- Attached residential.

Characteristics:

- Accommodation of the automobile on sites. However, garages are typically integrated into the front facade of the dwelling, or hidden behind the dwelling; with driveways on the side of homes or occupying a portion of the front yard space.
- Less openness and separation between dwellings compared to suburban character areas, due to size of parcel and proportion of building footprint to parcel;
- Landscape enhancements remain subordinate to the structure.

Density / Height Guidelines:

- 1.8 to 14.0 dwelling units per acre (DU/ac).

Applicable City Zoning Districts:

- Single Family Residential (R1B)
- Single Family Residential (R1C)
- Single Family Residential (R1D)
- Waterfront Residential (R1E)
- Townhouse (R2A)
- Townhouse (R2B)
- Manufactured Housing Park District (R4)

Class: Suburban

BUSINESS (OFFICE) PARK LAND USE CATEGORY (BP)

The purpose of the Business Park land use category for this Comprehensive Plan's *Future Land Use Map*, is to foster stability and growth of high-quality light industrial (design, assembly, finishing, packaging); office/ warehousing/distribution; office/technology/research and development; and similar industry clusters. These activities are characterized as "clean" since they produce a relatively small amount of environmental outputs, including, but not limited to smoke, gas, odor, dust, noise, vibration of earth, soot or lighting; to a degree that is non-offensive when measured at the property line of subject property. Business Parks are enhanced by access to transportation networks, and that provide desirable employment opportunities for the general welfare of the community.

Business Parks are suburban in character, are typically developed in a campus-style setting that features reduced site coverage and increased open space; and may include offices and associated administrative, executive professional uses, and specified institutional and limited commercial uses. Parking lots are often heavily screened or located to the rear of the main office building. Parking bays for loading and off-loading are located along the longitudinal side of the building, perpendicular to interior vehicular circulation.

Development Types:

Many businesses located in an office setting provide professional services. From a land use planning perspective, it is important to distinguish office uses from other commercial activities. The "pure" office uses entail minimal amounts of interaction with customers. Employees are the primary activity generators for offices.

- Light manufacturing and assembly;
- distribution, and warehousing;
- uses involving handling, storage, or shipping;
- laboratories for research and development.
- food production clusters (e.g., breweries, cookie, cracker and pasta manufacturing);
- arts and crafts manufacturing cluster (e.g., commercial screen printing, pottery product manufacturing, ornamental and architectural metalwork manufacturing).

Business (Office) Park

- Primarily office, medical, and technology/research uses;
- higher-density auto urban (general) residential (20 to 30 percent of total area maximum);
- Public/institutional; and
- Common green spaces.

Characteristics:

- Building type, parking and shipping arrangements, the presence of outdoor storage facilities, trailer trucks, loading docks, rail lines, and power sources
- Typically a minimum Landscape Surface Ratio (lot coverage) of 20 to 30 percent, which allows for sizable building footprints since most developments involve large sites.
- Extensive landscaping of business park perimeter, and special streetscape and design treatments at entries, key intersections, and internal focal points.
- Development outcomes often controlled by private covenants and restrictions that exceed City ordinances and development standards.
- Intended to create a highly attractive business investment environment.
- Site operations are conducted indoors with no outdoor storage or display.

Siting Criteria:

Programmatic and locational criteria for light industrial/ business park development include the following considerations:

- Encourage the formation of new unified business park corridors (e.g., Ohio Street, County Line Road, E. Michigan Boulevard) or the development of individual parcels as part of business parks by focusing new growth in a more clustered pattern, as opposed to isolated parcels along strips of non-residential land uses lining thoroughfares.
- Sufficient acreage, either on one parcel or through assembling multiple parcels, to ensure that current and future expansion needs are satisfied. The estimated size of park should be 50 to 250 acres.
- Configuration: Square or rectangular sites are preferred as they offer the greatest flexibility and satisfy most uses.
- Shovel-ready sites: In-place infrastructure (e.g., utilities, accessibility, rail, etc.) increases speed-to-market, decreases construction / implementation costs, and minimizes risk (e.g., a proposed access road or interchange may not be constructed when planned).
- Ensure adequate truck loading and maneuvering areas within a building or in a side or rear yard, in such a way that all storage, standing and maneuvering of trucks will take place solely on private property and is well-screened from all public thoroughfares.
- Light industrial land uses and industrial parks shall be located near freeways with adequate access provided by thoroughfares. Access to rail is desirable where possible.
- Sufficient street frontage to accommodate structures, parking, and access while in character with adjacent non-industrial properties.

Intensity / Height Guidelines:

- 0.25 to 0.50 FAR for uses with a limited number of employees and customers, such as warehouses / up to three (3) stories.

Applicable City Zoning Districts:

- Light Industrial (M1)
- Office Service (OS)

Class: Neighborhood Conservation (NC)

The Neighborhood Conservation (NC) designation is applied to established neighborhoods that are largely built-out and stable, and where no significant change in development type or pattern is expected or desired. To implement the intent and policies associated with NC, the current zoning designations for these areas may warrant repurposing, and their uses and standards may require recalibration, to achieve certain, desired development outcomes. In this way, all existing, stable neighborhoods would transition from their current zoning designation to an "NC" designation, which results in a series of NC subdistricts (i.e., NC-1, NC-2, etc.), each of which is customized for a particular area, density and intensity of development. Essentially, this would "lock in" standards for each area that reflect and reinforce how the neighborhood originally developed, or has evolved over time, and the existing, prevailing character. This recommended approach to the zoning of existing neighborhoods allows for compatible building additions and site improvements, whereas typical zoning designations may cause such positive actions to require variances or worse, be labeled as "nonconformities."

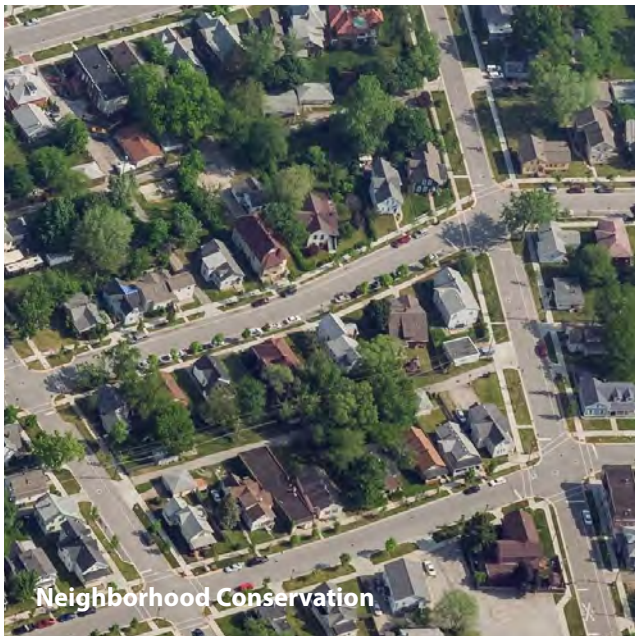
As a result, desired reinvestment is promoted while ensuring that existing neighborhood character is maintained even with redevelopment or infill activity (although changes in stable neighborhoods generally come from incremental expansion and modification of existing homes over time, and not due to large-scale redevelopment).

Development Types (Depending on neighborhood-specific standards):

- detached residential dwellings;
- attached residential and multi-family dwellings;
- public/institutional;
- neighborhood commercial.

Characteristics:

- Integrity of older, intact neighborhoods protected through customized Neighborhood Conservation zoning with standards that ensure no significant change in the development type or pattern and reinforce existing physical conditions (e.g., lot sizes, building setbacks, etc.).


Neighborhood Conservation

- Designed to preserve existing housing stock (and avoid excessive nonconformities and variance requests) and parcel sizes, and also to govern periodic infill and/or redevelopment activity within a neighborhood to ensure compatibility.
- Depending on the particular neighborhood, the customized zoning may recognize and embrace small-scale office or neighborhood commercial (retail/service) uses that have always been part of the area's fabric. Such uses could also be allowed to expand within certain limits, or a particular Neighborhood Conservation sub-district could provide for new uses of this type to occur on vacant sites at the edge of the neighborhood or other appropriate locations. This can be especially important to neighborhood integrity when older homes are falling into disrepair or are no longer marketable, and conversion to other uses is best for all — but when done compatibly under the Neighborhood Conservation standards.

Applicable City Zoning Districts:

- Not applicable

Class: Neighborhood Conservation (NC)

NEIGHBORHOOD COMMERCIAL (NCC) LAND USE CATEGORY

Outside of Michigan City's Downtown, there are commercial and office nodes that are automobile-oriented but designed at a neighborhood scale and cater to pedestrians in neighborhood commercial configurations. These neighborhood commercial centers occupy much smaller building footprints than typical businesses found on major arterial corridors and provide neighborhood conveniences such as drug stores, professional services, drinking establishments, and boutique retail uses. Small food markets are often accompanied by convenience stores and personal service establishments such as banks, dry cleaners, and small-scale drug stores. The Neighborhood Commercial category also includes residences that have been converted into professional offices. Proposed locations include smaller commercial centers adjacent to and surrounded by neighborhoods and at principal intersections of community collector streets.

Most neighborhood commercial properties are between 10,000 and 20,000 square feet in total area. The depth of a center's inline retailers ranges from 30 to 80 feet, with most of the tenants requiring 1,200 square feet of gross land area. A 20-foot-wide-by-60-foot-deep module is the most commonly used store dimension.

Except for dense urban centers, the economics of most suburban neighborhood centers presently require surface parking with an overall blended ratio of 4.0 to 4.5 cars per 1,000 square feet of the entire center's gross building area.

Refer to NC diagrammatic locations of NC on the *Future Land Use Map*. Refer to Neighborhood Commercial Land Use Policies for additional siting and design criteria.

Development Types:

– Professional offices, convenience stores, dry cleaners, post offices, coffee shops, and drug stores.

Characteristics:

– Non-residential development should be small-scale, low-intensity land uses, generally about the same scale and intensity level (building size, shape, and footprint) as residential development within the Rural Residential (RR) or Suburban (General) Residential (SR)character categories; and clustered at intersections of community collector thoroughfares.

– Together with parking areas, buildings consume 50 to 60 percent of the site (floor to area [FAR] ratio is greater than its Auto-Urban (General) Commercial counterpart and is no more than 0.5 to 0.75). Landscaped areas consume 40 to 50 percent of the sites and assume a residential character. Buildings often have a residential appearance.

– Parking is often screened by garden walls and ornamental hedges, or within 300 feet of the building.

– Service vehicles must be smaller in size than a conventional semi-trailer to accommodate deliveries in confined neighborhood areas.

– Signage is significantly reduced in size.

Neighborhood Commercial

Intensity / Height Guidelines:

– Neighborhood shopping areas are designed to serve a localized trade area within a community. The neighborhood shopping areas serve a radius about one-half mile and a population of 2,500 to 4,000 people.

– Desired FAR = 0.50 / up to two (2) stories

Applicable City Zoning Districts:

– B1 Neighborhood Commercial District

Class: Auto-Urban

AUTO-URBAN MULTI-FAMILY RESIDENTIAL (MF) LAND USE CATEGORY

Higher density residential uses such as attached and multiple-family housing (up to three stories in height), and manufactured home communities also have this character due to their density, limited open space, relative amount of impervious surface devoted to buildings and parking lots, and increased building enclosure. Multi-family residential developments are typically setback from road frontages, with buildings surrounded by surface parking lots and oriented inward toward recreational / social amenities, such as swimming pools, cabanas, etc.

Development Types:

– Complexes of often several, multi-story (two to three stories) multi-family buildings, interspersed with parking lots and open spaces areas.

Characteristics:

– Gated automobile and pedestrian entrances;
– Internal orientation;
– Designated recreational areas, often with pool house and pool;
– Shared stair wells and elevators, depending on the number of stories;
– Perimeter buildings heights are typically reduced compared to internal buildings;
– Surface parking lots.

Density / Height Guidelines:

– 18.0 to 30.0 dwelling units per acre (DU/ac).

Applicable City Zoning Districts:

– Low-Rise Multiple Family Residential (R3A)

Auto-Urban Multi-family Residential

Class: Auto-Urban

AUTO-URBAN (GENERAL) COMMERCIAL (GC) LAND USE CATEGORY

The Auto-Urban (General) Commercial land use category of development has become commonplace across the nation since the mid-20th Century, and is characterized by roads, driveways, and at-grade parking areas that commonly exceed the area of the building(s) as a percent of ground cover. The dominance of buildings and surface parking relative to landscaped or unimproved areas is what distinguishes Auto-Urban development from Suburban development character, placing it closer to the urban end of the character spectrum. This character type is most commonly associated with a highway-oriented commercial or business strip. Fast food restaurants, gas stations, and strip shopping centers like those found along S. Franklin Street / U.S. Highway 421, E. Michigan Boulevard, and U.S. Highway 20 are the dominant commercial images of an Auto-Urban character.

The primary difference in Urban and Auto-Urban land use categories is the role of the automobile in its site design. Rather than buildings oriented to the street, as in an urban setting, with parking to the rear, such as what is found in Downtown, Auto-Urban environments are characterized by large parking lots surrounding the buildings.

Auto-Urban General Commercial uses include high intensity commercial businesses that have a trade area outside of Michigan City and/or require a large amount of land for their operations. Uses like auto and recreational vehicle sales, farm implement dealers, motels, nurseries and other outdoor sales, gas stations, restaurants, and "big box" retailers. Due to the potential for these uses to generate high traffic volumes, their location should be on or at least provide adequate access to arterial roadways.

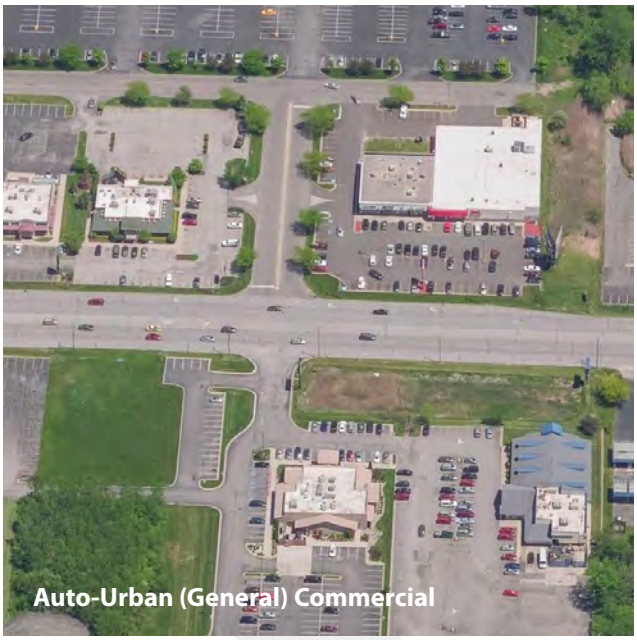
Auto-Urban uses require a significant amount of space for high levels of automobile dependent interaction, i.e., large surface parking lots with multiple points of ingress/egress. As a result, buildings are constructed at the back of the site nearest neighboring uses and away from their roadway frontage. Auto-Urban uses also have a greater reliance on site access, thereby adding to the number of driveways and access points. The result is expansive parking areas that dominate the front setback and, thus, the character of the development.

Development Types:

- "Strip" commercial centers along major roadways, with a range of uses, including those on high-profile "pad" sites along the roadway frontage;
- Automobile service-related enterprises (e.g., gas / service stations, auto parts, car washes);
- Restaurant chains (e.g., fast food, other);
- "Big-box" commercial stores (e.g., grocery, appliances, Wal-Marts, clothing, etc.); and
- Hotels and motels.

Characteristics:

- Significant portions of development sites devoted to vehicular access drives, circulation routes, surface parking, and loading/delivery areas, making pavement the most prominent visual feature;



Auto-Urban (General) Commercial

- Buildings typically set back toward rear of site to accommodate expansive parking areas in front, closest to passing traffic;
- Less emphasis on architectural design in many cases, with building façades often lacking articulation and having large banks of single-pane windows;
- Development desire to maximize signage (number, size) to capitalize on site visibility to passing traffic;
- Often not conducive for access or on-site circulation by pedestrians or cyclists.
- Required Landscape Surface Ratio of 10 to 15 percent.

Intensity / Height Guidelines:

- 0.35 to 0.50 FAR / up to two (2) stories

Applicable City Zoning Districts:

- Neighborhood Commercial (B1)
- General Commercial (B2)
- Highway Commercial (B3)

Class: Urban

MIXED-USE (MU)

Downtown typifies what is envisioned for the density and intensity of development within the Urban Commercial / Mixed-Use land use classification. The Downtown retains the historic fabric and design of a traditional mixed-use, central business district. This urban environment is characterized by taller, larger buildings that occupy most if not all of the site and are set at the street edge with parking largely on-street and in structures, with reduced common surface parking lots. Sidewalks are scaled for pedestrian rather than automobile use, and original buildings with historic or design significance have been mostly well-preserved.

This Comprehensive Plan strongly recommends the preparation and adoption of design and architectural standards for developments in the UC/MU land use category so that there is continuity in the overall character of the area.

Characteristics:

- Streets and other public spaces framed by buildings with zero/minimal front setbacks, creating "architectural enclosure."
- Greatest site coverage. Multi-story structures encouraged.
- Most conducive for pedestrian activity and interaction, with public plazas and pocket parks providing green space amid an urban environment, and a place to gather and host community events.
- Structured and on-street parking.
- Low-density residential uses, and industrial uses should not be permitted within the UC/MU land use classification.

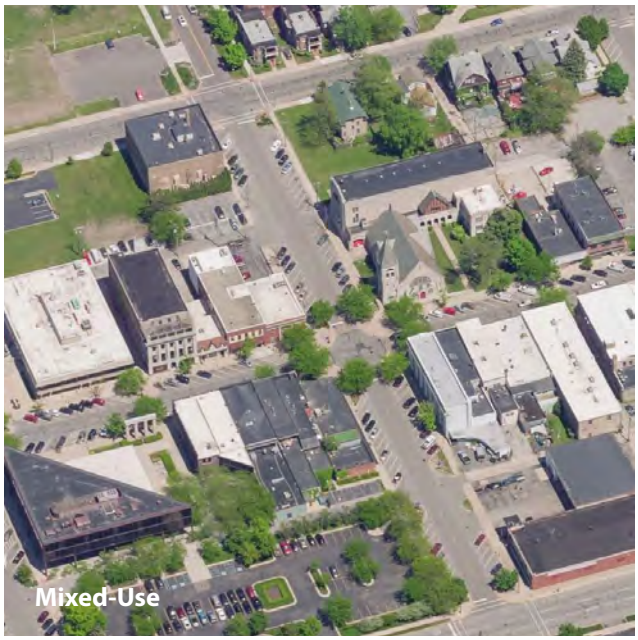
Allowed Uses:

- Intensive, urban character with a multiplicity of uses, including multi-family residential, entertainment, restaurants, department stores and other retail, general and professional offices, hotels, open space gathering areas.

Development Types:

Mixed-Use, Lifestyle Center

- Promotes regional pedestrian-oriented, mixed-use centers with integrated, complementary uses; with convention/assembly and/or parks and public spaces that draw visitors from surrounding neighborhoods and communities within the region.


Mixed-Use

Density / Height Guidelines:

- These permitted development densities and intensities are recommended so that innovative and flexible site design can provide density to encourage neotraditional planning concepts.
- Ranges from 2.0 to 4.0 FAR (approximately 70 DU/acre or 60 to 150 residents/acre), of which up to 0.75 FAR can be office or commercial / up to eight (8) stories.

Development Type: Downtown Mixed-Use Central Business District

- Applies to the area around Downtown. It includes an active mix and concentration of uses and public gathering / event spaces in a main street setting, including professional offices, government services and entertainment venues.

Intensity / Height Guidelines:

- Ranges from 2.0 to 4.0 FAR / from 3 to 8 stories, as determined by the *Downtown Special Area Plan* (to be developed).

Development Type: Mixed-Use Corridor

- Allows a broad range of commercial, office and high-density residential uses and public spaces serving surrounding neighborhoods, commercial /

professional business parks and visitors from nearby communities.

Intensity / Height Guidelines:

– 1.85 FAR (approximately 60 DU/ac or 50 to 130 residents/ acre), of which up to 0.50 FAR can be office or commercial; on N. Broad Street intensities above 2.0 FAR may be permitted at key locations with significant public benefits and amenities specified within special area plan standards / up to four stories.

Applicable City Zoning Districts:

– Downtown Core (CBD1)
– High-Rise Multiple Family Residential District (R3B)
– Marina District (MD)
– Michigan City North End Form-based Overlay District (NEFBO)

Heavy Industrial

Class: Industrial (I)

HEAVY INDUSTRIAL (HI) LAND USE CATEGORY

Having an area that can accommodate more traditional, heavy industry can be an important component of a successful economic development strategy. The Industrial use classification combines activities of both light and heavy industry. Uses such as office / warehouse, wholesale, product assembly, and light manufacturing are included with heavier uses that often include outdoor storage, display and work activity.

Development Types:

– Heavy industrial;
– Heavy commercial (i.e., retail sales involving larger merchandise or vehicles, often with significant outdoor display areas, such as a large home improvements store or lumber supply yard);
– Office uses accessory to a primary industrial use.

Characteristics:

– Typically auto-oriented character, although master-planned industrial park developments may feature more open space and landscaping, regulated signage, screening, building design standards, etc.;
– Outdoor activity and storage, which should be screened where visible from public ways and residential areas;
– May involve significant truck traffic or direct rail service;
– On-site presence of large-scale moving equipment in some cases;
– Potential for environmental impacts that may affect the proximity and type of adjacent uses, including particulate emissions, noise, vibrations, smells, etc., plus the risk of fire or explosion depending on the materials handled or processed;
– Certain intensive publicly-owned uses (e.g., public works facilities, fleet maintenance, treatment plants, fire training) are best sited within Industrial areas.
– Required 10 to 15 percent landscape surface ratio, equivalent to City's Bufferyard E composition along all edges of property.

Siting Criteria:

– Availability of utilities infrastructure, e.g., the ancillary services required in the operation of any production process.
– Industrial uses should have access to major roadways and rail spurs, and cost-saving infrastructure such as dedicated water supplies, waste systems and electric power systems.

Intensity / Height Guidelines:

– 0.25 to 0.50 FAR for uses with a limited number of employees and customers, such as warehouses / up to three (3) stories.

Applicable City Zoning Districts:

– Heavy Industrial (M2)

Class: Public / Institutional (PI) Land Use Category

Institutional land uses include improved parcels and facilities that are held in the public interest and are usually exempt from real property taxation plus any service drives or roads inside the actual parcel. This category encompasses major City-owned facilities, plus other public and private buildings and sites with an institutional nature. This classification is also for development that supports municipal / regional special uses and functions, and may include utilities and transportation-related infrastructure; and for uses that may require a special zoning overlay district, such as the Michigan City Municipal Airport, which includes Air Installation Compatible Use Zone (AICUZ) navigation easements that are designed to ensure awareness that locations within the Airport's flight paths are subject to impacts such as significant noise and potential safety risk. With these latter uses there may be some incompatibility with adjacent uses due to environmental factors (e.g., odor, emissions) or safety-related issues. Therefore, the Comprehensive Plan does not specify height standards for Public/Institutional designations, as these uses typically have a range of unique needs. Specific height standards for these designations may be specified by applicable zoning or special area plan standards.

Development Types:

- Municipal and other government buildings;
- Public safety facilities (police, fire);
- Schools and colleges;
- Hospitals and medical centers;
- Cemeteries;
- Michigan City Municipal Airport;
- Sanitary District and Wastewater Treatment Plant;
- Water Towers;

Characteristics:

- High degree of visitation and/or pedestrian activity in some cases, with people coming and going throughout the day;
- Institutional functions may require multiple buildings, arranged in a campus-like setting;
- Facilities may have special parking and passenger drop-off requirements;
- Buildings are sometimes set back from the road to provide more prominence, with large amounts of open spaces surrounding the buildings.

Intensity / Height Guidelines:

- 1.25 FAR for schools and city facilities.

Applicable City Zoning Districts:

- Airport District (AP)

Class: Park / Open Space (P) Land Use Category

This land use category includes all existing municipal public parks, outdoor recreation areas and open spaces that have been committed to public or private enjoyment and recreational pursuits.

Development Types:

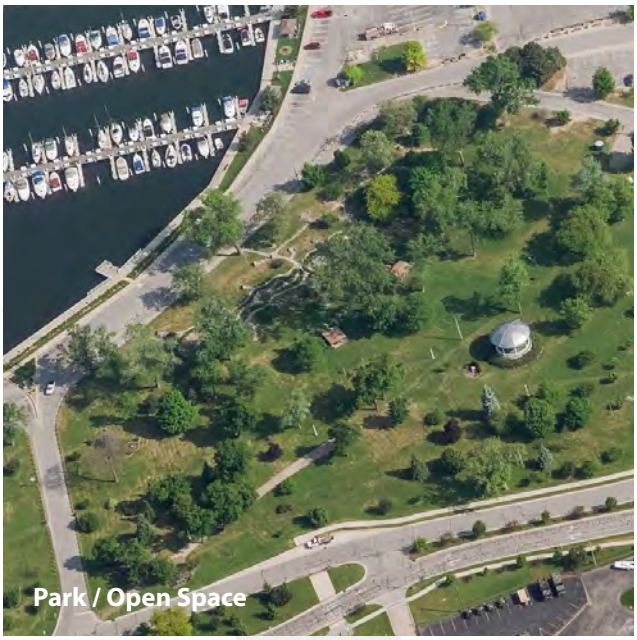
- Public parks and open space;
- Public greenways and recreational trails;
- Public recreation areas (e.g., public golf courses);
- Public or private lands within floodplain or storm water management areas that are generally unsuitable for development.

Characteristics:

- Public parkland theoretically will remain so in perpetuity compared to other public property, such as buildings, that can transition to private ownership at some point;
- Park design, intensity of development, and planned uses/activities should match area character (e.g., public squares/plazas in Urban downtowns; athletic fields/courts and play equipment in large community parks located and designed for intensive use; and nature parks for passive recreation in Suburban, Estate and Rural areas).

Applicable City Zoning Districts:

- Not applicable


Park / Open Space

OBJECTIVE 12.1: Develop a *Future Land Use Plan* that anticipates the variety and spatial distribution of land uses and associated development densities and intensities required to accommodate the projected population of Michigan City in 2040.

Future Land Use Map: Key Concepts

As depicted within TFC Map 21, *Future Land Use Diagram*, several key concept have driven the development of the *Future Land Use Map* (TFC Map 22, *Future Land Use*).

NATURAL ENVIRONMENT

Located on the southern shore of Lake Michigan, the City of Michigan City is nestled within one of the most ecologically diverse environments in North America. To the west of the City is the Indiana Dunes National Lakeshore, which will soon become America's 60th national park. To the east are native stands of boreal flatwoods, wetlands, surface waters and floodplains, much of which are part of the Trail Creek watershed.

FREESTANDING COMMUNITY

Environmental resources help to prevent sprawl, maintains Michigan City's identity as a free-standing community, and directs the City's growth southward.

NEW GROWTH AND DEVELOPMENT

It is envisioned that Michigan City's projected population growth will be accommodated and balanced between infill and redevelopment of neighborhoods and mixed-use districts in and around Midtown, Downtown and the Marina; and development within the business development centers located between U.S. Highway 20 and Interstate 94.

It is envisioned that, for the most part, Interstate 94 will remain the southern growth boundary, except for corridors that have penetrated south of the interstate, such as U.S. Highway 421 and U.S. highway 20.

TRANSIT ORIENTED DEVELOPMENT

With the double-tracking of the South Shore commuter rail line there will be significant transit oriented development / redevelopment emanating from the 11th Street Station. Important redevelopment sites include the Franciscan Health North Campus in Midtown, the former Police Station site, the current City Hall site, and several blocks of marginal development immediately east of Downtown and along Trail Creek.

BUSINESS DEVELOPMENT CENTERS

Southern growth will be oriented within four key business development centers, which will contain light manufacturing, warehousing, and distribution-oriented business parks, with convenient access to Interstate 94 and parallel U.S. Highway 20; various densities of single family and multi-family residential land uses, within which to house a growing business park workforce; and a variety of office, commercial, and retail uses of varying development intensities.

NEIGHBORHOOD COMMERCIAL DEVELOPMENT

This Comprehensive Plan places emphasis on walkable, neighborhood-scale commercial / retail development, located in village-style settings, where neighborhood commercial is either clustered at the core of a neighborhood, or along a collector street in the interstitial areas between neighborhoods. The plan recommends utilizing the turn-of-the-century, traditional, two-story, neighborhood commercial building typology found throughout Midtown and the neighborhoods flanking Downtown.

THOROUGHFARE IMPROVEMENTS

With the advent of the Indiana Dunes National Park initiative, there is renewed interest is developing a new interchange at Interstate 94 and County Line Road. This interchange will be located two miles west of the U.S. Highway 421/Interstate 94 interchange, and will provide a direct route to the Indiana Dunes National Park as well as Downtown Michigan City. It will also enable the development of a transit oriented, western business development center composed of Ameriplex-style, warehousing and distribution flex space.

KEY CORRIDORS

Significant redevelopment will likely occur along key corridors leading in to Michigan City, as outlined in the *U.S. Highway 421 / S. Franklin Street "South Gateway"*

LEGEND

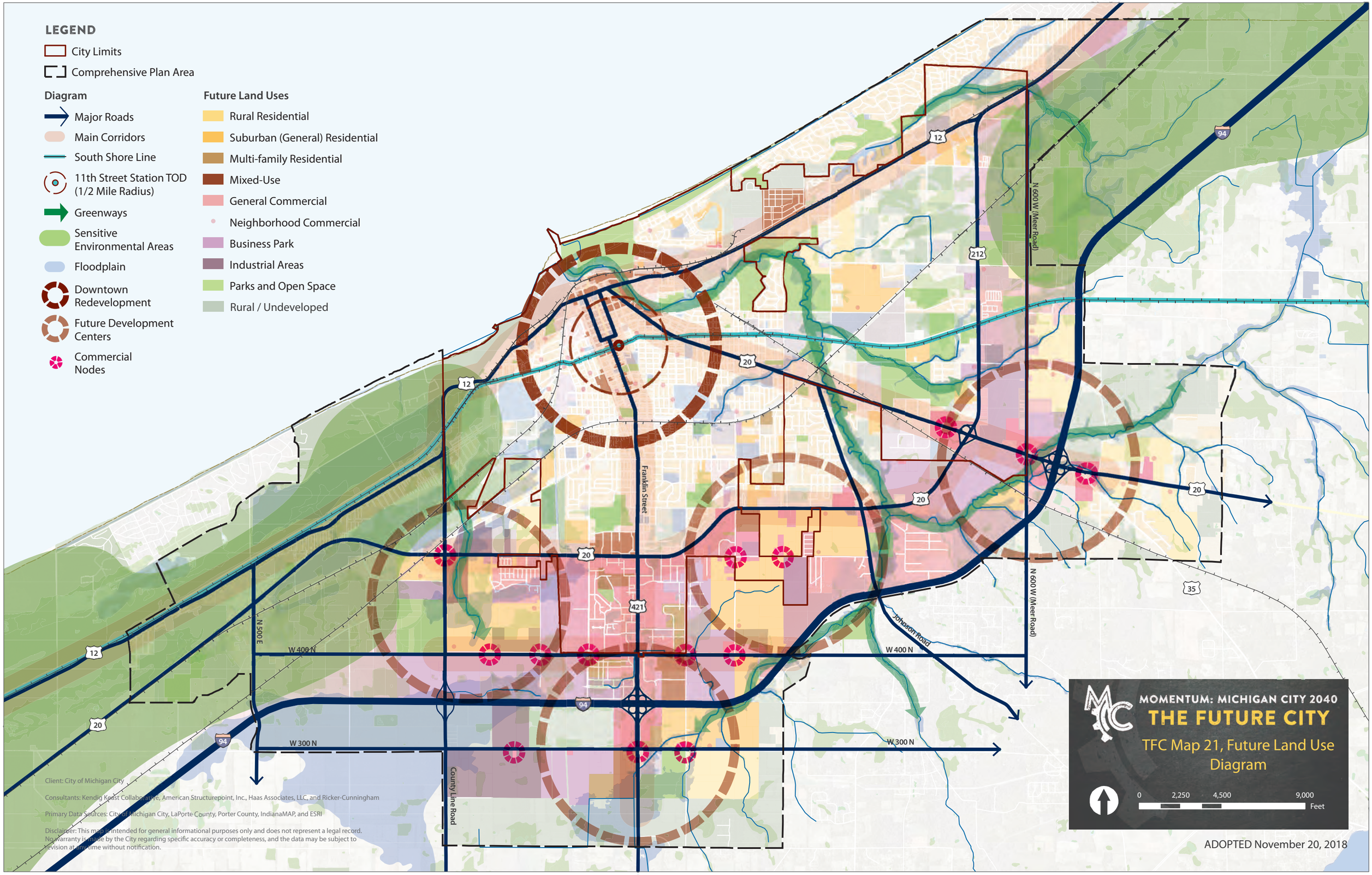
- City Limits
- Comprehensive Plan Area

Diagram

- Major Roads
- Main Corridors
- South Shore Line
- 11th Street Station TOD (1/2 Mile Radius)
- Greenways
- Sensitive Environmental Areas
- Floodplain
- Downtown Redevelopment
- Future Development Centers
- Commercial Nodes

Future Land Uses

- Rural Residential
- Suburban (General) Residential
- Multi-family Residential
- Mixed-Use
- General Commercial
- Neighborhood Commercial
- Business Park
- Industrial Areas
- Parks and Open Space
- Rural / Undeveloped



Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

MOMENTUM: MICHIGAN CITY 2040

THE FUTURE CITY

TFC Map 21, Future Land Use Diagram

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Corridor Redevelopment Plan, but also including U.S. Highways 12 and 20.

MEDICAL MILE

With the advent of the Franciscan Health South Campus / Regional Hospital, as well as the cluster of medical office buildings located just east of U.S. Highway 421, it is envisioned that CR W 400 N (Kieffer Road), from County Line Road eastward to the Interstate 94 underpass, will be redeveloped to include clusters of satellite medical-related, offices, pharmacies, medical equipment stores, etc.

GREEN INFRASTRUCTURE

It is envisioned that as the business development centers become viable live-work-play environments that key riparian corridors will function as integral green infrastructure and active transportation corridors for residents to utilize for commuting to work, traveling Downtown and to the lakefront, and for accessing designated recreation and open space areas.

Future Land Use Map

The essence of comprehensive planning is a recognition that Michigan City does not have to wait and react to growth and development. Rather, it can determine where growth will occur and what character this new development will reflect. Through active community support, this Plan will ensure that development meets certain standards and, thus, contributes to achieving the desired community character.

The purpose of the *Future Land Use Map* and associated policies is to guide zoning, ensure the efficient and predictable use of land capacity, guide growth and development, protect public and private property investments from incompatible land uses, and efficiently coordinate land use and infrastructure needs. The *Future Land Use Map* shall be used in conjunction with the Comprehensive Plan policies to evaluate zoning consistency including proposed zoning map amendments and zoning text changes.

The *Future Land Use Map* (TFC Map 22, *Future Land Use*, which follows TFC Map 1, *Growth Sequencing*) is not the community's official zoning map, but it shall be considered along with the City's zoning ordinance, when development is proposed. It is a guide for establishing future land use patterns. *The Future Land Use Map* shows how land uses are assigned to parcels of land in the Planning Area.

The provisions of the *Land Use and Character* element of the Comprehensive Plan, including its policies, strategies, and recommendations, as well as other elements of the Comprehensive Plan are implemented primarily through development regulations (zoning and subdivision ordinances) or through programs that fulfill other policy objectives, such as capital improvement priorities, and plans to raise revenues for financing public facilities and services. Refer to TEC Map 44, *Zoning*) determine which specific development requirements currently apply to a particular parcel; recognizing that upon the adoption of the Comprehensive Plan, the City's official zoning map will need to be revised.

As a guide for development and public improvements, the *Future Land Use Map* is intended to provide an overall framework for guiding the actions of the different entities responsible for determining Michigan City's future. It will be important that the *Future Land Use Map* be used on a daily basis in order for the City to enjoy the benefits of coordinated development over the next 20 years. This is significant since the findings and recommendations contained in this plan provide the basis for the City's development ordinances as the primary tools used to implement the plan.

Land Use Policies

The land use policies are the key integrating force behind this chapter and the *Future Land Use Map*. They establish a general statement of intent for the future growth and development within the Planning Area and serve as the policy basis for the more specific growth area designations, land use recommendations, and future thoroughfare designations. They will be used as a guide for future land use and infrastructure decisions and for considering future requests to amend the Comprehensive Plan. The growth principles, policies, strategies and recommendations outlined within the chapters of the Plan, and depicted on the *Future Land Use Map* should be used to establish the general pattern of development within the Planning Area. This pattern, density and intensity of development should be implemented through the City's land development regulations. To ensure contiguous and fiscally sustainable development it should be the overarching regulatory policy of the City to encourage growth in

LEGEND

- City Limits
- Comprehensive Plan Area

Future Land Uses

- Rural Residential
- Suburban (General) Residential
- Auto-Urban Multi-family Residential
- Mixed-Use
- Auto-Urban (General) Commercial
- Neighborhood Commercial*
- Business (Office) Park
- Heavy Industrial
- Rural / Undeveloped
- Public / Institutional
- Park / Open Space

* The locations for Neighborhood Commercial (NC) land use is diagrammatic only and intended to depict the general location of the land use category. Refer to Neighborhood Commercial Land Use Policies for additional siting and design criteria.

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Lake Michigan
Dunelend Beach
Michiana Shores
Long Beach
Pottawattamie Park
Michigan Township
Michigan City
Trail Creek
Springfield Township
Beverly Shores
Town of Pines
Pine Township
Coolspring Township
Center Township
PORTER COUNTY
LA PORTE COUNTY

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

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MOMENTUM: MICHIGAN CITY 2040

THE FUTURE CITY

TFC Map 22, Future Land Use

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

areas that either possess the requisite utilities and transportation infrastructure system capacities, or can support infrastructure expansion in the future.

As discussed within the Implementation section of the Plan, an interlocal agreement should be executed between the City and LaPorte County requiring that all new development within the Planning Area (which includes lands outside of the City limits) adheres to the following development policies.

Growth cycles and land use patterns create parcels whose development will occur as an area matures and overall density reaches a built-out stage.

The following items are intended to identify specific site planning and design considerations that can be incorporated into a project to represent certain levels of development quality. The list of policies is not inclusive of all design items that should be considered when reviewing development plans. Any development request should note other design items that may not be identified and that also result in enhanced development standards.

STRATEGY 12.1.1: ***Encourage the redevelopment of properties along CR 400 N (Keiffer Road), from County Line Road east to Interstate 94.***

With the development of the Franciscan Health Michigan City – South Campus Regional Hospital there is an opportunity to regulate / incent the redevelopment of the CR W 400 N (Kieffer Road) corridor into what has been described as, the "medical mile;" which would consist of medical-related businesses (doctors' offices, medical equipment, etc.), which would support the Regional Hospital.

ACTIONS AND INITIATIVES

1. Work with LaPorte County to rezone land on both sides of CR W 400 N (Kieffer Road) from B2 – General Commercial, M2 – Heavy Industrial, and B3 – Highway Commercial, to OS – Office Service District; the uses of which include offices for professional and business services, planned office developments, and medical centers.

STRATEGY 12.1.2: ***Adopt a Right-to-Farm ordinance.***

In conjunction with LaPorte County, consider jointly adopting a Right-to-Farm (RTF) ordinance, which would be intended to relieve operating farmers from nuisance claims from new neighbors and developers, thereby insuring that farming operations are able to continue operation as long as the land/market permits. The ordinance can include:

- grandfathering—establishing farming practices as pre-existing uses within zoning ordinances to aid in the relief of nuisance claims against them, should they arise from new developments or homeowners;
- requirements for realtors, developers, etc. to inform potential buyers of the neighboring farming operations and RTF Ordinance.

ACTIONS AND INITIATIVES

1. Work with LaPorte County to develop and adopt a right to farm ordinance to enable

STRATEGY 12.1.3: ***Ensure the availability of land for agriculturally based economic development in the Planning Area.***

ACTIONS AND INITIATIVES

1. Preserve suitable agricultural production areas with high potential for economic output using applicable and adopted mechanisms such as agricultural overlay zones, conservation easements, agricultural districting, and cluster development.
2. Encourage development of structures on land that is not suitable for agriculture.
3. Discourage the conversion of prime agricultural land designated Rural / Undeveloped on the *Future Land Use Map*.

STRATEGY 12.1.4: ***Promote and assist the viability of agricultural based economic activities in the Planning Area.***

ACTIONS AND INITIATIVES

1. Promote sustainable economic development ventures that grow from the local agricultural base and assist farmland owners with maintaining and enhancing agricultural activity through agricultural base tax incentives, cooperative ventures and promotion of agricultural production.
2. Enhance opportunities for agricultural business activity such as incubators and commercial kitchens through local and regional marketing strategies.
3. Encourage programs to coordinate the reactivation of fallow farmland to increase farm production.

4. Encourage local processing to strengthen the Area economy.
5. Assist in marketing of local agricultural products.
6. Encourage a "buy local" program.
7. Promote fair financing and small lending programs for agricultural based economic activities.
8. Encourage an agricultural cooperative to increase marketing possibilities as well as decreasing the cost of inputs.
9. Assist in establishing potential markets for local goods, e.g. farmers markets, local food co-ops, health food stores, neighborhood grocery stores, public schools, private schools, colleges, businesses, correctional facilities and restaurants.

STRATEGY 12.1.5: ***Revise Sign ordinance and standards within the Planning Area.***

STRATEGY 12.1.6: ***Encourage mixed use development as designated in the Plan to allow people to live, work, shop, learn and play in close proximity while minimizing conflicts between land uses.***

STRATEGY 12.1.7: ***Provide industrial sanctuaries. Encourage the growth of industrial activities in the City by preserving industrial land primarily for manufacturing and mixed employment purposes.***

MICHIGAN CITY MUNICIPAL AIRPORT (MCMA) RUNWAY EXPANSION

As discussed within *The Existing City* report (page A.127) the expansion of the MCMA runway to 5,001 linear feet will result in increased use of the airport by a greater diversity of aircraft types, including the Cessna Citation 550 class of jets, which typically log a minimum of 500 annual operations. Additional operations increases the need to regulate land uses adjacent to the airport. According to the Federal Aviation Administration (FAA), an incompatible land use includes "any type of land development which jeopardizes the safe operation of aircraft near an airport. These uses include developments such as residential buildings, schools and libraries, nursing homes and hospitals, wetlands and open water, landfills and sewerage treatment facilities, generators of light emissions and others."[1]

1 Li, Kai Ming; et.al, 2007. Land Use Management and Airport Controls: Trends and Indicators of Incompatible Land Use. PARTNER Report No.: PARTNER-COE-2008-001. Available at: http://web.mit.edu/aeroastro/partner/reports/landmgt-proj6-2008-01.pdf

STRATEGY 12.1.8: ***Prepare a Master Plan for the Michigan City Municipal Airport.***

The *Airport Master Plan* is a document that details the long-term development of an airport. The basic purpose of an *Airport Master Plan* is to set out a plan for future development designed to meet projected needs given community, environmental, and political considerations. An *Airport Master Plan* is also a tool to ensure that aviation planning among federal, state, regional and local agencies is coordinated.

ACTIONS AND INITIATIVES

1. In anticipation of the Michigan City Municipal Airport's runway expansion, prepare an updated master plan for the airport property that locates utilities infrastructure extensions, taxiways, aircraft fueling stations, private hangers, vehicular access and circulation, and warehouses.
2. Utilize the Federal Aviation Administration's (FAA) Land Use Compatibility and Airports circular in adhering to airport master plan requirements, and identifying airport impact zones.

STRATEGY 12.1.9: ***Amend the Michigan City Code of Ordinances, Appendix C – Joint Zoning Ordinance to reflect the expanded airport runway.***

Re-delineate the AP - Airport District boundaries to reflect the expanded airport runway, additional airport properties, and likely additional programmatic considerations resulting from a more heavily used airport. The FAA's Land Use Compatibility and Airports circular outlines the following considerations when amending a zoning ordinance to reflect an airport's physical and programmatic expansion:

1. Review existing state enabling legislation and case law affecting planning review and approval actions necessary by state agencies. Then consider zoning with emphasis on the affected communities.
2. Determine if further analysis can be accomplished in-house, or if a consultant(s) may be required (particularly as it applies to existing/new development around the airport).
3. Research and study the contemporary approach to land use and/or zoning control currently being employed in similar jurisdictions around the country.

4. Consider a variety of land use controls, such as, but not limited to: – Airport Noise Overlay Zones – Variance Procedures – Special Exceptions – Performance Standards.
5. Ensure that airport-related zoning and all other implementation devices (for example, subdivision regulations) are in agreement with the adopted comprehensive plan.
6. Allow for adequate review of all airport zoning and development ordinances by legal counsel, appropriate internal agencies and authorities, any affected special districts, and all affected local government entities.
7. Develop and implement a citizens' public participation program, replete with appropriate processes and relevant information. This effort should be designed to elicit meaningful responses from the general public regarding the status of land use planning around the airport.
8. Refine specific zoning and land use compatibility strategies to ensure that they are as uniquely oriented to the airport development circumstances of the particular jurisdictions.
9. Consult with legal counsel to ensure that required due process is followed as the local planning bodies and legislative authorities review and adopt local zoning ordinances.

ACTIONS AND INITIATIVES

1. When regulating heights of towers and other structures around the airport, utilize the FAA Advisory Circular: A Model Zoning Ordinance to Limit Height of Objects Around Airports.

STRATEGY 12.1.10: ***Require full disclosure of anticipated Municipal Airport impacts to adjacent properties.***

Within the Airport Influence area a notice to title/ disclosure statement should be required for new or substantial redevelopment of lots, buildings, structures, and activities. The notice should indicate that the property is located adjacent to the (name) airport and may experience low overhead flights, odor, vibrations, noise and other similar aviation impacts.

Indiana Code 2017, IC 32-21-5-7 requires "disclosure by the owner that an airport is located within a geographical distance from the property as determined by the Indiana real estate commission. The commission may consider the differences between an airport serving commercial airlines and an airport that does not serve commercial airlines in determining the distance to be disclosed." In Indiana, sellers are required to provide the Residential Real Estate Sales Disclosure form, which requires sellers to disclose whether the property is within one mile of an airport.

ACTIONS AND INITIATIVES

1. Consider partnering with the real estate / development community to develop brochures that depict noise contours and noise impact areas generated by the airport, and outline various sound attenuation construction techniques.

As delineated in TEC Figure 14, *MCMA RPZ Improvements* in the *Existing City Report* on page A.127.

STRATEGY 12.1.11: ***To mitigate airport impacts to adjacent properties, employ sound attenuation techniques for all new residential construction.***

ACTIONS AND INITIATIVES

1. For all new residential construction, require contractors to provide optional noise abatement / attenuation construction techniques, including increased wall thickness, additional insulation, location, size, and type of windows, including glass thickness.
2. As the airport becomes fully operational, prepare a noise contour map that depicts noise contours down to 65 DNL. Share this map with Michigan City's real estate community.
3. Delineate a Noise Impact Area. A "noise impact area," for purposes of a fair disclosure program, could be based on a sufficiently sized, fixed distance from the airport or from the airport runways. The area could be sized to ensure that it would cover the 65 DNL contour and other areas that may reasonably be considered to be subject to potentially disturbing aircraft overflights.

STRATEGY 12.1.12: ***Encourage the protection of the Michigan City Municipal Airport from adjacent incompatible land uses and/or activities that could impact the present and/or future use of the airport as an Essential Public Facility (EPF), endanger the lives of people on the ground and/or promote inadvertent growth of incompatible land uses.***

Incompatible land uses may include residential, multi-family, height hazards, uses that attract large concentrations of people, wildlife hazards, and special

uses such as schools, hospitals and nursing homes, and explosive/hazardous materials.

ACTIONS AND INITIATIVES

1. Encourage open space/clear areas and utilize zoning criteria within key safety areas adjacent to the airport to facilitate protection of the airport as an essential public facility, and reduce safety risk exposure to people on the ground and in the air. Applicable criteria may include promoting cluster development to promote open space/clear areas, locating structures away from the extended centerline of the runway, discouraging public assembly, transfer of development rights and other applicable strategies. When possible promote contiguous open space parcels, especially in areas with smaller parcel size configurations.
2. Discourage the siting of uses adjacent to airports that attract birds, create visual hazards, discharge any particulate matter in the air that could alter atmospheric conditions, emit transmissions that would interfere with aviation communications and/or instrument landing systems, or otherwise obstruct or conflict with aircraft patterns, or result in potential hazards to aviation.
3. Encourage the adoption of development regulations that protect the airport from height hazards by developing a Height Overlay District that will prohibit buildings or structures from penetrating the Federal Aviation Regulations (FAR) Part 77 "Imaginary Surfaces".
4. Develop criteria, standards and compatible land use designations that will protect the airport and aviation uses from incompatible development by adopting a combination of zoning techniques including compatible zoning districts, overlay districts, and development siting criteria for evaluating uses or activities in key areas adjacent to the airport.
5. Encourage economic development opportunities and aviation related uses adjacent to airports and promote the efficient mobility of goods and services region-wide consistent with the economic development element and the regional transportation strategy.
6. Protect the viability of the airport as a significant economic resource to the community by encouraging compatible land uses, densities, and reducing hazards that may endanger the lives and property of the public and aviation users.

Public / Institutional (PI)

PI Policy 1: Ensure that new public schools are developed in proximity to affordable housing or else are sited to ensure future affordable housing development.

PI Policy 2: Parking lots for civic buildings, schools, and religious facilities are best located at the side or rear of a building and screened from public streets.

PI Policy 3: Schools as emergency aid centers. Encourage the use of school facilities as gathering and aid-distribution locations during natural disasters and other emergencies.[1]

PI Policy 4: Facility adaptability. Ensure that public schools may be upgraded to flexibly accommodate multiple community-serving uses and adapt to changes in educational approaches, technology, and student needs over time.[2]

PI Policy 5: School access. Encourage public school districts to consider the ability of students to safely walk and bike to school when making decisions about the site locations and attendance boundaries of schools.[3]

1 2016. Chapter 8, Public Facilities and Services. City of Portland Comprehensive Plan.
2 Ibid.
3 Ibid.

Policies

Neighborhood Commercial Development (NC)

NC Policy 1: Promote small scale community commercial centers which foster a market place atmosphere; improve profit for small businesses; provide jobs; and circulate dollars within the local economy to enhance a community environment and meet retail, recreational and service needs of neighborhood residents.

NC Policy 2: Through attention to the mix and intensity of land uses and transit service, the City will support development along community collectors that enhances residential livability and pedestrian access.

NC Policy 3: Support the continued presence of existing small-scale retail sales and commercial services along community collectors.

NC Policy 4: Support new small-scale retail sales and services, commercial services, and mixed uses where community collectors intersect with neighborhood commercial nodes.

NC Policy 5: Discourage the conversion of existing residential uses to commercial uses outside of neighborhood commercial nodes.

NC Policy 6: Preserve and enhance a system of neighborhood commercial nodes that includes a mix of housing, neighborhood-serving retail, and community uses.

NC Policy 7: Discourage the commercial territorial expansion of neighborhood commercial nodes, except to adjacent corners of the node's main intersection.

NC Policy 8: Support the continued presence of small-scale, neighborhood-serving retail and commercial services in neighborhood commercial nodes.

NC Policy 9: Ensure that new commercial / retail uses within neighborhoods are developed at a height, mass, scale and design that is appropriate and compatible with surrounding areas. Encourage a height of at least two stories for new buildings in neighborhood commercial nodes, in keeping with neighborhood character.

NC Policy 10: Neighborhood Commercial Displacement. Avoid the displacement of small and local businesses due to rising real estate costs. Programs should be developed to offset the impacts of rising operating expenses on small businesses in areas of rapidly rising rents and prices.

Commercial Development (C)

C Policy 1: Residential and commercial developments located next to outdoor public places should have their entrances and windows facing the public places to provide natural surveillance.

C Policy 2: Through site planning and building design, ensure that commercial developments are compatible with abutting uses. Appropriate buffers, consisting of combinations of vegetation, earthen berms, and structural systems (walls and fences); building setbacks, height and materials; lighting, signage, adjoining land uses, and densities should be considered and integrated into commercial developments. Off-street parking adjacent to public roads should require screening by one or a combination of the following: walls, drought-tolerant landscaping, and/or berms. These screens should be continuous and at a recommended height of three (3) feet or greater to visually buffer the parking lot.

C Policy 3: Encourage commercial development design that will provide opportunities for cross access with adjoining sites to reduce or limit points of ingress and egress on arterial or collector streets to reduce onsite and offsite traffic congestion and hazards.

C Policy 4: Commercial development should provide access points on arterial and collectors and not on local neighborhood streets.

C Policy 5: Site amenities such as plazas, pedestrian walkways, and site furnishings (benches, decorative light fixtures, ornamental waste receptacles, and enhanced paving) along linkages are encouraged. The use of landscaping, building overhangs and canopies should be implemented in order to provide shade and to make the areas comfortable for the users.[1]

C Policy 6: Promote comprehensive sign plans for multi-user commercial developments. Exterior signs for individual pad sites should be coordinated with signs for the entire commercial complex. Encourage freestanding signs not to exceed the building heights of the commercial developments they advertise.[2]

1 Clark County, Nevada Comprehensive Plan Urban Land Use Policies. Clark County Department of Comprehensive Planning (Available at: http://www.clarkcountynv.gov/comprehensive-planning/land-use/Documents/Consolidated_Urban_Land-Use_Policies.pdf)
2 Ibid.

C Policy 7: Encourage commercial developments to use visually articulated elements including, but not limited to towers, domes, decorative fascias or parapets, pilasters or columns, arcades or colonnades, decorative details such as tiles wrought iron (tubular steel), fenestration, landscaped planters or trellises, pitched/hipped roofs, or other visually articulated design utilizing harmonious volumes, spaces and materials.[3]

C Policy 8: Encourage architectural treatments on all building sides to eliminate blank building elevations along public rights-of-way and areas visible to the general public to improve visual quality. All structures on a development site should be of compatible architectural design, style, and color. If the back or sides of any building are oriented toward a right-of-way, public facility, or a planned residential area, it should be of the same architectural style and color, constructed of the same building materials as the remainder of the building, and should be enhanced with similar architectural features to match the front of the building.

Similarly, buildings located on corner lots should have facades enhanced to match the front of the building to emphasize their prominent location. This also includes design variations to a building's mass, including different elevations, roof forms, and surface planes by stair-stepping building height, breaking up the mass (mass refers to height, bulk, and scale of a building) and shifting building placement.[4]

C Policy 9: Encourage usable and functional, pedestrian friendly developments where building entrances are clearly identifiable and directly accessible from public sidewalks.[5]

C Policy 10: For tourist-oriented commercial developments, such as hotels, encourage the development of multi-storied residential uses with appropriate indoor and outdoor amenities (e.g. swimming pool, health spa, tennis courts, access to trails and parks, etc.) and local supporting commercial uses (e.g. restaurants, entertainment facilities, etc.).[6]

3 Clark County, Nevada Comprehensive Plan Urban Land Use Policies. Clark County Department of Comprehensive Planning (Available at: http://www.clarkcountynv.gov/comprehensive-planning/land-use/Documents/Consolidated_Urban_Land-Use_Policies.pdf).
4 Ibid.
5 Ibid.
6 Ibid.

Mixed-Use Development (MU)

MU Policy 1: Promote compatible, mixed-use developments within existing urban areas.

MU Policy 2: Provide for More Than a Single Use. A mixed-use development should contain three or more significant uses that are mutually supporting. A significant physical and functional integration of uses can be achieved through:

- Buildings that are intended to be primarily multi-story structures with a vertical mixing of uses.
- Key components of the development that are positioned around central public spaces.
- Interconnected buildings/uses through pedestrian friendly pathways such as sidewalks, interior walkways, plazas and mall areas, escalators, and aerial bridges between buildings.[1]

MU Policy 3: Include a Residential Component. Encourage mixed-use development that includes a residential component as opposed to a mix of only nonresidential uses to reduce the number of trips generated and congestion on adjacent roadways.[2]

MU Policy 4: Create mixed-use centers which enhance the sense of community and reduce the need to travel long distances for employment and/or services. Maintain the integrity of mixed-use centers and neighboring residential communities.

MU Policy 5: Provide a Safe, Comfortable, and Attractive Environment. A mixed-use development should be safe, comfortable, and attractive to pedestrians, patrons, and residents.

- Provide a continuous pedestrian network.
    - Sidewalks should connect all residences to open space, gathering places, public and semi-public uses, and nonresidential uses.
    - Internal sidewalks should be connected to the perimeter public sidewalk system.
    - Horizontal and vertical pedestrian movement systems are important.
- Provide functional, people-oriented open spaces and/or public gathering spaces as opposed to just landscaped areas. These spaces should include a mix of the following:
    - Water features
    - Sculptures
    - Seating areas
    - Special lighting, to set nighttime atmosphere in particular
    - Special paving
    - Trees and landscaping
    - A well-defined edge
- Buildings with active uses such as restaurants and retail spaces, trees, walls, topography, and other site features should be oriented and arranged to enclose gathering places and lend a human scale.
- Site planning should integrate the principles of "Crime Prevention through Environmental Design" (CPTED) to the maximum extent practicable.

1 City of Overland Park, Kansas
2 Ibid.

MU Policy 6: Reduce sprawl by achieving higher densities while also creating more amenities and more useable public open space.

- The appropriate density for a mixed-use development should be judged based on circumstances such as:
    - Intensity of surrounding uses.
    - Adjacency to a thoroughfare.
    - Separation from other uses by a thoroughfare.
    - The extent and type of proposed transitions.
    - The degree to which the development provides a sense of place or a design that surrounding uses will want to connect to.[3]

MU Policy 7: Focus on design aspects that provide density without forsaking the basics of good design.

- Incorporate multiple open spaces within walking distance of homes.
- All residential dwellings should be within 1,500 feet of an open space area.
- Establish written architectural criteria for all residential structures.
- Maintain a consistent setback for all structures on the same block and across the street.
- Minimize the appearance of automobiles in driveways through the use of private alleys serving rear yard garages.

MU Policy 8: Facilitate Public Transit Linkages. Encourage more intense mixed-use developments along current public transit routes or along planned/anticipated routes.

- Provide connections to mass transit on-site; or
- Provide distinctive pedestrian connections to adjacent off-site stops.[4]

MU Policy 9: Share Parking. Utilize shared parking facilities, with cross-access easements (as appropriate), linked to multiple buildings to provide safe and efficient access to buildings and to lessen the impact of vehicles and parking.[5]

MU Policy 10: Encourage the physical and functional integration of surrounding buildings, existing and/or proposed pedestrian paths, trails, and streets in accordance with Mixed Use District requirements when considering the location of buildings on the site.[6]

3 City of Overland Park, Kansas
4 Ibid.
5 Ibid.
6 Clark County, Nevada Comprehensive Plan Urban Land Use Policies. Clark County Department of Comprehensive Planning (Available at: http://www.clarkcountynv.gov/comprehensive-planning/land-use/Documents/Consolidated_Urban_Land-Use_Policies.pdf)

Business Park Development (BP)

BP Policy 1: Allow the option of low-intensity office as a transitional use. Low-intensity office development may be considered appropriate as a transition between more intense nonresidential development and existing/planned lower intensity residential neighborhoods under the following circumstances:

- The maximum total building area is limited to 20% of the total net land area in the project (excluding those areas in public right-of-way).
- Such development must be compatible in architectural design, height, bulk, and building materials to the adjacent low-density residential developments.
- Such development must demonstrate compatible site design by the use of extensive screening, building and parking orientation, and preservation of natural site amenities.
- Traffic generated by such development must be directed away from residential areas and on to commercial streets.[1]

BP Policy 2: Cluster office development. Encourage the formation of new unified office corridors or the development of individual parcels as part of office parks, shopping centers, or mixed-use developments by focusing new growth in a more clustered pattern as opposed to isolated parcels along strips of nonresidential land uses lining thoroughfare or commercial streets.

BP Policy 3: Encourage business and research park developments to be designed as centers or campuses with limited points of ingress and egress on arterial or collector streets to reduce traffic congestion and hazards, through coordinated architectural and signage programs, screened parking areas, and extensive landscaping. Also, encourage business and research park developments to incorporate pedestrian and bicycle circulation systems that connect with existing and proposed transit routes, trail systems, parks, and open space.

BP Policy 4: Limit access to major roadways. Limit the principal access of office development to thoroughfare, reverse frontage, or commercial streets.

1 City of Overland Park, Kansas

BP Policy 5: Encourage convenient parking within office areas. Encourage convenient customer parking within office areas and discourage parking in adjacent residential neighborhoods.[2]

BP Policy 6: Locate less compatible uses toward the interior of office areas. Encourage higher intensity and or less compatible office uses because of height, bulk, parking, lighting, noise, traffic generation, or hours of operation to locate in the interior of office areas and not adjacent or in close proximity to residential neighborhoods.

BP Policy 7: The use of similar building height and roof forms should be utilized to enhance compatibility with surrounding development, especially adjacent residential neighborhoods.

BP Policy 8: Provide sufficient opportunities for offices that support the regional economy and the local needs of the community.

BP Policy 9: Encourage master planned office developments to reduce points of ingress and egress on arterial and collector streets, traffic congestion, traffic hazards, signs and visual clutter, and inconsistent architectural style.[3]

BP Policy 10: Outside storage areas, loading areas with roll-up, overhead doors, service areas, and areas intended for large semi-truck parking should be screened from public streets, along with residential and other adjacent uses. All screening material should be consistent with the materials used for the balance of the project.[4]

2 City of Overland Park, Kansas.
3 Clark County, Nevada Comprehensive Plan Urban Land Use Policies. Clark County Department of Comprehensive Planning (Available at: http://www.clarkcountynv.gov/comprehensive-planning/land-use/Documents/Consolidated_Urban_Land-Use_Policies.pdf)
4 Ibid.

Industrial Development (I)

I Policy 1: Facilitate the mobility of employees by public transit and the movement of goods by truck, rail, air, or waterway, as appropriate.

I Policy 2: Ensure that planned industrial areas are of sufficient size, and are appropriately located, to support the community's economic development goals and strategies.

I Policy 3: Direct environmentally responsible industrial growth onto land that is highly suited for industrial development and is in proximity to adequate transportation corridors.

I Policy 4: Protect suitable industrial land from residential conversion or encroachment by:

- Identifying and rezoning it to an industrial zoning classification;
- Critically reviewing rezoning requests for conversion of industrial land to non-industrial uses; and
- Assessing the appropriateness and impact of incompatible land uses adjacent to industrial lands.

I Policy 5: Encourage district heating in industrial parks and urban manufacturing districts, wherever a centrally located heating/cooling system can handle several companies' energy needs effectively and more efficiently.

I Policy 6: Ensure Adequate Transitions. Encourage development patterns that provide appropriate transitions and buffering between differing land use intensities. Where developments of incompatible intensities abut, there should be adequate buffering (landscaping and screening) to separate them.

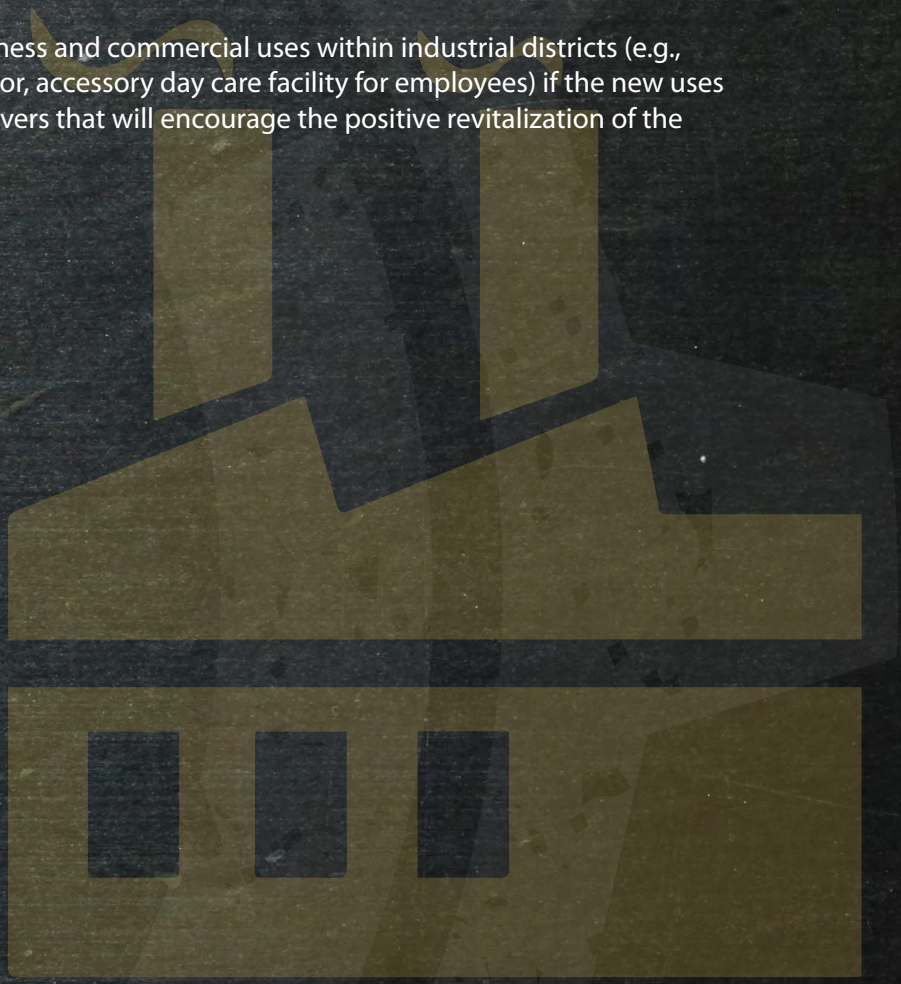
- Low-intensity, office development can be a transitional use between business park developments and residential developments.
- Medium- to high- intensity recreation facilities such as ball fields, court game areas, etc., can be a transitional use so that joint use is made of parking facilities.
- Promote the retention of stands of trees, natural vegetation, wetlands, stream corridors, and environmentally sensitive areas whenever possible to separate light industrial/business park developments from residential land uses.
- Encourage the creative and extensive use of landscaping and berming techniques for effective buffering of residential and light industrial/business park land uses.
- Screen Unsightly Views - Ensure adequate screening of unsightly views of light industrial/business park developments (loading docks, rooftop equipment, parking areas, trash containers, and satellite dishes) through the use of extensive landscaping, berms, fencing, architectural design, open space, setbacks, building orientation, or any combination of these methods.

I Policy 7: Encourage higher intensity and/or less compatible uses to locate in the interior of industrial/business park areas or adjacent to freeways or thoroughfares, but not adjacent or in close proximity to residential neighborhoods. A use may be considered less compatible because of height, bulk, parking, light, noise, traffic generation, or hours of operation.

I Policy 8: More intensive light industrial/business park land uses that generate high volumes of traffic should be located near freeways with adequate access provided by thoroughfares. Access to rail is desirable where possible.

I Policy 9: Support the industrial employment base by allowing and encouraging limited commercial-retail development (e.g., taverns, cafes, or restaurants) near industrial districts that complement the needs of employees and businesses.[1]

I Policy 10: Allow the integration of business and commercial uses within industrial districts (e.g., workforce training center, business incubator, accessory day care facility for employees) if the new uses will support industry or other economic drivers that will encourage the positive revitalization of the neighborhood.[2]



1 Leigh, Nancey Green, et al. 2014 Sustainable Urban Industrial Development. PAS Report 577. American Planning Association. Chicago.
2 Milwaukee (WI), City of. 2009. Near North Side: A Plan for the Area. Available at http://city.milwaukee.gov/AreaPlans/NearNorth.htm#.VC8ZEGeBGUk.

Momentum: Michigan City 2040 Comprehensive Plan

Implementation

Kendig Keast Collaborative **ADOPTED November 20, 2018**

Implementation:
Introduction

Plans are never intended to simply exist as a binder that is forever sitting on the shelf. These are collaborative works that involve many different contributors and include directions for many aspects of City development. Indeed, a great many people put time and effort into chronicling 'the next step' for the City of Michigan City. At the same time, experience dictates that plans become unused and reduced to shelf clutter. The addition of this Implementation chapter is intended to avoid that near term fate. Using this Plan on a frequent basis for policy, planning, regulatory, and capital decisions will lead to its commonplace acceptance and reference. This is the goal of this chapter and moreover, this Comprehensive Plan as a whole.

The *Momentum: Michigan City 2040* Comprehensive Plan should be a "living document" that is responsive to ongoing change. That is, a document that is frequently referenced for guidance in community decision-making. Its key planning considerations, goals, and action strategies must also be revisited periodically to ensure that the Plan is providing clear and reliable direction on a range of matters, including land development issues and public investments in infrastructure and services.

Implementation is not just about a list of action items. It is a challenging process that will require the commitment of the City's elected and appointed officials, staff, residents, business owners, major institutions, foundations, other levels of government, and other organizations and individuals who will serve as champions of the Plan and its particular direction and strategies. Among its purposes, this final chapter highlights specific roles, responsibilities, and methods of implementation to execute priority Plan recommendations. Equally important are formalized procedures for the ongoing monitoring and reporting of successes achieved, difficulties encountered, and new opportunities and challenges that have emerged since Plan adoption. This is in addition to any other change in circumstances, which may require rethinking of Plan priorities. Scheduled plan evaluations and updates, as described later in this section, will help maintain its relevance and credibility as an overarching policy guide.

Guiding Principles

The following principles will inform the development of recommended strategies, initiatives and actions for implementing this Plan.

Guiding Principle 1: Be Bold. The scope and breadth of the *Momentum: Michigan City 2040* Comprehensive Plan is transformational. Bold yet realistic steps will be necessary to implement it.

Guiding Principle 2: Flexible Approach. Use a flexible approach to implementation. The Comprehensive Plan's flexibility allows for further improvements as new information is obtained or updated and individual projects are further refined. The Plan does not provide all the answers; as no plan could. It does, however, encourage an adaptive assessment strategy that includes a process for monitoring and amending plan elements and strategies to remain abreast of changing conditions, and as new information becomes available.

Guiding Principle 3: Ensure responsible use of fiscal resources. Implementation of the Comprehensive Plan represents a substantial financial investment by all levels of government. Because of the expansive size of the Planning Area and the range of issues and challenges therein, the Plan's recommended strategies and actions, by design, are largely broad and conceptual in nature. More detailed technical studies and designs are warranted to ensure that each project is designed to achieve its intended purpose and that the project is shown to be a sound investment. The City will need to ensure that fiscal resources are used efficiently and effectively.

Guiding Principle 4: Stakeholder Involvement. Continue to involve stakeholders and the public. Public outreach and engagement have been an integral part of the development of the Comprehensive Plan. Continue to seek public input throughout implementation and future amendments to the Plan.

Guiding Principle 5: Partnership and Collaboration. No single organization can implement the *Momentum: Michigan City 2040* Comprehensive Plan on its own, and the Plan cannot be legislated or regulated into reality. Successful implementation will depend on partnerships and collaboration across governments and across sectors.

Guiding Principle 6: Interlocal Cooperation. The City should promote interlocal cooperation agreements between its departments and their corresponding counterparts within LaPorte County; so as to establish consistent policies regarding engineering standards and development, and code enforcement throughout the Planning Area (lands within the City limits and extraterritorial area). An ongoing system of consultation and cooperation should be established between the City and County jurisdictions.

Guiding Principle 7: Remain Adaptable to Opportunity. While every effort has been made to anticipate the needs of the future in developing the Comprehensive Plan, it is important to remain adaptable to changing conditions and circumstances. As a living document, the Plan's approach to implementation must allow it to change course should the need or opportunity arise.

Guiding Principle 8: Accountability. The City is directly accountable for the ongoing administration and implementation of the Comprehensive Plan. A successful, working system is one in which clear targets for construction and implementation are set, performance is managed, and people can trust that their interests are being served. Toward that end, the City should provide regular reporting on progress towards the achievement of Plan goals and objectives.

Why this Final Plan Section is Important for Michigan City:

- Emphasizes the importance of not only creating a plan, but translating it into real action, and tangible, beneficial results.
- Adds a short-term strategic perspective and component to what is otherwise intended as a guide to Michigan City's long-term enhancement over the next 20 years.
- Includes an Implementation Action Plan for the City and other plan implementation partners to focus on during the next several years after plan adoption.
- Underscores the need to keep the plan fresh and relevant through annual review and reporting procedures and periodic updates.
- Advocates ongoing community engagement as the Plan is implemented.

Plan Implementation Methods

PLAN INFLUENCE

Simply setting out an implementation framework in this chapter is not enough to ensure that the action items of this Plan will be carried out and the community's vision and goals ultimately achieved. The policies and action priorities in this plan should be consulted frequently and should be widely used by decision-makers as a basis for judgments regarding:

- the timing and availability of infrastructure improvements;
- proposed development and redevelopment applications;
- landowner-requested annexations;
- zone change requests and other zoning-related actions;
- expansion of public facilities, services and programs;
- annual capital budgeting;
- potential redrafting and amendments to the City/ County Joint Zoning Ordinance and related code elements;
- intergovernmental coordination and agreements; and
- operations, capital improvements, and programming related to individual City departments.

THERE ARE SEVEN GENERAL METHODS FOR PLAN IMPLEMENTATION:

1. **Policy-based Decisions**

   Land use and development decisions should be made based on the policies that are set out in this Comprehensive Plan. In some measure, the adoption of new or amended land development regulations (e.g., zoning, subdivision, landscaping, sign controls, etc.) will establish a specific framework for evaluating private development proposals against the City's articulated policies. However, decisions regarding annexation, infrastructure investment, and right-of-way acquisitions are generally left to the broad discretion of the City Council. Moreover, administering *Future Land Use Map* amendments is typically the responsibility of the Planning Commission. This plan provides the common policy threads that should connect those decisions.

2. **Land Development Regulations and Engineering Standards**

   Land development regulations and engineering standards are fundamentals for plan implementation. It is plain—but often under appreciated—that private investment decisions account for the vast majority of any City's physical form. Consequently, zoning and subdivision regulations and associated development criteria and technical engineering standards are the basic keys to ensuring that the form, character and quality of development reflect the City's planning objectives.

   These ordinances should reflect the community's desire for quality development outcomes while recognizing economic factors. They should not delay or interfere unnecessarily with appropriate new development or redevelopment that is consistent with plan goals and policies.

3. **Coordination and Partnerships**

   Some community initiatives identified in the Comprehensive Plan cannot be accomplished by City government on its own. They may require direct coordination, intergovernmental agreements, or funding support from other public entities or levels of government. Additionally, the unique role of potential private and non-profit partners to advance the community's implementation action program should not be underestimated. This may occur through cooperative efforts, volunteer activities and in-kind services (which can count toward the local match requirements for various grant opportunities), and public/private financing of community improvements. Indeed, the role of committees, commissions and organizations in the successful and sustainable implementation of the Plan cannot be understated.

4. **Special Projects, Programs and Initiatives**

   Special projects or initiatives may include initiating or adjusting existing City programs; entering into interlocal agreements; expanding citizen participation programs; providing training; and other types of special projects.

5. **Specific Plans and Studies**

   There are several areas where additional planning work is warranted, at a "finer grain," on the ground level of detail than what is appropriate in a Comprehensive Plan. As such, some parts of this plan will be implemented only after some additional planning or special study, or detailed design, and the development of construction documentation and specifications.

6. **Formation of New Policies**

   As new development or redevelopment plans are proposed, the City's staff and advisory boards, together with the Plan Commission and City Council, must take the policies and recommendations of this plan into consideration. The text of this prioritization of programs, and projects within this chapter, coupled with economic development-related initiatives outlined within Focus Area 1, *Growth Capacity and Economic Performance,* the *Future Land Use Map* and the proposed *Thoroughfare Plan*, should weigh heavily in future decisions by City officials, residents and other stakeholders in achieving the shared community vision.

7. **Capital Improvements Programming**

   A capital improvements program, or "CIP," is a multi-year plan (typically five years) that identifies budgeted capital projects, including street infrastructure; water, wastewater and drainage facilities; open space, trails and recreation facility construction and upgrades; construction of public buildings; and purchase of major equipment. Identifying and budgeting for major capital improvements will be essential to implementing this Comprehensive Plan. Decisions regarding the prioritization of proposed capital improvements should take into account the policy and management directives of this Plan.

   A capital improvements program and budget also boosts accountability by identifying all the anticipated costs associated with a project, and how those costs might be spread over multiple phases and budget cycles. This is especially important if the City will be dependent on an external grant to finance a project, or might be pursuing the project in coordination with another public entity or with a private or non-profit partner.

Why Program Improvements?

- To take into account the community's long-range needs during annual budgeting.
- To avoid overlooking large, critically needed projects.
- To help make the development of major facilities consistent with the community's goals and objectives, anticipated growth, and financial capabilities.
- To ensure the highest priority projects are constructed or acquired first.
- To balance the needs of different sectors of the community with those of the entire community.
- To allow ample time to explore alternative funding sources.
- To encourage citizen interest and constructive participation in community affairs.
- To facilitate intergovernmental coordination by keeping other municipal departments, governments and agencies informed of the local governing body's construction intentions.
- To help reduce some of the risk in private development by adhering carefully to a well-publicized schedule for constructing community improvements.
- To improve the development and maintenance of public facilities by requiring local officials to analyze and forecast their future needs.
- To adopt a more business-like and responsible approach to solving community problems, thereby discouraging piecemeal, uncoordinated, "brush fire" approaches.
- To improve financial management, debt administration, and use and allocation of limited public resources, and thereby help qualify the City for better borrowing terms and bond ratings.

Project Definition

Perhaps the most basic question is how does a capital project go from being only a general concept in the Comprehensive Plan to a built and tangible result on the ground? Capital improvements planning and programming becomes another component of the City's annual budgeting cycle. It can involve a similar process of City staff generating potential project needs and priorities based on their knowledge of community infrastructure, facilities and operations, as well as requirements imposed on the City externally, balanced with opportunities on the horizon. Meanwhile, elected officials and their constituents may be identifying priorities of their own, often from a less technical position but with a lay person's perception of need.

The range of activities to incorporate into a CIP goes well beyond street, drainage and utility infrastructure projects and includes parks and trails, City buildings, land and right-of-way/easement assembly and acquisition, major vehicle and equipment purchases, soft costs including the planning and design studies that are often a precursor to significant initiatives and expenditures, aesthetic or tourism-related enhancements, such as community gateway treatments, streetscape upgrades along corridors, and installation of wayfinding signage - all qualify as capital projects.

PROJECT BREAKDOWN AND PHASING

As with any complex activity, an advisable next step is to break down a potential capital project into smaller parts, as generally depicted in IMP Figure1, *Project Lifecycle*. This is especially important to determine interim steps and a particular sequence of activities that may need to occur along the way toward attaining an ultimate outcome. For example, a major infrastructure project can involve the following components, some of which obviously must occur as a prerequisite for others:

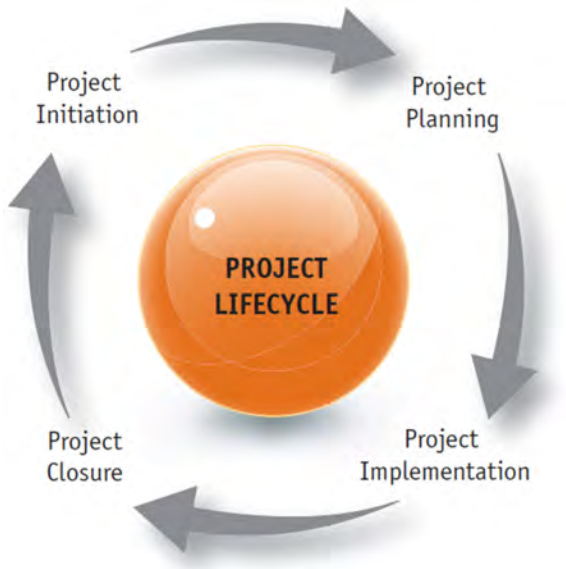
- Arranging funding, whether through City sources (general fund, capital budget), grant opportunities, cost-sharing with public and/or private partners, or a combination of some or all of these;
- Hiring new or reassigning existing technical or oversight staff;
- Securing consultant support, as needed, including consultant selection (prior to design);
- Environmental assessment and required documentation;

- Design (prior to bid/award);
  - Preliminary schematics;
  - Detailed engineering design;
- Bid/award (prior to construction);
- Property, right-of-way, or easement acquisition;
- Necessary permit approvals;
- Project bidding, award and contracting; and
- Finalizing intergovernmental or public/private agreements, as needed, to finance and/or execute a project.

Considering the array of projects that might be included in a CIP, this "chunking" of bigger projects is a way to move multiple initiatives forward simultaneously as the timing and cost of interim steps will vary across projects. Another essential reason for breaking down a complex project into its component parts is to separate out aspects that might be eligible for grant funding (e.g., environmental remediation) versus elements that in all likelihood will be the full responsibility of the City to finance, such as operational costs and project maintenance. Steps that require greater lead time will also stand out, such as necessary state or federal permitting.

Figure 1, Project Lifecycle

Source: CARE USA, 2007. The Basics of Project Implementation: A Guide for Project Managers. Cooperative for Assistance and Relief Everywhere, Inc.



PROJECT COST

An initial brainstorming step at this point is to attempt to identify and list every conceivable cost that might be associated with a project. This may include the cost of a capital improvement to include design, legal fees, land, construction, operating equipment, furniture, and any other expenditure that is necessary to put the asset into service. As with any budgeting exercise, not every specific cost factor might be anticipated, or they may be under or overestimated. This is why capital budgets include "contingency" line items or percentages of the total project cost, especially as labor, materials and other costs could vary significantly by the time a particular project actually proceeds into construction.

This point in the CIP process is another good time to "compare notes" with other area cities and public agencies that may be implementing comparable projects, or operate in a similar cost environment and with similar terrain and climate conditions.

Another critical aspect of capital project budgeting is to account for ongoing "O & M" (operations and maintenance) costs. In essence, if the City builds it, can the City also afford to run and maintain it, and for how long? Additionally, depending on the nature of the project, there are often identifiable and predictable future milestone points where a cost spike will again occur, such as when critical parts exceed their useful life and must be replaced.

PROJECT PRIORITIZATION

As with any priority-setting process, various criteria could potentially be applied. For municipal governments, perhaps the most fundamental ranking consideration is public health, safety and welfare. Some projects and improvements the City cannot avoid doing, or cannot put off, as they are mandated by the state or federal governments, or are a condition of a permit (e.g., water and wastewater system compliance with water quality standards).

Once a set of candidate projects has been identified, reasons for placing certain projects ahead of others can include:

- **"Low-Hanging Fruit:"** Projects that are relatively easy and quick for the City to accomplish. This is a common way to build momentum, illustrate capabilities, and to show and celebrate early results.

- **"Bang for the Buck:"** Basic cost/benefit considerations may make some projects immediately more attractive than others. City Administrators often favor this ranking criterion.
- **Tangible Results:** Visible outcomes may be especially important, to demonstrate meaningful results from the targeted investment of public funds. Elected officials often favor this ranking criterion, along with wanting to have results they can point to relatively soon given election cycles.
- **"Chip-Away" Projects:** These are interim steps toward an ultimate, longer-term objective. As previously mentioned, the principle of chunking helps to break down more complex projects. Steps along the way may not yield tangible results, but the eventual outcome will be highly beneficial to the community over the long term.
- **"Money in the Bank:"** Some projects have an obvious funding source, such as a dedicated enterprise fund, and can be implemented sooner than later. In some cases, a project that might not otherwise rank highly as a community priority may quickly move to the top of the list when a new grant opportunity comes along at the regional, state or federal level.

As noted earlier, the *Momentum: Michigan City 2040* Comprehensive Plan highlights a variety of potential projects for the City to pursue, either in the near term or over the decades ahead. Various other specialized plans and studies sponsored by the City also identify needs and priorities related to economic development, transportation, utility infrastructure, parks and trails, housing and neighborhoods, community facilities, and other physical "building blocks." In reality, some projects are true "needs" while others are only "wants." So, the types of criteria highlighted in this section can be helpful for sorting out which projects should move forward first.

Some cities start the process by having each department place its own identified projects in a suggested rank order, for eventual compilation and consideration across all departments and functions. In the end, however, setting project priorities in the public sector cannot be an entirely technical process. Taxpayer funds are involved at some point, so elected officials must consider equity, and also show results to their constituents. Geographic and/or socioeconomic fairness may require that beneficial projects occur in various parts of the community – including across most or all City Council wards, and not be concentrated in only certain parts of the city.

Questions to Consider —

An old reference entitled, *Municipal Finance Administration*, suggests answering the following questions when starting project prioritization:

- *How is the candidate project related to the progress of the entire community?*
- *Is the project part of a larger program or objective, and how are they interrelated?*
- *How many citizens will be helped by the project? How many will be harmed or inconvenienced if the project does not happen?*
- *How will the project add value to the surrounding area?*
- *Will the project lead to more efficient performance of a City service? Will it reduce the ongoing costs of a service or facility?*
- *Will the project provide an outcome or service necessary to the community's economic development? What improvements would be of most value for retaining or attracting commercial and industrial firms?*
- *Is the project required to complete or make fully usable a major public improvement?*
- *Will growth and development in the area of the proposed project increase the costs of land acquisition and/or construction if the project is deferred?*
- *Is the project well defined and understandable to the public, and will it appeal to voters?*

Some cities assemble a citizens advisory committee to help with project vetting and recommend priorities. Other cities embrace the political aspect by starting the annual CIP process with ward-level public meetings hosted by individual City Council members, with support from City staff. Technical and financial staff then weigh in to highlight reasons certain projects must be fast-tracked (e.g., mandated improvements) while others will require more time (e.g., sheer cost, right-of-way acquisition, etc.). Inter-departmental working groups, as well as subcommittees of City Council, the Plan Commission, or other City boards/commissions may also play a role.

Implementation:

Plan Administration

During the development of this Plan, representatives of government, business, community groups, and others came together to inform the planning process. These community leaders – and new ones who will emerge over the horizon of this plan – must maintain their commitment to the ongoing implementation and updating of the Plan's goals, strategies, and actions.

Education

Comprehensive plans are relatively general in nature, but they are still complex policy documents that account for interrelationships among various community issues and potential courses of action. As such, educating decision-makers and administrators about plan implementation is an important first step after plan adoption. As the principal groups that will implement the plan, the City Council, Plan Commission, and City department heads should all be "on the same page" with regard to priorities, responsibilities, and interpretations.

Consequently, an education initiative should begin immediately after plan adoption, and should include the following activities:

- a discussion of the individual roles and responsibilities of the City Council, Plan Commission (and other advisory bodies), and individual staff members;
- a thorough overview of the entire Comprehensive Plan, with emphasis on the parts of the plan that relate to each individual group;
- implementation tasking and priority setting, which should lead to each group establishing a one year and three-year implementation agenda;
- facilitation of a mock meeting in which the use of the Plan and its policies and recommendations is illustrated; and
- an in-depth question and answer session, with support from key staff.

Definition of Roles

As the community's elected officials, the City Council should assume the lead role in the implementation of

the Plan. The key responsibilities of the City Council are to decide and establish priorities, set timeframes by which actions will be initiated and completed, and determine the budget to be made available for implementation efforts. In conjunction with the City Manager, Council members must also help to ensure effective coordination among the various groups that are responsible for carrying out the plan's action strategies.

CITY COUNCIL

The City Council will take the lead in the following general areas:

- Adopting the Plan and ratifying Plan amendments, after recommendation by the Planning Commission.
- Acting as the "champion" of the Plan.
- Establishing the overall implementation priorities and timeframes by which action strategies in the Plan will be initiated and completed.
- Considering and approving the funding commitments that will be required.
- Adopting new or amended land development regulations to implement the Plan.
- Approving intergovernmental and development agreements that will advance implementation of the plan after recommendation of the Planning Commission.
- Offering final approval of projects and activities and their associated costs during the budget process, keeping in mind the need for consistency with the plan.
- Providing policy direction to the Plan Commission, other appointed City boards and commissions, and City staff.

PLAN COMMISSION

The Plan Commission will take the lead in the following general areas:

- Hosting the education initiative previously described.
- Periodically obtaining public input to keep the Plan up to date, using a variety of community outreach and citizen and stakeholder involvement methods.
- Ensuring that recommendations forwarded to the City Council are reflective of the plan goals, priorities, and action strategies.

Adaptive Management

Most commonly used by natural resource managers, adaptive management is an iterative process of improving management practices and decision making by learning from the outcomes of previous practices and decisions. Applied to a policy instrument like a comprehensive plan, this basic concept can be used to periodically recalibrate an implementation program by assessing the results of past actions and aligning future actions with new knowledge of the trends that will shape a community's future.

Godschalk and Anderson, 2012 Sustaining Places: the Role of the Comprehensive Plan Planning Advisory Service Report No. 567

- After holding one or more public hearings to discuss new or evolving community issues and needs, adopting plan updates and amendments making recommendations to the City Council regarding ratifying Commission recommendations and adoptions.
- Preparation of annual reports to City Council regarding progress in Plan implementation.

CITY STAFF

City Staff will take the lead in the following general areas:

- Managing day-to-day implementation of the Plan, including coordination through an interdepartmental Plan Implementation Committee.
- Supporting and carrying out capital improvement planning efforts.
- Managing the drafting of new or amended land development regulations.
- Conducting studies and developing additional plans.
- Reviewing applications for consistency with the Comprehensive Plan as required by the City's land development regulations.

- Negotiating the specifics of intergovernmental and development agreements.
- Administering collaborative programs and ensuring open channels of communication with various private, public, and non-profit implementation partners.
- Maintaining an inventory of potential plan amendments, as suggested by City staff and others, for consideration during annual and periodic plan review and update processes.

Monitoring the Plan

As discussed in the following section, a successful comprehensive plan is used and updated on an ongoing basis. An effective monitoring program, including periodic checkups and tracking of indicators to measure implementation progress, is essential. Given the 20-year time horizon of the *Momentum: Michigan City 2040* Comprehensive Plan and the difficulty of anticipating and projecting future conditions in an era of uncertainty and constant change, implementation must be flexible enough to allow decision makers to adapt to new and unforeseen circumstances.[1] Moreover, in the years following plan adoption many questions may emerge relating to the Plan's efficacy and ability to produce the desired results:

- *Have staff and governmental officials been acting consistently with the policy guidance of the Plan?*
- *Has any significant progress been made in achieving the overall goals and objectives of the Plan?*
- *Have there been any significant shifts in the data and trends that informed the original drafting of the Plan? For example, has population growth been in line with projections? Has the economic base of the community changed with the unexpected arrival or departure of a major industry?*

To answer these questions as well as maintain both the relevance and credibility of the Plan requires appropriate monitoring mechanisms, utilizing tools such as the following:

- **Baseline Data**: In order to monitor progress, it is necessary to establish baselines or starting points for each indicator, including the date when the baseline was established, its data source, and expected methods of updating it. When available, officially recognized data sources, such as the U.S. Census, or to a lesser extent, GIS-based data such as ESRI's Business Analyst, can facilitate baseline setting.
- **Data Book**. As found within *The Existing City* report, most comprehensive planning processes begin with a data inventory, trend analysis, and community audit. Periodically updating the data can verify whether the trends identified at the time the Plan was crafted are still relevant. Given the work involved and the fact that trends do not reverse overnight, revisions to demographic data should be performed every three to five years, rather than annually.[2]

Planning for sustainability is the defining challenge of the twenty-first century. Overcoming deeply ingrained economic and cultural patterns that result in resource depletion, climate instability, and economic and social stress requires holistic problem solving that blends the best scientific understanding of existing conditions and available technologies with the public resolve to act. Planning processes allow communities to look past immediate concerns, evaluate options for how best to proceed, and move toward a better future.

Godschalk and Anderson, 2012 Sustaining Places: the Role of the Comprehensive Plan Planning Advisory Service Report No. 567

Plan Amendment Process

Comprehensive plans must be updated on a regular basis in order to stay abreast of changing conditions and needs. The *Momentum: Michigan City 2040* Comprehensive Plan is meant to be a flexible document

1 Godschalk, David, FAICP and Willima R. Anderson, FAICP, 2012. Sustaining Places: The Role of the Comprehensive Plan. American Planning Association, Planning Advisory Service Report No. 567.

2 Godschalk, David, FAICP and Willima R. Anderson, FAICP, 2012. Sustaining Places: The Role of the Comprehensive Plan. American Planning Association, Planning Advisory Service Report No. 567.

allowing for adjustment to changing conditions over time. Shifts in political, economic, physical, technological, and social conditions, plus other unforeseen circumstances, may influence and change the priorities and fiscal outlook of the community. As Michigan City evolves, new issues will emerge while others will no longer be as relevant. Some action statements will be found impractical or outdated while other plausible solutions will arise. To ensure that it continues to reflect the overall goals of the community and remains relevant over time, the Plan must be revisited on a regular basis to confirm that its elements are still on point and the associated goals and action strategies are still appropriate.

Revisions to the Comprehensive Plan are two-fold, with minor plan amendments occurring at least every other year and more significant updates and modifications occurring every five years. As an example, a minor amendment could include revisions to certain elements of the Plan as a result of the adoption of another specialized plan. Major updates will involve: reviewing the base conditions and anticipated growth trends, re-evaluating Plan findings and formulating new ones as necessary, and adding, revising, or removing action strategies in the plan based on implementation progress.

ANNUAL PROGRESS REPORT

The Plan Commission, with the assistance of staff, should prepare an annual progress report for presentation to the Mayor and City Council. This ensures that the Plan is consistently reviewed and that any needed modifications or clarifications are identified for the bi-annual minor plan amendment process. Ongoing monitoring of consistency between the Plan and the City's implementing regulations should be an essential part of this effort.

The Annual Progress Report should include and highlight the following:

- Significant actions and accomplishments during the last year, including the status of implementation for each major programmed task in the Comprehensive Plan.
- Obstacles or problems in the implementation of the Plan.
- Proposed content amendments that have come forward during the course of the year.

Types of Amendments

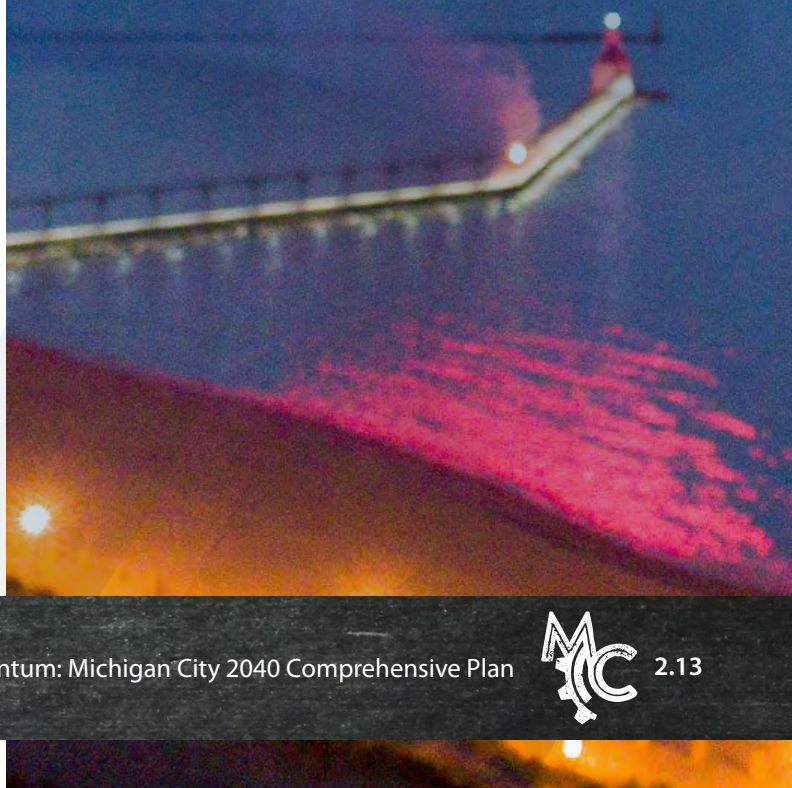
Two types of revisions to the Comprehensive Plan may occur: (1) minor amendments and (2) major updates.

- **Minor Amendments:**

  This type of amendment may be proposed at any time, such as specific adjustments to the *Future Land Use Map* and *Character Map* related to particular land development applications or public improvement projects. Minor amendments can be addressed by the City in short order or, if not pressing, be documented and compiled for a more holistic evaluation through an annual plan review process. This is also how and when the results of another specialized plan or study should be incorporated into relevant sections of the plan.

- **Major Updates:**

  More significant plan modifications and updates should occur no more than every five years. Major updates involve reviewing the base conditions and anticipated growth trends; re-evaluating the guiding principles and recommendations in the plan—and formulating new ones as necessary; and adding, revising, or removing action statements in the plan based on implementation progress..



– Recommendations for needed actions, programs, and procedures to be developed and implemented in the coming year, including recommendation of projects to be included in the City's proposed CIP, other programs/projects to be funded, and priority coordination needs with public and private implementation partners.

BI-ANNUAL AMENDMENT PROCESS

Plan amendments should occur on at least a bi-annual (every two year) basis, allowing for proposed changes to be considered concurrently so that the cumulative effects may be understood. Factors that should be considered in deciding on a proposed plan amendment include:

– Consistency with the goals and action strategies set forth in the Plan.
– Potential effects on infrastructure provision including water, wastewater, drainage, and the transportation network.
– Potential effects on the City's ability to provide, fund, and maintain services.
– Potential effects on environmentally sensitive and natural areas.
– Whether the proposed amendment contributes to the overall direction and character of the community as captured in the plan vision and goals, and as reflected in ongoing public input.

FIVE-YEAR UPDATE / EVALUATION AND APPRAISAL REPORT

An evaluation and appraisal report to City Council should be prepared every five years. This report should be prepared by City staff with input from City departments, the Plan Commission, and other boards and commissions. The report process involves evaluating the existing plan and assessing how successful it has been in achieving the community's goals. The purpose of the report is to identify the successes and shortcomings of the Plan, look at what has changed over the last five years, and make recommendations on how the plan should be modified in light of those changes.

The report should review baseline conditions and assumptions about trends and growth indicators. It should also evaluate implementation potential and/or obstacles related to any unaddressed major action strategies. The evaluation report and process should result in an amended Comprehensive Plan, including identification of new or revised information that may lead to updated goals and action strategies.

More specifically, the report should identify and evaluate the following:

1. Summary of major actions and interim plan amendments undertaken over the last five years.
2. Major issues in the community and how these issues have changed over time.
3. Changes in the assumptions, trends, and base studies data, including the following:
    - The rate at which growth and development is occurring relative to the projections put forward in the Plan.
    - Shifts in demographics and other growth trends.
    - City-wide attitudes, and whether apparent shifts, if significant, necessitate amendments to the stated goals or action strategies of the Plan.
    - Other changes in political, social, economic, technological, or environmental conditions that indicate a need for plan amendments.
4. Ability of the Plan to continue to support progress toward achieving the community's goals. The following should be evaluated and revised as needed:
    - Individual sections and statements within the Plan must be reviewed and revised, as necessary, to ensure that the Plan provides sufficient information and direction to achieve the intended outcome.
    - Conflicts between goals and action strategies that have been discovered in the implementation and administration of the Plan must be pointed out and resolved.
    - The list of priority actions must be reviewed and major accomplishments highlighted. Those not completed by a specified timeframe should be re-evaluated to ensure their continued relevance and/or to revise them appropriately.

- As conditions change, the timeframes for implementing major actions in the Plan should be re-evaluated where necessary. Some actions may emerge as a higher priority given new or changed circumstances while others may become less important to achieving the goals and development objectives of the community.
- Based upon organizational and procedural factors, as well as the status of previously assigned tasks, the implementation task assignments must be reviewed and altered, as needed, to ensure timely accomplishment of the plan's action strategies.
- Changes in laws, procedures, and missions may impact the community's ability to achieve its goals. The plan review must assess these changes and their impacts on the success of implementation, leading to any suggested revisions in strategies or priorities.

Ongoing Community Outreach and Engagement

All review processes and updates related to this Comprehensive Plan should emphasize and incorporate ongoing public input and engagement. During the course of plan development, the City sponsored multiple venues and opportunities to involve it citizens and solicit input, including a community workshop and open house, multiple listening sessions with special interest groups, convening regular Comprehensive Plan Advisory Committee (CPAC) meetings and briefings, posting plan information on the City's project website, and sponsoring the MindMixer virtual town hall, social media platform. The City should, however, strive to identify, target, and include members of the community who were not fully represented or involved during the Plan development process, including area youth, disenfranchised at-risk populations, minority neighborhoods, single parents, etc.

Performance Measures (Indicators and Metrics)

The annual and continual plan evaluation and reporting processes should also incorporate specific performance measures and quantitative indicators that can be compiled and communicated both internally and to elected officials and citizens in a "report card" fashion.

Performance Measures by Focus Area:

GROWTH CAPACITY AND ECONOMIC PERFORMANCE

The following indicators and metrics can be used to gauge and quantify growth improvements:

1. Acres of newly annexed land
2. Infill development / redevelopment versus greenfield development
3. Macroeconomic performance

   Metrics:
   - Gross domestic product per capita
   - Inflation rate (cost of living as measured by the annual percentage increase of the consumer price index)
4. Sustainable public finance (total amount of outstanding debt issued by the general government divided by gross municipal income)
5. Ratio of Employment to Population (provides information on the ability of an economy to create employment)

   Metrics:
   - Proportion of the City's working-age population that is employed (by gender)
   - Employment by industry
   - Unemployment rates
6. Economic well-being

   Metrics:
   - Poverty
   - Persons in low-income households
   - Median household income
   - Per capita personal income

ENVIRONMENTAL MANAGEMENT AND GREEN INFRASTRUCTURE

1. Degree of cost efficiency in parks operations and maintenance.

   Metrics:
   - Operating cost per capita – operating cost of recreation programs per the number of city residents.
   - Operating cost per participant hour – participant hours are measured as the number of participants multiplied by hours per session. This measure is appropriate for assessing the cost efficiency of structured classes or programs.
   - Operating cost per program hour – program hours are measured as the number of hours a facility is open to the public. This measure is appropriate for assessing the cost efficiency of publicly available facilities such as a swimming pool or ice skating rink.
2. General fund support (general fund transfers as a percent of total program costs) versus Cost Recovery (program-generated revenue as a percent of program operating costs).
3. Volunteer Support

   Metrics:
   - Number of volunteers that support parks operations, programs, and maintenance.
4. Park Visitation.

   Metrics:
   - Visitors per Acre of Michigan City Parks and Recreation Department properties.
   - User satisfaction (measured by survey responses)
5. Individual / Family participation in recreational programs and activities

   Metrics:
   - Program completion rate (number of participants completing a class as a percent of the number of registrations)
   - Skill assessment (measured by pre- and post-testing, instructor assessment or self-assessment by participants)

- Repeat registration rate (number of people registering for a program that previously registered for a program as a percent of the total)

6. Number of people attending City-sponsored, Parks Department-facilitated special events.

UTILITIES INFRASTRUCTURE AND PUBLIC SERVICES

1. Water / Wastewater System Capacity

   Metrics:
   - Design supply (treatment capacity)
   - Condition: annual operation and maintenance (O&M) expenditures
   - Storage capacity
   - Area sewered

2. Police / Fire / EMS

   Metrics:
   - Response time
   - ISO rating

TRANSPORTATION INFRASTRUCTURE

The following indicators and metrics can be used to gauge and quantify transportation improvements:

1. Vehicle Miles Traveled (VMT) per Capita: Measures the amount of vehicle activity normalized by population.

   Metrics:
   - VMT per capita
   - VMT per employee

2. Active Transportation Facilities

   Metrics:
   - Length of on-street bike lanes (linear miles)
   - Length of off-street recreational trails (linear miles)
   - Neighborhoods with sidewalks
   - Sidewalk connectivity

3. Bicycle and Pedestrian Mode Share: Measures the proportion of trips taken by bicycle and walking mode.

   Metrics:
   - Bicycle mode share (bicycle trips divided by total trips).
   - Pedestrian mode share (pedestrian trips divided by total trips).

4. Bicycle and Pedestrian Activity and Safety: Measures the level of bicycle and pedestrian activity and safety in specific locations.

   Metrics:
   - Bicycles per day
   - Pedestrians per day
   - Bicycle crashes per 1,000 cyclists
   - Pedestrian accidents per 1,000 pedestrians

5. Land Consumption: Measures the amount of land consumed by new transportation infrastructure and/or new development served by new transportation infrastructure.

   Metrics:
   - Acreage of sensitive lands (e.g., parkland, habitat) on which new transportation infrastructure is built
   - Number of lane miles of roadways, amount of square footage of buildings, and number of parking spaces in park-and-ride lots
   - Amount of new housing and jobs in greenfields
   - Acres of land consumed per residential unit
   - Acres of farmland converted to development

6. Accessibility

   Metrics:
   - Street connectivity and Link-Node Ratio (ratio of streets to intersections)
   - Dendritic street pattern and Connected Node Ratio (ratio cul-de-sacs to streets)

DOWNTOWN

1. Proportion of all retail businesses located Downtown.

   Metrics:
   - Increase in retail businesses over a certain period of time
   - Occupancy rate (or drop in vacancy rate)
   - Longevity of businesses (or turnover rate)
   - Retail activity
   - Daytime population
   - Business mix
   - Flux in downtown businesses

2. Amount of Downtown Residential

   Metrics:
   - Proportion of City's population Downtown
   - Increase in housing units over time
   - High density residential development
   - Regulatory framework supporting downtown housing

3. Organization and Partnership

   Metrics:
   - Active leadership
   - Downtown development authority (or organizational support)
   - Partnerships and coalitions
   - Downtown redevelopment plan implementation
   - Community involvement (or affection from citizenry)

4. Downtown Traffic Generators

   Metrics:
   - Proportion of City's civic and cultural uses located Downtown
   - Access to arts and entertainment amenities
   - Educational establishments
   - Number of civic buildings

5. Historic Preservation and Rehabilitation

   Metrics:
   - Proportion of "National Register" structures in Downtown
   - Rehabilitation projects
   - Historic preservation initiatives
   - Heritage tourism activity

6. Multi-functionality

   Metrics:
   - Number/proportion of mixed-use development
   - Office development
   - Conference/meeting space

7. Downtown Design

   Metrics:
   - Sense of place, contributing elements
   - Clear boundary
   - Clear gateways / entrance features
   - Design guidelines
   - Bike/pedestrian friendliness
   - Public space
   - Streetscape and façade improvement programs
   - Accessibility and connectivity

8. Branding and Promotion

   Metrics:
   - Special events
   - Marketing initiatives

9. Downtown Finance, Employment and Demographics

   Metrics:
   - Change in assessed value of property
   - Change in real property investment
   - Change in downtown employment
   - Percentage increase in rental value
   - Lease rate comparison with peer cities
   - Income of downtown residents
   - Crime known to Police per 1000 residents
   - Composition of Downtown labor

HOUSING AND NEIGHBORHOODS

1. Pedestrian accessibility

   Metrics:
   - Percentage of single-family dwelling units (SFDUs) within one quarter mile of all existing commercial uses

2. Residential Density

   Metrics:
   - Median single-family residential lot size (acres)
   - Median number of rooms
   - Housing density (housing units / square mile)

3. Housing Affordability

   Metrics:
   - Percent paying 30 percent or more of income on home-related costs
   - Percent paying 30 percent or more on gross rent

4. Housing production (Relationship of housing supply to housing demand)

   Metrics:
   - Residential permits

5. Neighborhood mix.

   Metrics:
   - Renter-owner balance (ratio of renters to owners)

6. Neighborhood social cohesion

SUSTAINABILITY, RESILIENCE AND COMMUNITY WELLNESS

1. Community Health

   Metrics
   - refer to *Community Health, by the Numbers* sidebar, page 301

- pounds of locally-grown produce purchased and consumed

2. Increased pedestrianization

   Metrics
   - Reductions in vehicle miles traveled and subsequent Greenhouse Gas emissions
   - Reductions in obesity

3. Solid Waste

   Metrics
   - Pounds of recyclable waste diverted from landfill

4. Resilience

   Metrics
   - Number of companies with business continuity plans

5. Energy Efficiency

   Metrics
   - Reductions in energy consumption

LAND USE AND COMMUNITY CHARACTER

1. Land use change

   Metrics:
   - Acreage of agricultural land conversion (using parcel data)
   - Acreage of redevelopment
   - Change from "undeveloped" to "urban" designations.

2. Land consumption relative to population growth (changes in population density based on measurement of urbanized land).

3. Land use mix (actual land use mix vs. zoned land use mix)

   Metrics:
   - Ratio of acres of commercial, industrial, and public land uses in neighborhood to the number of housing units.
   - Ratio of acres of land zoned for commercial, industrial, and mixed land uses in the neighborhood to the number of housing units

4. Centrality

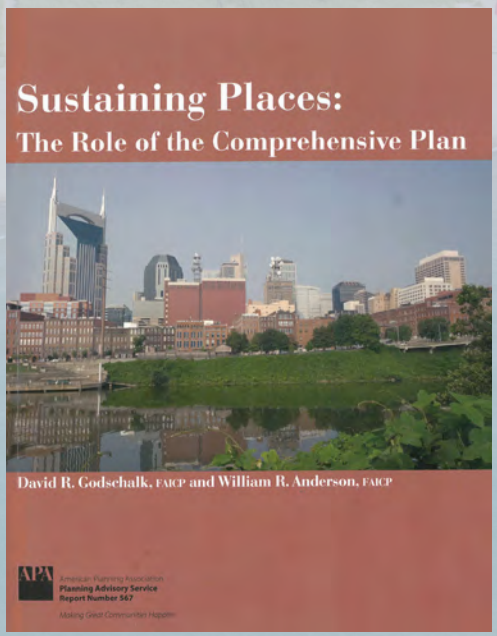
   Metrics:
   - Mean distance to commercial zone.
   - Mean distance to K-12 schools.
   - Mean distance to nearest park

Comprehensive Plan Evaluation

Comprehensive Plan Standards for Sustaining Places

As a compendium to Planning Advisory Service (PAS) Report No. 567, *Sustaining Places: The Role of the Comprehensive Plan*, written by David Godschalk and Bill Anderson, the American Planning Association's (APA) Sustaining Places Working Group was tasked with developing a set of standards that would capture the many aspects of sustainability that communities should strive to incorporate into their comprehensive plans. The culmination of this effort resulted in the publication of PAS Report No. 578, *Sustaining Places: Best Practices for Comprehensive Plans*, which summarizes the leading principles, processes and attributes, and corresponding best practices extrapolated from contemporary plans and professional reports. For the purposes of PAS No. 578, **principles** are defined as normative statements of intent that underlie a plan's overall strategy, including its goals, objectives, polices, maps, and other content; **processes** are planning activities that take place during the preparation of the comprehensive plan and define how it will be carried out; **attributes** are plan-making design standards that shape the content and characteristics of comprehensive plans; and **best practices** are the plan action tools employed by communities to activate the desired principles, processes, and attributes of their comprehensive plans.[1] The *Momentum: Michigan City 2040* Comprehensive Plan was evaluated based on these standards to determine whether there were outstanding implementation strategies and actions that should be identified and included within this chapter. IMP Table 1, *Plan Scoring Matrix*, is organized according to the six planning principles, the two planning process, and the two planning attributes, as discussed within PAS Report No. 578, including the following:

PAS Report 578, Sustaining Places: Best Practices Comprehensive Plans (2015)



PAS Report 567, Sustaining Places: The Role of the Comprehensive Plan (2012)

PRINCIPLES

1. Livable Built Environment
2. Harmony with nature
3. Resilient Economy
4. Interwoven Equity

1 David Godschalk and David Rouse, 2015. Sustaining Places: Best Practices for Comprehensive Plans, PAS No. 578. American Planning Association. Page 15.

5. Healthy Community
6. Responsible Regionalism

PROCESSES

7. Authentic Participation
8. Accountable Implementation

ATTRIBUTES

9. Consistent Content
10. Coordinated Characteristics

Following each principle, process, and attribute within IMP Table 1 is a description of the associated best practices. The degree to which the best practice has been included in the Comprehensive Plan is identified in IMP Table 1 using the PAS Report's scoring criteria for principles, processes and attributes, outlined below.

Scoring Criteria

BEST PRACTICES for Principles:

- Not Applicable (N/A): assigned only if it can be demonstrated that community conditions or legal constraints prevent the use of the practice.
- Not Present (0 points): assigned if the practice is applicable but not referenced or included in the plan.
- Low (1 point): assigned if the practice is mentioned in the plan at a basic level, but is not carried further.
- Medium (2 points): assigned if the practice is discussed in the narrative, goals, and policies of the plan, but is not carried forward to implementation steps.
- High (3 points): assigned if the practice is defined and addressed through data, analysis, and support, and included in goals, policies, and implementation actions of the plan.

BEST PRACTICES for Processes:

- Not Applicable (N/A): unlikely to be assigned for process evaluation since all plans must address participation and implementation.
- Not Present (0 points): assigned if the process practice is not addressed in the Plan.
- Low (1 point): assigned if the process practice is mentioned in the Plan, with no supporting data, analysis, or other documentation provided.
- Medium (2 points): assigned if the process practice is discussed to some degree in the Plan, with minimal supporting data, analysis, or other documentation provided.
- High (3 points): assigned if the process practice is fully addressed and completely defined in the plan, with supporting data, analysis, or other documentation provided.

BEST PRACTICES for Attributes:

- Not Applicable (N/A): unlikely to be assigned for attribute evaluation since all plans must address the basic content and characteristic practices.
- Not Present (0 points): assigned if the attribute practice is not addressed in the Plan;
- Low (1 point): assigned if the attribute practice is minimally addressed in the Plan, based on data, analysis, written and graphic communication, or other demonstrable form of support.
- Medium (2 points): assigned if the attribute practice is moderately addressed in the Plan.
- High (3 points): assigned if the attribute practice is fully addressed in the Plan.[2]

Also included in IMP Table 1, under the "Source" column are specific references regarding where the principles, process, attribute and/or best practices can be located within the *Momentum: Michigan City 2040* Comprehensive Plan. As discussed in PAS Report No. 578, comprehensive plans should endeavor to incorporate the full slate of best practices while allowing for each community's unique context, environment and issues. The framework of required components is aimed at setting standards for preparing and revising comprehensive plans that seek to create, sustain, and enhance unique community places. It can also be used to evaluate existing plans and to serve as an outline for dialog with citizens, planning boards, and elected officials about the ingredients of community sustainability. By addressing and implementing all possible best practices, a community can set a path towards achieving a high level of sustainability.

2 David Godschalk and David Rouse, 2015. Sustaining Places: Best Practices for Comprehensive Plans, PAS No. 578. American Planning Association. Page 15.

IMP Table 1, Plan Scoring Matrix

	BEST PRACTICES FOR PLAN PRINCIPLES	N/A	0	1	2	3	Source
1.0	**LIVABLE BUILT ENVIRONMENT** - Ensure that all elements of the built environment, including land use, transportation, housing, energy, and infrastructure, work together to provide sustainable, green places for living, working, and recreation, with a high quality of life.						
1.1	Plan for multimodal transportation.					■	Strategies 7.2.17; 7.5.4; 7.6.1; 7.6.2-7.6.6; 7.71-7.7.6; 8.1.2-8.1.4; and 8.2.1-8.2.5.
1.2	Plan for transit oriented development.					■	Strategies 7.7.6; 8.2.1-8.2.3; and 8.3.1-8.3.3.
1.3	Coordinate regional transportation investments with job clusters.					■	Strategies 7.7.3; 7.7.4; 7.7.6; 8.2.5
1.4	Provide complete streets serving multiple functions.					■	Strategies 7.2.17 and 7.6.1. Sidebar on page 178.
1.5	Plan for mixed land use patterns that are walkable and bikeable.					■	Strategies 7.7.6; 8.1.2-8.1.4; 8.2.2`; 8.2.6-8.2.7; 8.3.1-8.3.3; 9.2.2; 10.2.3-10.2.4; 10.3.6; and 12.1.6.
1.6	Plan for infill development.					■	Strategies 1.3.1-1.3.2; 2.2.3; 8.3.2; 9.2.1; and 10.3.1. Sidebars on pages 27; 245; and 248-250.
1.7	Encourage design standards appropriate to the community context.					■	Strategies 7.5.4-7.5.5; 7.6.5; and 8.3.1. Refer to Urban Design Polices, page 224-225.
1.8	Provide accessible public facilities and spaces.				■		Strategies 3.2.2; 4.1.1-4.1.2; and 4.2.2.
1.9	Conserve and reuse historic resources.					■	Strategies 1.3.2; 4.5.1; 8.1.9-8.1.11; and 10.3.5.
1.10	Implement green building design and energy conservation.					■	Strategies 9.1.3; 10.3.6 and 11.1.9. Sidebar on pages 278-279.
1.11	Discourage development in hazard zones.				■		Strategies 3.1.3 and 3.5.1.
	TOTAL SCORE: 1.0 LIVABLE BUILT ENVIRONMENT				**4**	**27**	
2.0	**HARMONY WITH NATURE** - Ensure that the contributions of natural resources to human well-being are explicitly recognized and valued and that maintaining their health is a primary objective.						
2.1	Restore, connect, and protect natural habitats and sensitive lands.					■	Strategies 3.1.1-3.1.4; 3.2.1-3.2.4; 3.3.1-3.3.4; 3.4.2-3.4.4; and 4.5.1.
2.2	Plan for the provision and protection of green infrastructure.					■	Strategies 3.1.1-3.1.4; 3.2.1-3.2.4; 3.3.1-3.3.4; 4.1.1-4.5.1; 4.2.1-4.2.3; 4.5.1; Sidebar on pages 68-69.
2.3	Encourage development that respects natural topography.				■		Strategy 3.4.4.
2.4	Enact policies to reduce carbon footprints.				■		Strategies 11.1.1-11.1.13.
2.5	Comply with state and local air quality standards.				■		Strategies 3.1.3; 3.4.1-3.4.4; 7.5.1; 7.5.3; and 11.1.1-11.1.13.
2.6	Encourage climate change adaptation.			■			Strategies 11.1.8; and 11.1.1-11.1.13.
2.7	Provide for renewable energy use.			■			Strategy 11.1.3.
2.8	Provide for solid waste reduction.				■		Strategies 11.1.2-11.1.3; and 11.1.6.
2.9	Encourage water conservation and plan for lasting water supply.			■			Strategies 3.1.3; 9.1.3; 11.1.3; and 11.1.8.
2.10	Protect and manage streams, watersheds, and floodplains.					■	Strategies 3.1.1-3.1.4; 3.2.1-3.2.4; and 3.3.1-3.3.3.
	TOTAL SCORE: 2.0 HARMONY WITH NATURE			**3**	**8**	**9**	

BEST PRACTICES FOR PLAN PRINCIPLES

1.0 LIVABLE BUILT ENVIRONMENT - Ensure that all elements of the built environment, including land use, transportation, housing, energy, and infrastructure, work together to provide sustainable, green places for living, working, and recreation, with a high quality of life.

1.1 Plan for multimodal transportation. A multimodal transportation system reduces dependence on automobiles and encourages more active forms of personal transportation, improving health outcomes and increasing the mobility of those who are unable or unwilling to drive. Fewer cars on the road also translates to reduced air pollution and greenhouse gas emissions with associated health and environmental benefits.

1.2 Plan for transit oriented development. Transit-oriented development (TOD) is characterized by a concentration of high-density, mixed-use development around transit stations and along transit lines, such that the location and the design of the development encourage transit use and pedestrian activity.

1.3 Coordinate regional transportation investments with job clusters. Coordination of regional transportation systems and areas of high employment densities can foster both transportation efficiency and economic development.

1.4 Provide complete streets serving multiple functions. Complete streets are streets that are designed and operated with all users in mind - including motorists, pedestrians, bicyclists, and public transit riders of all ages and abilities - to support a multimodal transportation system.

1.5 Plan for mixed land use patterns that are walkable and bikeable. Mixed land use patterns are characterized by residential and nonresidential land uses located in close proximity to one another. Mixing land uses and providing housing in close proximity to everyday destinations (e.g., shops, schools, civic places, workplaces) can increase walking and biking and reduce the need to make trips by automobile.

1.6 Plan for infill development. Infill development is characterized by development or redevelopment of undeveloped parcels of land in otherwise built-up areas, which are usually served by or have ready access to existing infrastructure and services.

1.7 Encourage design standards appropriate to the community context. Design standards are specific criteria and requirements for the form and appearance of development within a neighborhood, corridor, special district, or jurisdiction as a whole. These standards serve to improve or protect both the function and aesthetic appeal of a community.

1.8 Provide accessible public facilities and spaces. Public facilities play an important role in communities and they should be able to accommodate persons of all ages and abilities. Public facilities and spaces should be equitably distributed throughout the community.

1.9 Conserve and reuse historic resources. It is important to address the conservation and reuse of historic resources due to their cultural and historic significance to a community and the role they play in enhancing a community's sense of place, economy (through tourism and other economic activity), and environment (by reducing the need to construct new buildings that consume land and resources).

1.10 Implement green building design and energy conservation. Green building designs that meet the standards of the US Green Building Council's Leadership in Energy and Environmental Design (LEED™) or similar rating system are energy and resource efficient, reduce waste and pollution, and improve occupant health and productivity. They can be implemented through strategies such as code requirements, regulatory incentives, and investment programs (e.g., grants to homeowners for home weatherization).

1.11 Discourage development in hazard zones. A hazard zone is an area with a high potential for natural events, such as floods, high winds, landslides, earthquakes, and wildfires. Plans should discourage development in hazard zones, including any construction or site disturbance within an area of high risk relative to other areas within a jurisdiction.

2.0 HARMONY WITH NATURE - Ensure that the contributions of natural resources to human well-being are explicitly recognized and valued and that maintaining their health is a primary objective.

2.1 Restore, connect, and protect natural habitats and sensitive lands. Natural habitats and sensitive lands contain natural features that are environmentally significant and easily disturbed by human activity. Restoring degraded habitat can reestablish natural diversity and associated ecosystem services.

2.2 Plan for the provision and protection of green infrastructure. Green infrastructure (GI) is a strategically planned and managed network of green open spaces, including parks, greenways, and protected lands. Green infrastructure may also be defined as features that use natural means such as vegetation to capture, store, and infiltrate stormwater runoff, often in urban settings. GI provides a range of critical functions and ecosystem services to communities, such as wildlife habitat, stormwater management, and recreational opportunities.

2.3 Encourage development that respects natural topography. Taking natural topography into account in planning for private development and public infrastructure can reduce construction costs, minimize natural hazard risks from flooding or landslides, and mitigate the impacts of construction on natural resources, including soils, vegetation, and water systems.

2.4 Enact policies to reduce carbon footprints. The term, "carbon footprint" is used to describe the amount of carbon dioxide and other greenhouse gases emitted by a given entity in a certain time frame. It provides a measure of the environmental impact of a particular lifestyle or operation, and encompasses both the direct consumption of fossil fuels as well as indirect emissions associated with the manufacture and transport of all goods and services an entity consumes.

2.5 Comply with state and local air quality standards. Air quality standards are limits on the quantity of pollutants in the air during a given period in a defined area. Pollutants may come from mobile sources (e.g., cars and trucks), area sources (e.g. small businesses), or point sources (e.g., power plants).

2.6 Encourage climate change adaptation. Adapting to climate change involves adjusting natural and human systems to accommodate projected impacts such as sea level rise and increased frequencies of storm events as well as long-term shifts in precipitation levels, growing season length, and native vegetation and wildlife populations. Successful adaptation strategies reduce community vulnerability and minimize adverse effects on the environment, economy, and public health.

2.7 Provide for renewable energy use. Use of renewable energy resources reduces reliance on coal-fired energy plants and other sources of fossil fuels.

2.8 Provide for solid waste reduction. Solid waste is garbage or refuse resulting from human activities. Many common solid waste items - such as glass, aluminum and other metals, paper and cardboard, certain plastics, and food scraps and other organic materials - can be diverted from the waste stream and recycled into new products or composted.

2.9 Encourage water conservation and plan for lasting water supply. Reducing water use by buildings and landscapes through water conservation and planning for a lasting water supply are critical to a community's long-term sustainability. Access to ground or surface water sources sufficient for anticipated future water use demands, and a well-maintained supply system to deliver this water to end users, are important to ensure.

2.10 Protect and manage streams, watersheds, and floodplains. Streams, watersheds, and floodplains have typically been extensively altered in urban environments - for example, by replacing streams with underground culverts, or constructing buildings in the floodplain - negatively affecting the natural and beneficial functions they provide. Watershed management is important to protecting water supply, water quality, drainage, stormwater runoff and other functions at a watershed scale.

IMP Table 1, Plan Scoring Matrix (continued)

	BEST PRACTICES FOR PLAN PRINCIPLES	N/A	0	1	2	3	Source
3.0	**RESILIENT ECONOMY** - Ensure that the community is prepared to deal with both positive and negative changes in its economic health and to initiate sustainable development and redevelopment strategies that foster green business growth and build reliance on local assets.						
3.1	Provide the physical capacity for economic growth.					■	Strategies 2.2.2-2.2.3; 2.3.1; 8.4.3; 12.1.1; and 12.1.6-12.1.7.
3.2	Plan for a balanced land use mix for fiscal sustainability.				■		Strategy 1.1.3.
3.3	Plan for transportation access to employment centers.					■	Strategies 7.7.3; 7.7.4; 7.7.6
3.4	Promote green businesses and jobs.			■			Strategies 11.1.3; 11.1.5; 11.1.7
3.5	Encourage community-based economic development and revitalization.					■	Strategies 2.1.1-2.1.2; 2.2.1-2.2.3; 2.3.1-2.3.2; 2.3.4; and 2.4.1.
3.6	Provide and maintain infrastructure capacity in line with growth or decline demands.					■	Objectives 5.1-5.4; and 6.1.
3.7	Plan for post-disaster economic recovery.					■	Strategies 11.2.2-11.2.3.
	TOTAL SCORE: 3.0 RESILIENT ECONOMY			**1**	**2**	**15**	
4.0	**INTERWOVEN EQUITY** - Ensure fairness and equity in providing for the housing, services, health, safety, and livelihood needs of all citizens and groups.						
4.1	Provide a range of housing types.					■	Strategies 2.3.5; 9.1.2; 9.1.4; 9.2.1-9.2.3; 9.2.7; 9.2.9; and 10.2.3.
4.2	Plan for a jobs-housing balance.					■	Refer to Jobs-Housing Balance section, Page 235; Strategy 2.3.5;
4.3	Plan for the physical, environmental, and economic improvement of at-risk, distressed, and disadvantaged neighborhoods.				■		Strategies 1.3.1-1.3.2; and 10.1.1.
4.4	Plan for improved health and safety for at-risk populations.				■		Strategies 9.1.1-9.1.2; 9.1.4; and 9.2.6-9.2.9.
4.5	Provide accessible, quality public services, facilities, and health care to minority and low-income populations.		■				
4.6	Upgrade infrastructure and facilities in older and substandard areas.					■	Objectives 5.1-5.4; and 6.1.
4.7	Plan for workforce diversity and development.					■	Strategies 2.3.1-2.3.2; 2.3.4-2.3.5; and 2.4.1.
4.8	Protect vulnerable populations from natural hazards.			■			Strategy 11.2.1.
4.9	Promote environmental justice.		■				
	TOTAL SCORE: 4.0 INTERWOVEN EQUITY			**1**	**4**	**12**	

BEST PRACTICES FOR PLAN PRINCIPLES

3.0 RESILIENT ECONOMY - Ensure that the community is prepared to deal with both positive and negative changes in its economic health and to initiate sustainable development and redevelopment strategies that foster green business growth and build reliance on local assets.

3.1 Provide the physical capacity for economic growth. Economic growth is characterized by an increase in the amounts of goods and services that an economy is able to produce over time. Providing the physical capacity for economic growth means ensuring that adequate space will be available for commercial and industrial development and redevelopment for nonresidential land uses. Communities need to plan for the necessary amount of land and structures appropriately built, sized, and located to support existing and future production of goods and services based on current and projected economic conditions.

3.2 Plan for a balanced land use mix for fiscal sustainability. A balanced land use mix for fiscal sustainability is characterized by a pattern that includes both residential and nonresidential uses, such that the long-term cost of providing a desirable level of public services to residents, business owners, and visitors is closely matched to the tax or user-fee revenue generated by those uses.

3.3 Plan for transportation access to employment centers. Plans should ensure that areas with high job density are accessible to employees via one or more travel modes (automobile, transit, bicycling, walking). More transportation modes serving the employment center offer employees a wider range of commuting options. This is important for improving access to employment opportunities, particularly among populations that may not have personal vehicles.

3.4 Promote green businesses and jobs. A green business is any business offering environmentally-friendly products and services through sustainable business models and practices. Green jobs are provided by agricultural, manufacturing, research and development, administrative, service, or other business activities that contribute substantially to preserving and restoring environmental quality. Green businesses and jobs may include, but are not limited to, those associated with industrial processes with closed loop systems in which the wastes of one industry are the raw materials, or feedstock for another.

3.5 Encourage community-based economic development and revitalization. Community-based economic development is development that promotes, supports, and invests in businesses that serve local needs and are compatible with the vision, character, and cultural values of the community. This approach encourages using local resources in ways that enhance economic opportunities while improving social conditions and supporting locally owned and produced goods and services. These activities foster connections and a sense of place, reduce the need for imports, and stimulate the local economy.

3.6 Provide and maintain infrastructure capacity in line with growth or decline demands. Keeping infrastructure capacity in line with demand involves ensuring that structures and networks are appropriately sized to adequately serve existing and future development. This is important in balancing quality of service provision with costs to local government.

3.7 Plan for post-disaster economic recovery. Planning for post-disaster economic recovery before a disaster happens helps communities resume economic activities following damage or destruction by a natural or human-made disaster. Plans for post-disaster recovery are characterized by officially adopted policies and implementation tools put in place before or after an event to direct recovery after a disaster event has occurred.

4.0 INTERWOVEN EQUITY - Ensure fairness and equity in providing for the housing, services, health, safety, and livelihood needs of all citizens and groups.

4.1 Provide a range of housing types. A range of housing types is characterized by the presence of residential units of differing sizes, configurations, tenures, and price points located in buildings of different sizes, configurations, ages, and ownership structures. Providing a range of housing types accommodates varying lifestyle choices and affordability needs and makes it possible for households of different sizes and income levels to live in close proximity to one another.

4.2 Plan for a jobs-housing balance. A jobs/housing balance is characterized by a roughly equal number of jobs and housing units (households) within a commuter shed. A strong jobs/housing balance can also result in jobs that are better matched to the labor force living in the commuter shed, resulting in lower vehicle-miles traveled, improved worker productivity, and higher overall quality of life. When coordinated with multimodal transportation investments, it improves access to employment opportunities for disadvantaged populations.

4.3 Plan for the physical, environmental, and economic improvement of at-risk, distressed, and disadvantaged neighborhoods. At-risk and distressed neighborhoods suffer from disinvestment, falling property values, high real estate foreclosure rates, rapid depopulation and physical deterioration for many reasons, including (but not limited to) the existence of cheap land on the urban fringe, the financial burdens of maintaining an aging building stock, economic restructuring, land speculation, and the dissolution or relocation of anchor institutions. A disadvantaged neighborhood is a neighborhood in which residents have reduced access to resources and capital due to factors such as high levels of poverty and unemployment and low levels of educational attainment.

4.4 Plan for improved health and safety for at-risk populations. An at-risk population is characterized by vulnerability to health and safety impacts through factors such as race or ethnicity, socio-economic status, geography, gender, age, behavior, or disability status.

4.5 Provide accessible, quality public services, facilities, and health care to minority and low-income populations. Public services, facilities, and health care should be located so that all members of the public have safe and convenient transportation options to reach quality services and facilities that meet or exceed industry standards for service provision.

4.6 Upgrade infrastructure and facilities in older and substandard areas. Infrastructure (e.g., water mains, storm and sanitary sewers, electrical grids, telecommunications facilities, etc.) comprises the physical systems that enables societies and economies to function. A substandard area is a neighborhood, district, or corridor with infrastructure that fails to meet established standards. Targeting infrastructure in older and substandard areas provides a foundation for further community revitalization efforts and improves quality of life for residents in these neighborhoods.

4.7 Plan for workforce diversity and development. Promoting workforce diversity and development is a vital piece of economic development efforts, making areas attractive to employers and enabling residents to find employment in their communities.

4.8 Protect vulnerable populations from natural hazards. Vulnerable populations face higher risks than others when disaster events occur and may require special interventions to weather those events. A population may be vulnerable for a variety of reasons, including location, socio-economic status or access to resources, lack of leadership and organization, and lack of planning.

4.9 Promote environmental justice. The goal of environmental justice is to provide all communities and persons across the nation with the same degree of protection from environmental and health hazards and equal access to decision making processes. This results in healthy environments for all in which to live, learn, and work.

IMP Table 1, Plan Scoring Matrix (continued)

	BEST PRACTICES FOR PLAN PRINCIPLES	N/A	0	1	2	3	Source
5.0	**HEALTHY COMMUNITY** - Ensure that public health needs are recognized and addressed through provisions for healthy foods, physical activity, access to recreation, health care, environmental justice, and safe neighborhoods.						
5.1	Reduce exposure to toxins and pollutants in the natural and built environments.		■				
5.2	Plan for increased public safety through the reduction of crime and injuries.					■	Strategies 4.1.4; 6.1.1; 7.2.4; and 10.3.3. Sidebar on page 275.
5.3	Plan for the mitigation and redevelopment of brownfields for productive uses.					■	Strategy 3.5.1. TFC Table 13A (page 75)
5.4	Plan for physical activities and healthy lifestyles.					■	Strategies 4.2.1-4.2.2; 7.2.17; 7.5.4; 7.6.1-7.6.6; and 8.1.2-8.1.4.
5.5	Provide for accessible parks, recreation facilities, greenways, and open space near all neighborhoods.					■	Strategy 4.2.2. Refer to *Future Land Use Map*.
5.6	Plan for access to healthy, locally grown foods for all neighborhoods.					■	Strategies 11.3.4-11.3.6.
5.7	Plan for equitable access to health care providers, schools, public safety facilities, and arts and cultural facilities.				■		Strategies 11.3.1-11.3.3.
	TOTAL SCORE: 5.0 HEALTHY COMMUNITY				**2**	**15**	
6.0	**RESPONSIBLE REGIONALISM** - Ensure that all local proposals account for, connect with, and support the plans of adjacent jurisdictions and the surrounding region.						
6.1	Coordinate local land use plans with regional transportation investments.					■	Strategies 7.7.6; and 8.3.1-8.3.3.
6.2	Coordinate local and regional housing plan goals.				■		Objective 9.2;
6.3	Coordinate local open space plans with regional green infrastructure plans.					■	Objective 3.1; Strategies 3.1.1; 3.2.3-3.2.4; 3.3.1; 3.3.2-3.3.3; 3.4.4; 3.5.1;
6.4	Delineate designated growth areas that are served by transit.					■	Strategies 1.1.2; and 8.3.1-8.3.3.
6.5	Promote regional cooperation and sharing of resources.					■	Strategies 4.5.1; 4.6.3; 7.1.5; and 7.7.6.
6.6	Enhance connections between local activity centers and regional destinations.				■		Strategies 7.1.1; 7.2.17; 7.5.4; 7.6.1; and 7.7.1-7.7.5.
6.7	Coordinate local and regional population and economic projections.					■	Refer to Economic Performance Focus Area. Strategy 1.1.1.
6.8	Include regional development visions and plans in local planning scenarios.			■			Strategy 2.1.1
6.9	Encourage consistency between local capital improvement programs and regional infrastructure priorities.				■		Strategies 1.13; 1.2.1; and 1.3.2.
	TOTAL SCORE: 6.0 RESPONSIBLE REGIONALISM			**1**	**6**	**15**	

BEST PRACTICES FOR PLAN PRINCIPLES

5.0 HEALTHY COMMUNITY - Ensure that public health needs are recognized and addressed through provisions for healthy foods, physical activity, access to recreation, health care, environmental justice, and safe neighborhoods.

5.1 Reduce exposure to toxins and pollutants in the natural and built environments. Reducing exposure to toxins and pollutants improves the health of individuals and communities, with concomitant improvements in quality of life and health care cost savings.

5.2 Plan for increased public safety through the reduction of crime and injuries. Public safety involves prevention of and protection from events such as crimes or disasters that could bring danger, injury, or damage to the general public. Although addressing crime is typically considered a governmental responsibility (police, fire and emergency services), it can also be reduced through environmental design using crime prevention through applying environmental design (CPTED) principles.

5.3 Plan for the mitigation and redevelopment of brownfields for productive uses. Redevelopment of brownfields sites requires an environmental assessment to determine the extent of contamination and to develop remediation strategies. The feasibility of site cleanup, market forces, and other factors may help to define appropriate reuse options, which range from open space to mixed-use development. Reusing brownfield sites returns underutilized land to productive use and reduces pressure to develop greenfield sites.

5.4 Plan for physical activities and healthy lifestyles. A healthy lifestyle is characterized by individual practices and behavioral choices that enhance health and wellbeing. Barriers to the design of the physical environment can influence rates of physical activity and health benefits. Active transportation facilities (e.g., sidewalks and bike lanes) and accessible, equitably distributed recreational opportunities support physical activity and healthy lifestyles.

5.5 Provide for accessible parks, recreation facilities, greenways, and open space near all neighborhoods. Parks, recreational facilities, greenways and open space offer a range of benefits to residents, including opportunities for increased physical activity. The proximity of parks to neighborhoods supports increased physical activity among residents; however, social and environmental impediments such as crime, unsafe pedestrian conditions, and noxious land uses may decrease accessibility and subsequent use of these facilities. Plans should ensure that the type of park and its function and design are appropriate for its locational context.

5.6 Plan for access to healthy, locally grown foods for all neighborhoods. A lack of access to fresh, healthy foods contributes to obesity and negative health outcomes. Healthy foods include those that are fresh or minimally processed, naturally dense in nutrients, and low in fat, sodium, and cholesterol. Locally grown goods are those produced in close proximity to consumers in terms of both geographic distance and the supply chain. Though there is no standard definition of locally grown, sources can range from backyards and community gardens to farms within the region or state.

5.7 Plan for equitable access to health care providers, schools, public safety facilities, and arts and cultural facilities. Equitable access ensures services and facilities are reachable by all persons, regardless of social or economic background. Healthcare providers are those individuals, institutions, or agencies that provide healthcare services to consumers. Schools are institutions that provide education or instruction. Public safety facilities provide safety and emergency services to a community, including police and fire protection. Arts and cultural facilities provide programs and activities related to the arts and culture, including performing arts centers, concert halls, museums, galleries, and other related facilities.

6.0 RESPONSIBLE REGIONALISM - Ensure that all local proposals account for, connect with, and support the plans of adjacent jurisdictions and the surrounding region.

6.1 Coordinate local land use plans with regional transportation investments. Coordinating local land use plans with transportation investments ensures that local land use decisions take advantage of regional transportation networks where possible to improve mobility and access for residents.

6.2 Coordinate local and regional housing plan goals. Regional housing plans typically include state-mandated regional "fair share" plans establishing target affordable housing unit allocations among constituent jurisdictions. Local communities should provide for affordable housing in a manner consistent with the needs and targets defined in regional housing plans.

6.3 Coordinate local open space plans with regional green infrastructure plans. Coordinating local open space plans with regional green infrastructure plans can maximize both the ecological and public benefits that green infrastructure provides and can help leverage investment in parks, greenways, trails, and other green infrastructure projects.

6.4 Delineate designated growth areas that are served by transit. A designated growth area is an area delineated in an officially adopted local or regional comprehensive plan where higher density development is permitted or encouraged and urban services - including public transportation (where feasible) - are (or are scheduled to be) available. The purpose of a designated growth area is to accommodate and focus projected future growth (typically over a 20-year timeframe) within a municipality, county, or region through a compact, resource-efficient pattern of development. Ensuring that new growth areas are served by transit improves residents' access and mobility and helps reduce dependence on personal automobiles for travel throughout the region.

6.5 Promote regional cooperation and sharing of resources. Regional cooperation and sharing of resources covers any situation where multiple jurisdictions coordinate the provision of public services and facilities. Exploring opportunities for regional cooperation may allow for improved efficiency and cost savings in local governmental operations.

6.6 Enhance connections between local activity centers and regional destinations. A local activity center is a node containing a high concentration of employment and commerce. A regional destination is a location that is responsible for a high proportion of trip ends within a regional transportation network, such as a job cluster, a major shopping center or cultural center or district, or a major park or recreational facility. Enhancing connections makes it easier for residents to move throughout the region to access employment opportunities, services, and recreational amenities.

6.7 Coordinate local and regional population and economic projections. Coordinating local and regional projections minimizes the risk of planning cross purposes as the result of inconsistent data.

6.8 Include regional development visions and plans in local planning scenarios. Considering regional development visions and plans may introduce new opportunities for local development or intergovernmental collaboration.

6.9 Encourage consistency between local capital improvement programs and regional infrastructure priorities. Coordinating between local capital improvement programs and regional infrastructure priorities helps ensure that local investments are in line with regional visions and mobility goals.

IMP Table 1, Plan Scoring Matrix (continued)

	BEST PRACTICES FOR PLAN PROCESSES	N/A	0	1	2	3	Source
7.0	**AUTHENTIC PARTICIPATION** - Ensure that the planning process actively involves all segments of the community in analyzing issues, generating visions, developing plans, and monitoring outcomes.						
7.1	Engage stakeholders at all stages of the planning process.					■	Strategy IMP.1.1; "Ongoing Community Outreach and Engagement section (Implementation, page 2.15)
7.2	Seek diverse participation in the planning process.				■		Strategy IMP.1.1
7.3	Promote leadership development in disadvantaged communities through the planning process.		■				
7.4	Develop alternative scenarios of the future.		■				
7.5	Provide ongoing and understandable information for all participants.					■	
7.6	Use a variety of communication channels to inform and involve the community.					■	
7.7	Continue to engage the public after the comprehensive plan is adopted.					■	"Ongoing Community Outreach and Engagement section (Implementation, page 2.15)
	TOTAL SCORE: 7.0 AUTHENTIC PARTICIPATION				**2**	**12**	
8.0	**ACCOUNTABLE IMPLEMENTATION** - Ensure that responsibilities for carrying out the plan are clearly stated, along with metrics for evaluating progress in achieving desired outcomes.						
8.1	Indicate specific actions for implementation.					■	Almost every strategy in the Plan has a series of Courtses of Action
8.2	Connect plan implementation to the capital planning process.			■			Strategies IMP.1.5; IMP.1.8
8.3	Connect plan implementation to the annual budgeting process.			■			Strategy IMP.1.8
8.4	Establish interagency and organizational cooperation.					■	Strategy IMP.1.9
8.5	Identify funding sources for plan implementation.	■					Comp Plan development was not scoped to include the identification of federal, state and local funding sources.
8.6	Establish implementation benchmarks, indicators, and targets.					■	Performance Measures section (Implementation, page 2.16)
8.7	Regularly evaluate and report on implementation progress.					■	Annual Progress Report section (Implementation, page 2.13); Five Year Update / Evaluation section (Implementation, page 2.14)
8.8	Adjust plan as necessary based on evaluation.			■			Bi-Annual Amendment Process section (Implementation, page 2.14)
	TOTAL SCORE: 8.0 ACCOUNTABLE IMPLEMENTATION			**3**		**12**	

BEST PRACTICES FOR PLAN PRINCIPLES

7.0 AUTHENTIC PARTICIPATION - Ensure that the planning process actively involves all segments of the community in analyzing issues, generating visions, developing plans, and monitoring outcomes.

7.1 Engage stakeholders at all stages of the planning process. Engaging stakeholders throughout the planning process - from creating a community vision to defining goals, principles, objectives, and action steps, as well as in implementation and evaluation - is important to ensure the Plan accurately reflects community values and addresses community priority and needs. In addition, engagement builds public understanding and ownership of the adopted plan, leading to more effective implementation.

7.2 Seek diverse participation in the planning process. A robust comprehensive planning process engages a wide range of participants across generations, ethnic groups, and income ranges. Especially important is reaching out to groups that might not always have a voice in community governance, including representatives of disadvantaged and minority communities.

7.3 Promote leadership development in disadvantaged communities through the planning process. Leaders and respected members of disadvantaged communities can act as important contacts and liaisons for planners in order to engage and empower community members throughout the planning process. Participation in the process can encourage development of emerging leaders, especially from within communities that may not have participated in planning previously.

7.4 Develop alternative scenarios of the future. Scenario planning is a technique in which alternative visions of the future are developed based upon different policy frameworks and development patterns, allowing communities to envision the consequences of "business as usual" compared to changed development strategies. Comparing scenarios helps to frame choices and informs community decision making during the planning process.

7.5 Provide ongoing and understandable information for all participants. Information available in multiple, easily accessible formats and languages is key to communicating with all constituents, including non-English speakers. Such communication may involve translating professional terms into more common lay vocabulary.

7.6 Use a variety of communication channels to inform and involve the community. Communications channels that can be used throughout the planning process include traditional media, social media, and Internet-based platforms. Different constituencies may prefer to engage through different channels.

7.7 Continue to engage the public after the comprehensive plan is adopted. Stakeholder engagement should not end with the adoption of the comprehensive plan. An effective planning process continues to engage stakeholders during the implementation, updating, and amending of the plan, so that the public remains involved with ongoing proposals and decisions.

8.0 ACCOUNTABLE IMPLEMENTATION - Ensure that responsibilities for carrying out the plan are clearly stated, along with metrics for evaluating progress in achieving desired outcomes.

8.1 Indicate specific actions for implementation. Accountable implementation begins with identification of recommended policy, regulatory, investment, and programmatic actions that indicate the responsible agency, recommended timeframe, and possible sources of funding. These actions are often provided in a matrix or similar format in the implementation section of the comprehensive plan.

8.2 Connect plan implementation to the capital planning process. Capital improvement plans guide and prioritize investments in facilities and infrastructure. A comprehensive plan can be connected to the capital planning process by ensuring that comprehensive plan goals and recommended action strategies align with capital improvement plan priorities and programs.

8.3 Connect plan implementation to the annual budgeting process. Plan objectives linked to budget categories and the timeframe of the community's annual budgeting process facilitates decision making by elected and appointed officials concerning desired planning outcomes.

8.4 Establish interagency and organizational cooperation. Coordinating the activities and schedules of internal departments and external agencies and organizations increases implementation effectiveness and can leverage resources for achieving local and regional planning goals.

8.5 Identify funding sources for plan implementation. Coordinating public and private funding sources - including federal, state, and foundation grant programs - facilitates implementation of priority plan items. A comprehensive plan that has consistent, clearly presented goals, objectives, and action priorities, backed by demonstrated community support, puts the community in a strong position to secure external funding for implementation.

8.6 Establish implementation benchmarks, indicators, and targets. Indicators allow quantitative measurement of achievement of social, environmental, and economic goals and objectives. Benchmarks are measurements of existing conditions against which progress towards plan goals can be measured. Targets are aspirational levels of achievement for a specific goal or objective often tied to a specific timeframe. Establishing these metrics allow for the monitoring of progress in plan implementation.

8.7 Regularly evaluate and report on implementation progress. A process for evaluating and reporting plan implementation status and progress to both the public and elected officials following adoption ensures accountability and keeps the community informed about plan implementation progress. Such evaluation is typically done on an annual basis.

8.8 Adjust plan as necessary based on evaluation. A process for adjusting plan goals, strategies, and priorities over time as conditions change or targets are not met keeps the plan current and in line with present conditions. This process should be tied to evaluation of and reporting on implementation progress.

IMP Table 1, Plan Scoring Matrix (continued)

	BEST PRACTICES FOR PLAN ATTRIBUTES	N/A	0	1	2	3	Source
9.0	**CONSISTENT CONTENT** - Ensure that the plan contains a consistent set of vision, goals, policies, objectives, and actions that are based on evidence about community conditions, major issues, and impacts.						
9.1	Assess strengths, weaknesses, opportunities, and threats.					■	SWOT analyses were developed during the Community Workshop and CPAC meetings.
9.2	Establish a fact base.					■	Each Focus Area is based on local and regional facts, described both in *The Existing City* report and in the Plan.
9.3	Develop a vision for the future.					■	Refer to "Michigan City: Legacy City Reborn" Vision, page 3
9.4	Set goals in support of the vision.					■	Refer to Goals 1-12 throughout the Plan.
9.5	Set objectives in support of the goals.					■	Objectives follow each goal, throughout the Plan.
9.6	Set policies to guide decision-making.					■	There are over 200 policies in the Plan, at the end of each Focus Area.
9.7	Define actions to carry out the plan.					■	Courses of Action follow each Strategy.
9.8	Use clear and compelling features to present the plan.					■	High quality graphics, diagrams, figures and sidebars present compelling and relevant subject information.
	TOTAL SCORE: 9.0 CONSISTENT CONTENT					**24**	
10.0	**COORDINATED CHARACTERISTICS** - Ensure that the plan includes creative and innovative strategies and recommendations and coordinates them internally with each other, vertically with federal and state requirements, and horizontally with plans of adjacent jurisdictions.						
10.1	Be comprehensive in the plan's coverage.					■	
10.2	Integrate the plan with other local plans and programs.					■	Practically every plan that Michigan City has developed in the last 15 years has been summarized in *The Existing City* report. Refer to Appendix A.
10.3	Be innovative in the plan's approach.					■	Innovation is the cornerstone of this Plan.
10.4	Be persuasive in the plan's communications.					■	
10.5	Be consistent across plan components.					■	
10.6	Coordinate with the plans of other jurisdictions and levels of government.					■	The Plan references levels of local, regional and state government, as appropriate.
10.7	Comply with applicable laws and mandates.					■	
10.8	Be transparent in the plan's substance.					■	
10.9	Use plan formats that go beyond paper.			■			Plan website, MC2040.com provide plan sections and maps.
	TOTAL SCORE: 10.0 COORDINATED CHARACTERISTICS			**1**		**24**	

9.0 CONSISTENT CONTENT - Ensure that the plan contains a consistent set of vision, goals, policies, objectives, and actions that are based on evidence about community conditions, major issues, and impacts.

9.1 Assess strengths, weaknesses, opportunities, and threats. A technique developed for strategic planning processes, a strengths, weaknesses, opportunities, and threats (SWOT) analysis allows for the identification of the major issues facing the community internally (strengths and weaknesses) and externally (opportunities and threats). A SWOT analysis can inform community discussions and assessment of the impacts of forecasted changes, their planning implications, and appropriate responses.

9.2 Establish a fact base. Comprehensive planning should rest on a base of facts - an evidence-based description and analysis of current conditions and the best possible projection of future trends, such as land use, development, environmental factors, the economy, and population changes.

9.3 Develop a vision for the future. A vision is a statement and image of the community's desired future in terms of its physical, social, and economic conditions. Typically covering a 20-year timeframe, the vision sets the overall framework for the plan's goals, objectives, and policies and informs stakeholders of what the plan seeks to achieve.

9.4 Set goals in support of the vision. Goals are statements of community aspirations for achieving the vision. They are implemented through public programs, investments, and initiatives.

9.5 Set objectives in support of the goals. Objectives are measurable targets and strategies to be met through community action in carrying out the goals.

9.6 Set policies to guide decision-making. Policies are the specification of principles guiding public and private actions to achieve the goals and objectives presented in the plan.

9.7 Define actions to carry out the plan. The implementation section of the plan identifies commitments to carry out the plan, including actions, timeframes, responsibilities, funding sources, and provisions for plan monitoring and updating.

9.8 Use clear and compelling features to present the plan. Maps, tables, graphics, and summaries should be used in addition to text to convey the information, intent, and relationships in the plan. They are important in communicating the key features of the plan and making the ideas contained therein interesting and engaging to residents.

10.0 COORDINATED CHARACTERISTICS - Ensure that the plan includes creative and innovative strategies and recommendations and coordinates them internally with each other, vertically with federal and state requirements, and horizontally with plans of adjacent jurisdictions.

10.1 Be comprehensive in the plan's coverage. Comprehensive means covering a range of traditional planning topics (e.g., land use, transportation, housing, natural resources, economic development, parks, community facilities, infrastructure, natural hazards), as well as topics that address contemporary planning needs (e.g., public health, climate change, social equity, local food, green infrastructure, energy). It is important to address the interrelationships among these various topics.

10.2 Integrate the plan with other local plans and programs. An integrated plan includes recommendations from related functional plans and programs (e.g., hazard mitigation, climate adaptation, housing, transportation). It serves as the umbrella for coordinating recommendations from standalone plans into a systems perspective.

10.3 Be innovative in the plan's approach. An innovative plan contains creative strategies for dealing with community change, uncertainty, and development needs. It is open to proposing new approaches and solutions to community problems.

10.4 Be persuasive in the plan's communications. A persuasive plan communicates key principles and ideas in a readable and attractive manner in order to inspire, inform, and engage readers. It uses up-to-date visual imagery to highlight and support its recommendations.

10.5 Be consistent across plan components. A consistent plan frames proposals as sets of mutually reinforcing actions in a systems approach linking the plan with public programs and regulations.

10.6 Coordinate with the plans of other jurisdictions and levels of government. A coordinated plan integrates horizontally with plans and forecasts of adjacent jurisdictions and vertically with federal, state, and regional plans.

10.7 Comply with applicable laws and mandates. A compliant plan meets the requirements of mandates and laws concerning preparing, adopting, and implementing comprehensive plans.

10.8 Be transparent in the plan's substance. A transparent plan clearly articulates the rationale for all goals, objectives, policies, actions, and key plan maps. It explains the "what, how, and why" of each recommendation.

10.9 Use plan formats that go beyond paper. A plan that goes beyond paper is produced in a web-based format and/or other accessible, user-friendly formats in addition to a standard printed document. Planning websites can be used both to engage and inform citizens and different constituencies about the plan.

IMP Table 2, Evaluation Results

	TOTAL SCORES		Notes
	PRINCIPLES		
1	Livable Built Environment	31	(of 33 points)
2	Harmony With Nature	20	(of 33 points)
3	Resilient Economy	18	(of 21 points)
4	Interwoven Equity	17	(of 27 points)
5	Healthy Community	17	(of 21 points)
6	Responsible Regionalism	22	(of 27 points)
I	**Total Principles Score (Add 1 - 6)**	125	(of 162 points)
	PROCESSES		
7	Authentic Participation	14	(of 21 points)
8	Accountable Implementation	15	(of 24 points)
II	**Total Processes Score (Add 7 and 8)**	29	(of 45 points)
	ATTRIBUTES		
9	Consistent Content	24	(of 24 points)
10	Coordinated Characteristics	25	(of 27 points)
III	**Total Attributes Score (Add 9 and 10)**	49	(of 51points)
	Total Plan Score (Add I, II, and III)	203	(of 258 points)
	Total Points Available	258	
	Plan Score Percentage	78.6	
	Level of Achievement (based on Plan Score Percentage) – Designated: 70-79% – Silver: 80-89% – Gold: 90-100%	- DESIGNATED -	

Strategies, Actions and Initiatives

Based on the Comprehensive Plan evaluation and the subsequent scoring within IMP Table 1, *Plan Scoring Matrix*, and IMP Table 2, *Evaluation Results*, the following strategies and actions were developed to advance program initiatives that were either not originally scoped during the development of this Comprehensive Plan, or not adequately covered to receive a satisfactory scoring.

> *I know of no safe depository of the ultimate powers of the society but the people themselves; and if we think them not enlightened enough to exercise their control with a wholesome discretion, the remedy is not to take it from them, but to inform their discretion.*
>
> ~ Thomas Jefferson

STRATEGY IMP.1.1: ***Encourage residents and neighborhood based groups to become active participants in their City government and the decision-making process.***

STRATEGY IMP.1.2: ***Plan to reconcile the City's Zoning Ordinance and Subdivision Regulations with the Comprehensive Plan.***

Accomplish a comprehensive review of all City ordinances and procedures, and ensure that they are revised as necessary and practical to implement the policies of the Comprehensive Plan.

ACTIONS AND INITIATIVES

1. City Council should have Planning and Redevelopment Department staff prepare an ordinance for adoption that outlines how land use decisions will be made during the interim, before the Zoning Ordinance and Official Zoning Map can be revised to reflect the land use provisions within the Comprehensive Plan, as depicted on the *Future Land Use Map*.

STRATEGY IMP.1.3: ***Develop a Unified Development Ordinance.***

Appendix B – Subdivision Ordinance, Appendix C - Joint Zoning Ordinance, and other ordinances pertaining to physical development within the Michigan City Code of Ordinances should be redrafted and restructured into a Unified Development Ordinance (UDO).

There are several advantages to restructuring the City's Code of Ordinances into a UDO, including:

ACTIONS AND INITIATIVES

1. Develop Strategic Assessment report which provides a thorough critique of the City's Appendices B and C.
2. Prepare an Annotated Outline to depict how the City's land development ordinances will be restructured.

STRATEGY IMP.1.4: ***Engage in Capital Improvements Programming (CIP).***

Consider adopting the policy of developing and updating a capital improvements program (CIP) for budgeting municipal revenues over time. A CIP is typically a five- or six-year schedule of capital projects, such as buildings, transportation facilities, utility infrastructure, parks and playgrounds. CIPs distribute expensive projects over time, protecting the community from the abrupt tax increases that might otherwise be required to fund them. By compelling a local government to periodically review its current and potential capital needs, capital improvements programming improves planning for large projects and protects the local government from being confronted by a sudden need for an unplanned capital expenditure. Along with zoning and subdivision regulations, CIPs are the leading instrument available to implement comprehensive plans, strategic plans, and development plans.[1]

Each of Michigan City's comparison communities (Bay City, MI; Duluth, MN; Holland, MI; Lorain, OH; Marquette, MI; Muskegon, MI Sheboygan, WI) has a capital improvements programming requirement for forecasting and budgeting municipal expenses.

1 ICMA, 2000. The Practice of Local Government Planning. Third Edition. International City/County ICMA Management Association, in cooperation with the American Planning Association (pp.417-418)

ACTIONS AND INITIATIVES

1. Capital improvement programs guide and prioritize investments in facilities and infrastructure. A comprehensive plan can be connected to the capital planning process by ensuring that comprehensive plan goals and recommended strategies and actions align with capital improvement program priorities and programs.

STRATEGY IMP.1.5: *Consider becoming a member of the Shared Ethics Advisory Commission.*

As summarized on the Commission's website (http://www.sharedethics.com/), the Shared Ethics Advisory Commission was founded in 2005, and represents the local government entities of Lake, Porter and LaPorte Counties which have voluntarily committed themselves to the Shared Code of Ethics and Values. These cities, towns and counties work together to achieve the Commission's primary goals of:

– Heightening awareness of ethical issues within municipal government.
– Assisting municipal employees with the practical tools to make ethical decisions.

This mission is accomplished through a variety of methods, including regular training sessions, printed training materials, advocacy articles and an ongoing collaborative effort to enhance ethical behavior within participating governments.

STRATEGY IMP.1.6: *Prepare a plan for the provision of municipal services prior to annexation of land into the City limits.*

Indiana Code (IC 36-4-3-13) requires courts to order proposed annexations if the municipality has written and adopted a fiscal plan by resolution as of the date of passage of the annexation ordinance. The resolution must show:

1. Cost estimates of planned services;
2. Method or methods of financing the services;
3. Plan to organize and extend the services;
4. That non-capital services including (but not limited to) police and fire protection and street and road maintenance will be provided within one year in a manner equivalent in standard and scope to services provided elsewhere;
5. That capital services, including (but not limited to) street construction, street lighting, sewer facilities, water facilities, and stormwater drainage facilities, will be provided within three years in a manner equivalent in standard and scope to services provided elsewhere; and
6. Plan for hiring employees of other governmental entities whose jobs will be eliminated by the proposed annexation, although the municipality is not required to hire any employees.[1]

STRATEGY IMP.1.7: *Consider incorporating a fiscal impact analysis in development reviews.*

Many rural cities and counties approve developments incrementally, one project at a time, because planning for development can be hard to predict. In doing so, communities focus on short-term results, not the long-term implications and impacts of development in aggregate. Cities often rely on rough estimates of property and other tax revenues to conclude that the proposed project will benefit the community without examining possible costs. Long-term costs include infrastructure construction and maintenance, special transit service for elderly or disabled persons, emergency services, schools and other civic facilities, and services for employees and residents of new development. Failure to consider such costs before infrastructure funds have been committed can have fiscal and other impacts on residents for years through increased taxes and fewer services.

As a result of this level of analysis, local governments will understand the full range of costs and benefits associated with a proposed development and, where allowed by state law, can ensure that costs related to infrastructure and services are recovered as part of the approval process or that mitigation is provided. Developments that bring demonstrated benefits to a community are more likely to attract resident and stakeholder support.

Consider adopting the following four-step fiscal impact analysis:

1. Estimate the population generated by the development (e.g., the number of new residents, school-age children, and employees).
2. Translate this population into public services costs (e.g., roads, schools, and emergency services) based on costs used in the local or regional market.

1 Center for Urban Policy and the Environment, School of Public and Environmental Affairs,1998. Annexation in Indiana: Issues and Options. Indianapolis, IN.

enCodePlus™

The **enCode**Plus™ cloud-based software is the most advanced web-enabled technology in code (and plan) publishing. It may be used in-house by local and higher levels of government to draft, codify, display, and publish zoning and land development ordinances, general plans, and entire codes of ordinances, online.

POWERFUL CAPABILITIES

- Stores and retrieves archived code versions to identify legacy provisions that are still in effect for approved development projects or PUDs.
- Accepts and individually catalogues online comments from the public during the review stages of text amendments. This aids meaningful and well-documented public participation.
- Provides embedded interactive decision-support tools, such as parking, landscaping, and density calculators, to determine the parking requirements for specific development applications.
- Includes cross-platform and cross-browser compatibility for use on mobile devices including smart phones, iPads, and other tablets.
- Includes site visitor analytics and linkage to social media websites.
- Integrates map-to-text and text-to-map geographic information systems ("GIS") navigation.

BENEFITS TO YOUR AGENCY

- Saves staff time and simplifies plan and code administration and management.
- Limits the use of paper documents in favor of mobile viewing.
- Reduces (or eliminates) codification and publication costs.
- Enhances public access to the code, reduces the number of telephone inquiries, and improves the accuracy of permit applications.
- Eliminates the circulation of outdated plan or code versions.
- Accommodates a richer, more robust document with in-line illustrations, animations, and graphic visualizations.
- Easy code lookup and map access, and use of interactive decision support tools, ease the application review process and lighten staff workload.

3. Project the tax and other local revenues generated by the growth.
4. Compare the development-induced costs to projected revenues and, if a gap exists, determine how to address the shortfall.

ACTIONS AND INITIATIVES

1. Adopt a requirement for a full fiscal impact analysis for all major projects.
2. Maintain adequate and current information on the costs of government services so that basic information for fiscal impact analysis is readily available.
3. Train local government staff and Planning and utilities boards to understand fiscal analysis and how it relates to infrastructure provision associated with development decisions.
4. Require fiscal impact analysis of effects on other service providers (e.g., fire districts or school districts) and surrounding jurisdictions to help ensure that neighboring communities are not burdened by the costs of providing services. If the analysis identifies adverse impacts on other jurisdictions, adopt measures to ensure mitigation (e.g., developer contributions or revenue sharing).
5. Keep capital improvement plans current and include appropriate development projections.[1]

STRATEGY IMP.1.8: ***Consider developing an intergovernmental agreement between the City of Michigan City and LaPorte County whereby the County assigns the City the responsibility of providing development review and approving construction permits for all development within the Planning Area.***

1 Nelson, Kevin, 2012. Essential Smart Growth Fixes for Rural Planning, Zoning, and Development Codes. EPA, Office of Sustainable Communities.

Implementation Action Plan

IMP Table 3, *Implementation Action Plan*, includes a prioritized list of action recommendations derived from the various plan elements of the *Momentum: Michigan City 2040* Comprehesive Plan. The synthesized table does not include every action recommendation found throughout the Plan. As configured, the Implementation Action Plan details the "to do" list of priority action items showing the general time frame for initial implementation and who is responsible for initiating, administering and participating in the implementation process.

Additionally, action strategies have been categorized regarding those that will involve:
(1) capital investments, (2) programs and initiatives, (3) regulations and standards, (4) partnerships and coordination, and (5) targeted planning/study. Most capital projects will also require, to varying degrees, additional feasibility analysis, construction documentation, specifications, and detailed cost estimates.

CAPITAL PROJECTS

As discussed, most cities use five-year Capital Improvement Programs, or "CIPs" to identify and budget for "big ticket" projects, especially those that must be phased and/or coordinated with other initiatives. This may include street infrastructure; water, wastewater, and drainage improvements; parks, trails, and recreation facility construction and upgrades; construction of public buildings; and purchase of land, vehicles, or major equipment. Anticipating and adequately budgeting for major capital projects will be essential to implementing this plan. Likewise, decisions regarding the prioritization of proposed capital improvements should reflect the direction and priorities of this plan. The City of Michigan City does not formally utilize / adopt a Capital Improvement Program. Only a few departments utilize a CIP approach to budgeting; specifically, the Water Department and the Sanitary Department.

POLICIES AND PROGRAMS

Policies ultimately drive both day-to-day activities and strategic decisions. They capture basic philosophies and "standard operating procedures" that should apply across the board unless changing circumstances or new information suggest that standing policies should be revisited. Programs involve the routine activities of City departments and staff, as well as special projects and initiatives they may also undertake. As part of Comprehensive Plan implementation, this method may include initiating new or adjusting existing City policies or programs; expanding community outreach efforts; or providing specialized training to accomplish a priority objective more promptly and/or effectively.

REGULATION AND STANDARDS

Given that private investment decisions account for a vast majority of the City's physical form, land development regulations and engineering standards are fundamental for plan implementation. Consequently, zoning and subdivision regulations and associated development criteria and technical engineering standards are the basic keys to ensuring that the form, character, and quality of development reflect the City's planning objectives. These codes should advance the community's desire for quality development outcomes while recognizing economic factors. They should not delay or interfere unnecessarily with appropriate new development or redevelopment that is consistent with plan principles and directives.

PARTNERSHIPS AND COORDINATION

Some community initiatives identified in this plan cannot be accomplished by City government on its own. They may require direct coordination, intergovernmental agreements, or funding support from other public entities or levels of government. Additionally, the unique role of potential private and non-profit partners to advance the community's action agenda should not be underestimated. This may occur through cooperative efforts, volunteer activities, and in-kind services (which can count toward the local match requirements for various grant opportunities), and from public/private financing of community improvements.

MORE TARGETED PLANNING

Various areas of City governance require more detailed study and planning, especially as required to qualify

for external funding opportunities. These studies involve targeted planning work at a "finer grain" level of detail than is appropriate for comprehensive planning purposes (e.g., utility master plans, cost of growth assessments). As such, some parts of this plan will be implemented only after some additional planning or special study to clarify next steps and associated costs and considerations.

Note that a guide to acronyms used appears in the upper righthand corner of the table.

As mentioned, IMP Table 3, *Implementation Action Plan*, provides a starting point for determining immediate, near-term, and longer term task priorities. This is an important first step toward Plan implementation and should occur in conjunction with the City's annual budget process, during Capital Improvements Program (CIP) preparation, and in support of departmental work planning. Then, the City staff member designated as the Comprehensive Plan Administrator should initiate a first-year work program in conjunction with City management, other departments, and other public and private implementation partners.

The near-term action priorities should be revisited by City officials and staff annually to recognize accomplishments, highlight areas where further attention and effort are needed, and determine whether some items have moved up or down on the priority list given changing circumstances and emerging needs. It should be kept in mind that early implementation of certain items, while perhaps not the uppermost priorities, may be expedited by the availability of related grant opportunities, by a state or federal mandate, or by the eagerness of one or more partners to pursue an initiative with the City. On the other hand, some high-priority items may prove difficult to tackle in the near term due to budget constraints, the lack of an obvious lead entity or individual to carry the initiative forward, or by the community's readiness to take on a potentially controversial new program.

Progress on the Year 1-3 items, in particular, should be the focus of the first annual review and report a year after Comprehensive Plan adoption, as described earlier in this chapter. Then, similar to multi-year capital improvements programming, the entire action agenda list in IMP Table 3—and all other action items dispersed throughout the Plan chapters—should be revisited annually to decide if any additional items are ready to move into the next near-term action timeframe, and what the priority should be.

IMP Table 3, Implementation Action Plan

Priority

- Primary Action Type
- Secondary Action Type
- Tertiary Action Type

MCC: Mayor and City Council
MCCO: MC Controller's Office
CA: City Attorney
CE: City Engineer
PRD: Planning and Redevelop. Dept.
PC: Plan Commission
PD: Parks Dept.
EDC: Economic Development Corp.
RDC: Redevelopment Commission
SD: Sanitary District
WD: Water Department

	Initiate			Action Type					Action Leaders
	Year 1-3	Years 3-10	10+ Years	Capital Projects	Policies and Programs	Regulations and Standards	Partnerships and Coordination	More Targeted Planning	
FOCUS AREA 1: GROWTH CAPACITY AND ECONOMIC PERFORMANCE									
GOAL 1.0: Fiscally responsible and carefully managed development that is aligned with growth expectations and sequencing, and is in concert with the City's ability to deliver infrastructure and services in a safe, timely, and effective manner.									
OBJECTIVE 1.1: Monitor and manage growth to ensure consistency with the Future Land Use Map.									
STRATEGY 1.1.1: *Develop the tools to identify and monitor land use demands based on projected population growth.*									
1. Promote Zoning Integrity.					X	X			MCC, CA, PRD
3. Evaluate likely population-dependent thresholds for public facilities and services.								X	MCC, CA, PRD
4. Require Traffic Impact Analyses.					X	X			MCC, CA, PRD, PC
5. Use Density/Intensity Bonuses.					X	X			MCC, CA, PRD, PC
7. Provide for Cluster and Conservation Development Approaches.					X	X			MCC, CA, PRD, PC
STRATEGY 1.1.2: *Identify and implement growth management techniques for areas within the Planning Area.*									
1. Pursue interlocal cooperation agreements with LaPorte County.							X		MCC, CA, PRD
STRATEGY 1.1.3: *Establish a well-managed pattern of development that is fiscally responsible.*									
1. Continue to update a growth sequencing plan and management strategy.					X			X	CA, PRD, SD, WD
2. Evaluate the City's Water Department and Sanitary District capital improvement program (CIP) and annual capital plan against the growth sequencing plan to ensure utility extensions and capacity improvement projects are consistent with the defined growth area.								X	PRD, SD, WD
OBJECTIVE 1.2: Annexation is in Accordance with the City's Growth Sequencing Plan and Fiscal Impact Assessment.									
STRATEGY 1.2.1: *Prepare a Comprehensive Annexation program for lands within the Planning Area.*									
2. Prepare and maintain an annexation plan and associated service planning.					X			X	MCC, CA, PRD, PC
3. Develop a fiscal impact model to assess providing "full municipal services."					X			X	MCC, CA, PRD
OBJECTIVE 1.3: Balance greenfield development with infill development and redevelopment.									
STRATEGY 1.3.1: *Analyze areas within the City of Michigan City that may be worthy of redevelopment.*									
1. Identify and evaluate parcels in the Planning Area where the assessed value of the land is higher than the appraised value of improvements to the parcel.					X			X	MCC, CA, PRD, RDC
STRATEGY 1.3.2: *Develop policies and incentives that encourage and promote infill development and redevelopment.*									
1. Provide incentives for infill development.					X	X			MCC, CA, PRD, RDC
4. Study the infrastructure needs of the infill opportunity sites and prepare a schedule of capital improvements.					X			X	PRD, RDC, SD,WD
5. Create and adopt infill development standards						X		X	MCC, CA, PRD, RDC

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	Initiate			Action Type					Action Leaders
	Year 1-3	Years 3-10	10+ Years	Capital Projects	Policies and Programs	Regulations and Standards	Partnerships and Coordination	More Targeted Planning	
FOCUS AREA 1: GROWTH CAPACITY AND ECONOMIC PERFORMANCE									
STRATEGY 1.3.2: *Develop policies and incentives that encourage and promote infill development and redevelopment.*									
8. Apply targeted zoning strategies and performance standards to designated redevelopment zones.						X		X	MCC, PRD, PC
9. Establish "green-light" procedures to streamline approval of applications that comply with the City's established infill development standards,					X			X	MCC, PRD, PC, RDC
GOAL 2.0: A balanced, diversified economy assures desirable local employment opportunities, strengthens the city's tax base, and sustains quality of life.									
OBJECTIVE 2.1: Foster a strong and diverse economy which provides a full range of employment and economic choices for individuals and families in all parts of the City and Planning Area.									
STRATEGY 2.1.1: *Engage with, and Leverage the Entire Regional Asset-base.*									
1. Advance, secure, and execute initiatives aimed an improving the quality of life and economic well-being of communities within the region.					X		X	X	MCC, PRD, EDC
OBJECTIVE 2.2: Continue to Pursue Place/Asset-Based, Opportunity Development.									
STRATEGY 2.2.1: *Focus on place-based strategies.*									
Focus on place-based strategies.					X		X	X	PRD, PC, EDC
STRATEGY 2.2.2: *Maximize Indigenous Growth.*									
Maximize Indigenous Growth.					X		X	X	PRD, PC, EDC
STRATEGY 2.2.3: *Encourage business growth in infill locations.*									
Encourage business growth in infill locations.					X		X	X	PRD, PC, EDC, RDC
OBJECTIVE 2.3: Support business development activities to retain, expand and recruit businesses.									
STRATEGY 2.3.1: *Evaluate the feasibility and timing of developing a co-working facility.*									
1. Conduct a market assessment regarding the feasibility of administering a co-working facility.					X			X	PRD, EDC, RDC
2. Develop a large co-working space for artists to assemble and finish large art works.					X			X	PRD, EDC, RDC
STRATEGY 2.3.2: *Consider developing a micro-loan program.*									
Develop a micro-loan program.					X		X	X	PRD, EDC, RDC
STRATEGY 2.3.4: *Expand programs to promote and sustain entrepreneurship.*									
1. Partner with Ivy Tech Community College and/or the A.K. Smith Area Career Center to provide office space.									PRD, EDC, RDC
STRATEGY 2.3.5: *Provide a range of affordable housing options for a diverse and expanding workforce.*									
1. Partner with residential developers to determine under what conditions, market or other, they may be interested in investing in residential redevelopment projects.					X		X	X	PRD, EDC, RDC
2. Re-zone residential blocks to afford higher densities; as well as possible incentives to attract residential developers.					X	X		X	MCC, PRD, PC
3. Evaluate the existing condition of utilities infrastructure.					X			X	CE, PRD, SD, WD

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	Initiate			Action Type					Action Leaders
	Year 1-3	Years 3-10	10+ Years	Capital Projects	Policies and Programs	Regulations and Standards	Partnerships and Coordination	More Targeted Planning	
FOCUS AREA 2: ENVIRONMENTAL MANAGEMENT AND GREEN INFRASTRUCTURE									
STRATEGY 2.3.5: *Provide a range of affordable housing options for a diverse and expanding workforce.*									
5. Streamline the building demolition process.					X	X		X	MCC, CA, PRD, Board of Works (BOW)
6. Identify and advertise successful examples of where the Hoosier Homestead Initiative has enabled home ownership and enhancement of residential neighborhoods.							X		PRD, EDC, RDC
OBJECTIVE 2.4: Ensure a highly skilled and trained workforce that is prepared to meet and exceed the employment needs of future business and industry.									
STRATEGY 2.4.1: *Provide a range of workforce training programs and opportunities in Michigan City.*									
1. Consider partnering with Ivy tech community college to expand the number of industry-recognized manufacturing, healthcare, and construction certification courses offered.					X		X		MCC, PC, EDC
GOAL 3.0: Lake Michigan and its associated aquatic and terrestrial environs, are protected, managed, and enhanced as the region's greatest natural resource.									
OBJECTIVE 3.1: Continue to improve Trail Creek water quality, with respect to fecal coliform, dissolved oxygen, nutrients, and total suspended solids.									
STRATEGY 3.1.1: *Protect and manage the natural hydrology of the Trail Creek watershed to minimize sediment, nutrient, and bacteria loading into the stream, for the health, safety and enjoyment of all its user groups.*									
1. Partner with the Towns of Long Beach, Pottawattamie Park, and Trail Creek to develop a phased wastewater collection implementation program.				X	X	X	X	X	MCC, CA, CE, PRD, SD
2. Regulate growth within the Trail Creek watershed by requiring urban level services or all new development.					X	X		X	MCC, CA, PRD, PC, SD
3. Preserve riparian corridors within the Trail Creek watershed by amending Article 20 - Stormwater Management Regulations.					X	X		X	MCC, CA, CE, PRD, PC, PD
STRATEGY 3.1.2: *Update Trail Creek Management Plan.*									
1. Approach the Trail Creek Watershed Partnership to be the likely sponsoring entity of the Plan Update.					X		X	X	PRD, PD, SD
STRATEGY 3.1.3: *Continue to promote the use of low impact development strategies, tools, and techniques to restore pre-development hydrology and conform to performance criteria within Article 20 - Stormwater Management Regulations for all new development areas.*									
3. Incent the implementation of LID applications by providing expedited plan review.					X	X		X	MCC, CA, PRD, PC, SD
OBJECTIVE 3.2: Promote Trail Creek as a significant recreational amenity within the region.									
STRATEGY 3.2.1: *Pursue Recreational Stream designation for Trail Creek.*									
Pursue Recreational Stream designation for Trail Creek.					X		X		MCC, CA, PRD, PD, SD, BOW
STRATEGY 3.2.2: *Improve pedestrian access to key reaches of Trail Creek.*									
Improve pedestrian access to key reaches of Trail Creek.				X	X			X	CA, PRD, PD
STRATEGY 3.2.3: *Develop a Trail Creek Blueways program.*									
Develop a Trail Creek Blueways program.					X		X	X	MCC, CA, PC, PD, SD

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	Initiate			Action Type					Action Leaders
	Year 1-3	Years 3-10	10+ Years	Capital Projects	Policies and Programs	Regulations and Standards	Partnerships and Coordination	More Targeted Planning	
FOCUS AREA 2: ENVIRONMENTAL MANAGEMENT AND GREEN INFRASTRUCTURE									
OBJECTIVE 3.4: Improve the condition, diversity, and degree of cover of Michigan City's Urban Forest Canopy.									
STRATEGY 3.4.1: *Continue to improve the Tree Inventory GIS program.*									
Continue to improve the Tree Inventory GIS program.					X		X	X	PRD, Urban Forester, Tree Board
STRATEGY 3.4.2: *Increase the quantity and variety of trees in the City.*									
Increase the quantity and variety of trees in the City.				X	X			X	PRD, Urban Forester, Tree Board
OBJECTIVE 3.5: Remediate contaminated lands within the City limits.									
STRATEGY 3.5.1: *Remediate and redevelop brownfield sites and other developed lands that suffer from environmental or other constraints.*									
1. Develop a brownfields remediation prioritization program.				X	X		X	X	PRD, PC, EDC, RDC, SD
GOAL 4.0: A comprehensive system of well-planned, attractive, passive and active parks, open spaces, trails, facilities, and programmed recreational opportunities to serve a range of needs and lifestyles, including age, ability, accessibility and income, for residents and visitors alike.									
OBJECTIVE 4.1: Assure an even geographic distribution of parks and facilities that will provide equitable opportunity to recreational activities for all citizens.									
STRATEGY 4.1.1: *Meet and preferably exceed National Recreation and Parks Association (NRPA) standards for acres per capita and the facility demands of the population.*									
Meet and preferably exceed NRPA standards.				X	X		X	X	MCC, PRD, PC, PD
STRATEGY 4.1.2: *Accommodate the current and future needs of residents by providing a system of mini-parks and neighborhood play areas.*									
Provide a system of mini-parks and neighborhood play areas.				X	X			X	MCC, PRD, PC, PD
STRATEGY 4.1.3: *Bring all existing and future parks throughout the community to an equivalent standard of quality and excellence.*									
Bring all existing and future parks to an equivalent standard of quality and excellence.				X	X			X	MCC, PRD, PC, PD
STRATEGY 4.1.4: *Ensure the highest possible safety and security of parks and recreation users.*									
2. Identify and schedule repairs, routine maintenance and cleaning, and other necessary improvements.				X	X				MCC, PD
6. Improve accessibility for persons with disabilities.				X	X			X	CE. PD
7. Install emergency telephones within each park and along trail segments.				X	X				MCC, PD
STRATEGY 4.1.5: *Create new, year-round nature and recreation oriented attractions at Washington Park that appeal to visitor and locals residents alike.*									
1. Provide additional winter activities for Michigan City's youth.					X			X	MCC, PD
STRATEGY 4.1.6: *Utilize the City's nature preserves to promote health and wellness.*									
1. Develop a forest bathing program utilizing the City's nature preserves.					X			X	PD
2. Train a staff person to serve as the City's Forest Bathing facilitator.				X	X		X		PD

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	Year 1-3	Years 3-10	10+ Years	Capital Projects	Policies and Programs	Regulations and Standards	Partnerships and Coordination	More Targeted Planning	
FOCUS AREA 2: ENVIRONMENTAL MANAGEMENT AND GREEN INFRASTRUCTURE									
OBJECTIVE 4.2: Provide an interconnected system of paths, recreational trails, on-street bike lanes, and routes that are multi-purpose, safe, accessible, and convenient; and connect Michigan City's parks to neighborhoods, schools, workplaces, and other community destinations.									
STRATEGY 4.2.1: *Continue to aggressively implement the City's recreational trails program.*									
Continue to aggressively implement the City's recreational trails program.				X				X	MCC, PRD, PD
OBJECTIVE 4.3: Acknowledge that parks and recreation needs evolve over time with changes in demographic characteristics, and respond accordingly.									
STRATEGY 4.3.1: *Develop a plan to periodically monitor and quantify park and recreational facility use.*									
1. Monitor, on an annual basis, parks and recreational facilities' use.								X	PD
3. Consider passive recreational enhancements for those demographic sectors of the population not involved in team sports.					X		X	X	MCC, PRD, PD
STRATEGY 4.3.2: *Reprogram and re-design under-performing parks and recreational facilities.*									
Reprogram and re-design under-performing parks and recreational facilities.				X	X			X	MCC, PRD, PD
STRATEGY 4.3.3: *Take full advantage of unprogrammed public space.*									
1. Embrace electronic media and ways in which kids can apply computer-based games to Michigan City's parks system.					X			X	PD
STRATEGY 4.3.4: *Consider amending the City's Code of Ordinances to allow dogs to be walked in public parks and open space preserves.*									
1. Include regulations that dogs must be on a leash at all times.					X	X		X	MCC, CA, PRD
2. Require dog owners to pick-up dog waste.						X			MCC, CA, PD
STRATEGY 4.3.5: *Consider developing a demonstration dog park in the City.*									
Develop a demonstration dog park in the City.				X	X			X	MCC, PRD, PD
STRATEGY 4.3.6: *Consider amending the City's Code of Ordinances to allow dogs (on a leash) to accompany their owners at outdoor dining and drinking establishments.*									
Amend the City's Code of Ordinances to allow dogs (on a leash) to accompany their owners at outdoor dining and drinking establishments.					X	X	X	X	MCC, CA, PRD
OBJECTIVE 4.5: Promote and engage in the conservation and enhancement of natural and cultural resources.									
STRATEGY 4.5.1: *Continue to partner with other environmental non-profits and foundations to identify and acquire (through lease agreements, donations and partnerships) existing natural resources which warrant protection, conservation and/or enhancement; provides habitats for wildlife and endangered species or provides natural open spaces suitable for parks, recreation and both environmental and historical preservation of sites.*									
Identify and acquire (through lease agreements, donations and partnerships) existing natural resources.				X	X		X	X	MCC, PRD, PD, SD
OBJECTIVE 4.6: Utilize a full-range of capital / other resources to implement park and recreational facility enhancements.									
STRATEGY 4.6.1: *Adopt a Parkland Dedication, Fee-in-Lieu, and Development Fee ordinance.*									
Adopt a Parkland Dedication, Fee-in-Lieu, and Development Fee ordinance.					X	X		X	MCC, PRD, PC, PD

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FOCUS AREA 2: ENVIRONMENTAL MANAGEMENT AND GREEN INFRASTRUCTURE									
STRATEGY 4.6.3: *Work with LaPorte County to establish a parkland dedication ordinance that would apply, at minimum, to residential development within the Planning Area.*									
Partner with LaPorte County to establish a parkland dedication ordinance.						X	X	X	MCC, CA, PD
OBJECTIVE 4.7: Ensure success of the organization through continued development of the staff and department.									
STRATEGY 4.7.1: *The City's Parks and Recreation Department should continue to aggressively pursue CAPRA agency accreditation.*									
Pursue CAPRA agency accreditation.					X			X	MCC, PD
STRATEGY 4.7.2: *Continue to support existing staff regarding their professional development.*									
3. Support staff to obtain professional certifications.					X		X		PD, SD, Central Services
4. Obtain memberships and participate/attend the conferences and events of the NRPA and INPRA.				X	X		X		PD
FOCUS AREA 3: UTILITIES INFRASTRUCTURE AND PUBLIC SERVICES									
GOAL 5.0: An integrated water, stormwater, and waste water system that reduces pollution, protects and restores ecological systems, minimizes energy use and maximizes efficiency, and supports new growth while accommodating existing development.									
OBJECTIVE 5.1: Ensure a reliable, efficient and cost-effective water system which delivers adequate quantities and quality of water to satisfy domestic, industrial, commercial, institutional, agricultural and fire protection purposes without compromising the sustainability of the City's water resources.									
Develop an implementation program, schedule, and budget for the stormwater drainage improvement projects identified and described within the Utilities Infrastructure focus area.				X	X			X	MCC, WD
OBJECTIVE 5.2: Ensure a reliable and efficient collection, transmission, and treatment of all wastewater in a manner that protects environmental and human resources.									
Develop an implementation program, schedule, and budget for the wastewater treatment facility upgrades identified and described within the Utilities Infrastructure focus area.				X	X			X	MCC, SD
OBJECTIVE 5.3: Develop, conserve and enhance drainageways to serve multiple functions, including the conveyance and regulation of stormwater runoff; provision of wildlife corridors; and greenways for active transportation and recreation.									
Develop an implementation program, schedule, and budget for the stormwater drainage improvement projects identified and described within the Utilities Infrastructure focus area.				X	X			X	MCC, SD
OBJECTIVE 5.4: Support well-planned improvements to the private utility and communications networks that provide redundancy, efficiency, and security.									
STRATEGY 5.4.1: *Develop a phased program to extend fiber-optic cable, via micro-trenching to existing and proposed business opportunity areas.*									
Develop a phased program to extend fiber-optic cable.				X	X			X	MCC, EDC, RDC, IT Dept.
GOAL 6.0: Public services and facilities adequately serve the needs of residents and businesses within the Michigan City, and that such services and facilities are adaptable to future growth.									
OBJECTIVE 6.1: Ensure that public services and facilities adequately serve the needs of residents and businesses within the City of Michigan City, and that such services and facilities are adaptable to future growth.									

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FOCUS AREA 3: UTILITIES INFRASTRUCTURE AND PUBLIC SERVICES									
STRATEGY 6.1.1: *Provide for the ongoing needs of the Fire Department to ensure adequate protection of the population.*									
Provide for the ongoing needs of the Fire Department.				X	X			X	MCC, MC Fire Dept.
STRATEGY 6.1.2: *Provide for the ongoing needs of the Police Department to ensure adequate Police protection for the projected population.*									
Provide for the ongoing needs of the Police Department.				X	X				MCC, MC Police Dept.
FOCUS AREA 4: TRANSPORTATION INFRASTRUCTURE									
GOAL 7.0: A network of safe, connected, high-quality, attractive transportation corridors.									
OBJECTIVE 7.1: Ensure a well-connected and high-quality street network.									
STRATEGY 7.1.1: *Utilize the Thoroughfare Plan map and functional classification of roadways to achieve adequate mobility within the community and preserve rights-of-way.*									
1. Conduct signal warrant studies as area travel volumes increase with new development.					X			X	CE, PRD
STRATEGY 7.1.2: *Preserve traffic capacity by implementing access management and other Transportation Systems Management (TSM) provisions in the City.*									
1. Implement access management planning recommendations for U.S. Highway 421/S. Franklin Street.					X	X		X	MCC, CA, CE, PRD, PC
2. Sponsor the development of a corridor redevelopment plan for U.S. Highway 12, from County Line Road, west the western City limits.					X		X	X	MCC, PRD, PC, RDC
STRATEGY 7.1.3: *Incorporate additional street types into Michigan City's Code of Ordinances, Appendix B - Subdivision Ordinance, Section 06.04. - Streets.*									
1. Incorporate Street Types A through E and the right-of-way width, pavement width, parking, and associated frontage Zone amenities.					X	X		X	CE, PRD
2. Encourage alleys in compact, walkable residential districts, but with a narrower paved widths (usually 10 to 12 feet) and an easement for utilities (usually 20 feet overall).					X	X		X	CE, PRD
STRATEGY 7.1.4: *Implement the U.S. Highway 421 Access Road Plan.*									
Implement the U.S. Highway 421 Access Road Plan.				X	X	X	X	X	MCC, CE, PRD
STRATEGY 7.1.5: *Partner with LaPorte County to develop an access management plan for CR W 400 N (Kieffer Road).*									
Develop an access management plan for CR W 400 N (Kieffer Road).					X	X		X	CE, PRD
OBJECTIVE 7.2: Promote intra-city transportation efficiency.									
Evaluate recommendations and courses of action described within Strategies 7.2.1 through 7.2.16 and develop remedial treatment / expansion programs, schedules, and estimated budgets for all hot spots.				X	X	X	X	X	MCC, CE, PRD
STRATEGY 7.2.15: *Ensure that Michigan City's thoroughfares are designed and constructed according to complete streets principles and policies.*									
Ensure that Michigan City's thoroughfares are designed and constructed according to complete streets principles and policies.					X	X		X	MCC, CA, CE, PRD, PC

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FOCUS AREA 4: TRANSPORTATION INFRASTRUCTURE									
OBJECTIVE 7.3: Develop a phased transportation infrastructure improvement program to meet the traffic demand of the Future City.									
Work with INDOT to evaluate recommendations and courses of action described within Strategies 7.3.1 through 7.3.10 and develop programs, schedules, and estimated budgets for the thoroughfares, U.S. Highways, and interchanges that may warrant expansion.				X	X	X	X	X	CE, PRD
OBJECTIVE 7.4: Update Michigan City's Thoroughfare Plan.									
STRATEGY 7.4.1: *Balance changes in land use with the capabilities of the transportation system.*									
2. Evaluate the capacity of the existing and proposed transportation system in Comprehensive Plan amendments, rezoning requests, and site plan reviews.					X			X	CE, PRD
3. Collect and monitor transportation data.					X			X	CE, PRD
4. Require traffic impact analyses for all development proposals anticipated to generate significant volumes of traffic.					X	X		X	CE, PRD, PC
OBJECTIVE 7.5: Improve the Design and Appearance of Michigan City's Transportation Corridors.									
STRATEGY 7.5.1: *Implement a Green Streets program for thoroughfares within the Planning Area.*									
Implement a Green Streets program for thoroughfares within the Planning Area.					X			X	CE, PRD, SD
STRATEGY 7.5.2: *Maximize parking availability in Downtown Michigan City.*									
5. Update parking management plan to take advantage of existing supply; and reduce parking requirements for redeveloped areas.					X	X			CE, PRD, RDC
STRATEGY 7.5.3: *Work with the Michigan City Tree Board to identify transportation corridors in need of enhancement.*									
2. Develop a prioritized plant list, identifying locations, types, and sizes of trees to be planted.					X			X	PRD, Urban Forester, Tree Board
3. Identify additional means of providing legibility through the planting of specific types of trees along key east-west, and north-south corridors.					X			X	CE, PRD, Urban Forester, Tree Board
STRATEGY 7.5.4: *Create and implement a comprehensive streetscape improvement plan for major commercial corridors, so as to improve access for public transit, bicyclists, and pedestrians.*									
Create and implement a comprehensive streetscape improvement plan.				X	X		X	X	CE, PRD, RDC
STRATEGY 7.5.5: *Establish gateway entrance features for the principal entrance corridors into Michigan City.*									
1. Identify locations around the City limits boundary demarcation for a gateway entrance feature.					X		X	X	CE, PRD, RDC
STRATEGY 7.5.6: *In conjunction with the City's corridor redevelopment program for U.S. Highway 421, consider developing a demonstration gateway entrance feature for the Interstate 94/U.S. Highway 421 interchange.*									
Develop a demonstration gateway entrance feature for the Interstate 94/U.S. Highway 421 interchange.					X		X	X	CE, PRD, RDC

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FOCUS AREA 4: TRANSPORTATION INFRASTRUCTURE									
STRATEGY 7.5.7: *Prepare a corridor redevelopment plan for U.S. Highway 12.*									
Prepare a corridor redevelopment plan for U.S. Highway 12.				X	X		X	X	PRD, PC, RDC
OBJECTIVE 7.6: Provide Enhanced Pedestrian and Bicycle Mobility Options									
STRATEGY 7.6.1: *Consider adopting a "Complete Streets" policy and ordinance.*									
1. Commit to designing and constructing "Complete Streets" in the areas of new development.					X	X		X	MCC, PRD, PC, RDC
2. Draft and adopt a Complete Streets policy guide and ordinance for adoption.					X	X			MCC, CA, PRD
STRATEGY 7.6.2: *Improve the sidewalk system in Michigan City.*									
1. Within future street improvement projects along bus routes, incorporate design provisions.					X	X		X	CE, PRD
2. Retrofit older neighborhoods with pedestrian transportation facilities.					X			X	CE, PRD
3. Conduct a detailed inventory and map all existing sidewalk segments in the City.								X	CE, PRD, Homeowners Associations (HOAs)
4. Earmark a specific amount of capital, to be budgeted annually, for sidewalk/crosswalk improvements and new construction.				X	X				MCC, CE
STRATEGY 7.6.3: *Consider initiating a pedestrian signalization improvement program.*									
1. Identify intersections in the community that are heavily used by pedestrians and prioritize and implement safety improvements at these intersections.					X			X	CE, PRD, HOAs
STRATEGY 7.6.4: *Implement a formal traffic calming program.*									
Implement a formal traffic calming program.					X			X	CE, PRD
STRATEGY 7.6.6: *Support cycling culture in Michigan City.*									
Support cycling culture in Michigan City.					X		X		MCC, PD, EDC, RDC
OBJECTIVE 7.7: Expanding Public Transit Options.									
STRATEGY 7.7.3: *Analyze which locations within Michigan City would be best served by extending Michigan City Transit service hours on key routes.*									
1. Extend MCT Routes 3 and 4 to provide transit service to employees of Franciscan Hospital and the industrial businesses along Ohio Street.					X		X	X	MC Tranist (MCT)
2. Coordinate with major employers that employ workers with nontraditional hours.					X		X		MCT
4. Provide transit service along SR 212, and potential service schedule.					X		X		MCT

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FOCUS AREA 5: DOWNTOWN									
GOAL 8.0: An exciting, mixed-use environment with programmed activities for local residents and visitors alike.									
OBJECTIVE 8.1: Enhance the urban character and place qualities of Downtown and adjacent neighborhoods.									
STRATEGY 8.1.1: *Continue to promote and market Downtown assets, activities, and events.*									
Promote and market Downtown assets, activities, and events.					X		X		PRD, EDC, RDC, MC Mainstreet Association (MCMA)
STRATEGY 8.1.2: *Improve pedestrian circulation Downtown.*									
2. Identify potential locations in the Downtown area where parklets may be installed.				X	X		X	X	PRD, EDC, RDC, MCMA, Board of Works (BOW)
3. Evaluate proposed locations around the eastern end of 6th Street for a pedestrian bridge across Trail Creek to the Blue Chip Casino.				X	X		X	X	CE, PRD, PC, RDC
STRATEGY 8.1.3: *Develop a program to enhance alleys in Downtown, in order to ensure safe, connected, pedestrian circulation.*									
4. Identify strategies for enhancing alleys and passages with contained vegetation.				X	X			X	PRD, RDC, MCMA
6. Incorporate public art into alleys and passages.				X	X		X	X	PRD, RDC, MCMA, MC Public Art Committee (PCA)
7. Establish a funding mechanism to encourage alleyway enhancement projects.				X	X			X	PRD, RDC, MCMA
STRATEGY 8.1.7: *Strengthen Michigan City's public art ecosystem. Continue to promote public art Downtown.*									
1. Measure and communicate the economic value and economic contribution of the creative sector throughout the City and region.					X		X	X	MCC, PRD, MCMA
2. Work with Downtown business owners to identify building walls to use for large murals.					X		X	X	MCMA, PCA
5. Develop a self-guided tour of public art installations, art galleries, and artists' studios in and around Downtown.					X		X		MCMA, MCC, PCA
6. Establish and maintain an artists' resource and services website.					X		X		MCC, PCA
STRATEGY 8.1.8: *Consider adopting a percent for the arts ordinance.*									
Adopt a percent for the arts ordinance.						X			MCC, PC, MCMA, PCA
STRATEGY 8.1.9: *Preserve the historic significance and integrity of the Elston Grove Historic District.*									
3. Work with Purdue Northwest University to encourage students to live in the Elston Grove and Downtown and utilize an expanded Transit Triangle bus service to get to and from school.					X		X		EDC, MCMA
STRATEGY 8.1.12: ***Develop a comprehensive lighting program for Michigan City.***									
1. Provide lighting that enhances the scenic qualities and night-time experience of the City; reduces negative impacts to natural systems.					X	X		X	MCC, PRD, PC, RDC

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FOCUS AREA 5: DOWNTOWN									
STRATEGY 8.1.13: *Reduce nighttime glare and light trespass.*									
1. Require that fixtures are employed that effectively project light downwards. Eliminate direct upward lighting.					X	X		X	MCC, PRD, PC, RDC
2. Require that occupancy sensors are employed in future parking structures.					X	X		X	MCC, PRD, PC
3. Require motion sensors for office interior lighting.					X	X		X	MCC, PRD
4. Employ occupancy sensors/timers for exterior lighting.					X	X		X	MCC, PRD, PC, RDC
5. Install an automatic device that reduces the outward spillage of internal light					X	X		X	MCC, PRD, PC
STRATEGY 8.1.14: *Require all exterior fixtures to be Dark Sky compliant.*									
Require all exterior fixtures to be Dark Sky compliant.					X	X		X	MCC, PC, PD, RDC
OBJECTIVE 8.2: Promote high-density / intensity, mixed-use, transit oriented, infill development and redevelopment within Downtown.									
STRATEGY 8.2.4: *Develop a Transit Oriented Development (TOD) Plan focused on the 11th Street Station.*									
Develop and Implement a TOD Plan focused on the 11th Street Station.					X		X	X	MCC, PRD, PC, RDC
STRATEGY 8.2.5: *Further investigate the potential to utilize the block west of Franklin Street and south of 11th Street to develop a mutli-modal transit facility.*									
1. Partner with Michigan City Transit, Coach USA, and the Blue Chip Casino to advance a potential transit terminal development program.					X		X	X	PRD, EDC, RDC
STRATEGY 8.2.6: Advance the development of the 11th Street Station block.									
1. Determine the preferred development program option.					X			X	MCC, PRD, RDC
2. Prepare a development package and formulate public-private partnership options.					X		X	X	PRD, EDC, RDC
3. Actively pursue the potential funding sources outlined in the *11th Street Station Block Plan*.					X			X	PRD
STRATEGY 8.2.7: *Develop a public trolley service Downtown.*									
1. Work with the Michigan City Transit Department to determine the likely costs and confirm trolley stops.				X	X			X	PRD, RDC, MC Transit (MCT)
2. Develop public-private partnerships to secure capital funding for trolley.				X	X		X		PRD, EDC, RDC, MCT
STRATEGY 8.2.8: *Continue to seek partnerships through which to develop a hotel on the former Police Station site.*									
Develop a hotel on the former Police Station site.					X		X	X	PRD, EDC, RDC
STRATEGY 8.2.9: *Prepare an adaptive reuse study for the Franciscan Health Michigan City North Campus facility and site (TFC Figure 30, Franciscan North Campus in Midtown Site Location).*									
Prepare an adaptive reuse study for the Franciscan Health Michigan City North Campus facility and site.					X			X	MCC, PRD, RDC

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FOCUS AREA 5: DOWNTOWN									
OBJECTIVE 8.3: Manage and administer downtown as urban commercial district.									
STRATEGY 8.3.1: *Continue to partner with the Michigan City Mainstreet Association (MCMA) to sponsor community events Downtown.*									
Partner with the MCMA to sponsor community events Downtown.					X		X		MCC, PRD, MCMA
STRATEGY 8.3.2: *Provide capital assistance to the Mainstreet Association.*									
Provide capital assistance to the Mainstreet Association.				X	X		X		MCC
FOCUS AREA 6: HOUSING AND NEIGHBORHOODS									
GOAL 9.0: A diversity of affordable and adaptable housing types in sufficient quantity to accommodate a range of family sizes and income levels.									
OBJECTIVE 9.1: Encourage affordable housing ownership options. Expand opportunities for homeownership, especially for moderate to low income households.									
STRATEGY 9.1.1: *Analyze the City's zoning ordinance to ensure that adequate avenues exist for the development of affordable housing; and revise as appropriate.*									
1. Amend the City's zoning ordinance to incent the development of affordable housing through the provision of density bonuses.					X	X			MCC, PRD, PC, MC Housing Authority (MCHA)
STRATEGY 9.1.2: *Consider formulating and implementing an affordable housing strategy.*									
2. Promote affordable housing close t o transit.					X			X	PRD, MCHA
5. Administer an affordable housing investment fund (AHIF).					X		X	X	PRD, MCHA
6. Develop a tenant assistance fund (TAF).					X		X	X	PRD, MCHA
13. Enable home sharing.					X	X			PC, MCHA
14. Provide density bonuses to developers that comply with the City's affordable housing goal.					X	X			PRD, MCHA
STRATEGY 9.1.5: *Provide assistance to prospective and new homeowners interested in purchasing and renovating existing housing units in Michigan City.*									
Provide assistance to prospective and new homeowners interested in purchasing and renovating existing housing units in Michigan City.				X	X		X		PRD, MCHA
OBJECTIVE 9.2: Ensure a variety of housing types, suitable and attractive to people at different stages in their life.									
STRATEGY 9.2.1: *Encourage a variety of housing types that fit the character of Michigan City while providing housing options for all residents.*									
1. Incent the construction of a variety of housing types.					X				MCC, MCHA
2. Ensure an adequate supply of housing at a variety of prices and rents.					X		X		MCC, EDC, MCHA
3. Encourage infill housing designs that create a pedestrian-friendly streetscape.					X		X	X	MCC, PRD, EDC, MCHA

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RDC: Redevelopment Commission
SD: Sanitary District
WD: Water Department

	Initiate			Action Type					Action Leaders
	Year 1-3	Years 3-10	10+ Years	Capital Projects	Policies and Programs	Regulations and Standards	Partnerships and Coordination	More Targeted Planning	
FOCUS AREA 6: HOUSING AND NEIGHBORHOODS									
STRATEGY 9.2.2: *Promote residential development in Downtown.*									
3. Consider financial, regulatory and other types of incentives to encourage Downtown housing.					X		X		PRD, EDC, RDC
STRATEGY 9.2.6: *Enforce property maintenance of housing units, especially rental properties and eliminate substandard housing conditions.*									
Enforce property maintenance of housing units, especially rental properties and eliminate substandard housing conditions.					X	X	X		PRD, MC Inspection Dept. (MCID)
STRATEGY 9.2.7: *Enable Michigan City residents to age in the community by providing housing options and social support for seniors.*									
Fund, staff, and expand upon adult day care centers.					X		X		MCHA, MC Community Development Dept. (MCCD)
STRATEGY 9.2.8: *Coordinate policies that can help older adults continue to live in their own homes as they age.*									
1. Connect residents to social services.							X		MCHA, MCCD
2. Assist with home modifications for the elderly using a range of funding sources.					X		X		MCHA, MCCD
3. Assess the feasibility of creating a Michigan City chapter of Programs of All Inclusive Care for the Elderly (PACE).					X		X		MCHA, MCCD
GOAL 10.0: Complete, walkable and bike-able neighborhoods with safe and convenient access to the amenities, resources, and services needed in daily life.									
OBJECTIVE 10.1: Support reinvestment in private and public property to enhance the aesthetics of the neighborhood and in turn increase the economic value and the quality of life of the neighborhood.									
STRATEGY 10.1.1: *Improve the quality of the City's housing stock and neighborhoods.*									
Improve the quality of the City's housing stock and neighborhoods.					X		X		EDC, MCHA, MCCD, MC Police Dept.
STRATEGY 10.1.2: *Increase density in and around the designated Business Development Centers.*									
Increase density in and around the designated Business Development Centers.					X		X	X	PRD, PC
OBJECTIVE 10.2: Increase the involvement of residents in their neighborhoods. Revitalize neighborhoods through the collaborative involvement of residents, businesses and government to determine the vision and priorities of the individual neighborhoods.									
STRATEGY 10.2.2: *Consider expanding the number of neighborhood associations throughout Michigan City.*									
1. Establish neighborhood associations.					X		X		PRD, MCCD
2. Recruit neighborhood associations to carry out specific responsibilities.					X		X		PRD, MCCD
3. Develop and implement neighborhood enhancement plans.					X		X	X	PRD, RDC, MCCD
STRATEGY 10.2.4: *Create mixed-use neighborhoods with local small retail businesses and basic services within walking distance of housing.*									
3. Revise/Amend the Michigan City Zoning Ordinance Neighborhood Commercial (B1) district to incorporate provisions to enable small-scale (20,000-30,000 square foot parcels) neighborhood commercial/retail development.					X	X		X	PRD, PC, RDC

IMP Table 3, Implementation Action Plan

Priority

- Primary Action Type
- Secondary Action Type
- Tertiary Action Type

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	Initiate			Action Type					Action Leaders
	Year 1-3	Years 3-10	10+ Years	Capital Projects	Policies and Programs	Regulations and Standards	Partnerships and Coordination	More Targeted Planning	
FOCUS AREA 6: HOUSING AND NEIGHBORHOODS									
STRATEGY 10.2.5: *Create Neighborhood Conservation Districts for Established Neighborhoods.*									
1. Revise/Amend the Michigan City Joint Zoning Ordinance (Appendix C) to incorporate Neighborhood Conservation (NC) districts					X	X		X	MCC, PRD, PC
OBJECTIVE 10.3: Promote compatible new development and redevelopment through architecture, design and neighborhood amenities that add to the quality of the neighborhood.									
STRATEGY 10.3.2: *Enhance neighborhood identity through edge and perimeter treatment.*									
1. Implement attractive gateway signage and landscape compositions at principal neighborhood entrances.				X	X				PRD, RDC, MCCD
STRATEGY 10.3.3: *Promote neighborhood safety.*									
1. Apply CPTED principles to both public and private development projects.					X			X	PRD, MC Police Dept.
STRATEGY 10.3.4: *Ensure safe routes to schools from Michigan City's neighborhoods.*									
1. Determine the routes and degree to which children can walk and/or cycle safely to and from school.					X			X	CE, PRD, MC Police Dept.
2. Inventory the presence and condition of pedestrian facilities, including sidewalks, handicapped ramps, on-street bike lanes, lighting.					X		X	X	CE, PRD
FOCUS AREA 7: SUSTAINABILITY, RESILIENCE, AND HEALTHY COMMUNITIES									
GOAL 11.0: The systems and elements that compose Michigan City's built environment work synergistically to provide sustainable, green places for active living, working, and playing.									
OBJECTIVE 11.1: Ensure that sustainability / resilience principles, policies, and strategies are followed and advanced within the Planning Area in order to accommodate the City's present environmental, economic, and social needs without compromising the ability of future generations to do the same.									
STRATEGY 11.1.1: *Promote and encourage life-cycle thinking.*									
Promote and encourage life-cycle thinking.					X		X		PRD, SD, LaPorte County Solid Waste SD District
STRATEGY 11.1.2: *Promote consumer product awareness, increase recycling rates, and reduce the amount of substances entering into landfills.*									
1. Continue to promote the LaPorte County Solid Waste District's curbside and other recycling programs available to Michigan City residents.				X	X		X		MCC, PRD, LaPorte County Solid Waste SD District
3. Lead an aggressive recycling program within City government and quantify the results for the City's annual sustainability report.					X		X		MCC, MCCO
STRATEGY 11.1.5: *Promote the use of the Residential Renewable Energy Tax Credit.*									
Promote the use of the Residential Renewable Energy Tax Credit.					X	X	X	X	MCC, MCCO, EDC, RDC, MCHA, MCCD

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	Initiate			Action Type					Action Leaders
	Year 1-3	Years 3-10	10+ Years	Capital Projects	Policies and Programs	Regulations and Standards	Partnerships and Coordination	More Targeted Planning	
FOCUS AREA 7: SUSTAINABILITY, RESILIENCE, AND HEALTHY COMMUNITIES									
STRATEGY 11.1.6: *Consider purchasing climate-friendly products.*									
2. Adopt ENERGY STAR® purchasing standards for all new computer equipment, appliances and equipment.					X				MCC, MCCO, SD, IT Dept.
3. Conduct employee awareness training on the purchasing and use of green products and services.					X		X		MCCO, SD
6. Consider life cycle pricing to ensure that the maintenance, operating, insurance, disposal and replacement cost of the product or service is considered when evaluating purchase options.					X	X			MCCO, MC Finance Dept., MC IT Dept.
STRATEGY 11.1.8: *Encourage community and individual actions to mitigate climate change.*									
4. Include information in City mailings, websites and other media about actions that individuals and businesses can take to address climate change.					X		X		MCCO, PRD, SD, TCWP, LaPorte County Soil and Water Conservation District
5. Use the City's social media channels to inform the community about City sustainability activities.					X		X		MCC, MCCO, PRD
STRATEGY 11.1.9: *Consider developing a green building resources center (GBRC).*									
1. Draft a program, schedule, and budget for developing the Center.				X	X		X	X	MCCO, PRD, SD
3. Develop and maintain a green building webpage.					X				MCCO, PRD, SD
5. Designate a City staff member as the Sustainability Coordinator.					X		X		MCCO, PRD, SD
STRATEGY 11.1.10: *Consider joining the Climate Mayors network.*									
Join the Climate Mayors network.					X		X		MCC, MCCO, PRD
STRATEGY 11.1.11: *Develop annual Sustainability reports to quantify and track progress in advancing sustainability and resilience.*									
1. Promote the development of data and information systems for issue identification.					X		X		MCCO, PRD, SD
OBJECTIVE 11.2: Continue to track the evolution of resilience theory, practice, and application as it pertains to implementing *Michigan City Momentum 2040* Comprehensive Plan.									
STRATEGY 11.2.1: *Develop resilient neighborhoods.*									
1. Identify neighborhood residents who may require assistance and should be checked on during, or immediately after an unplanned, disruptive event.					X		X		PRD, MCCD, MC Fire Dept., MC Police Dept.
STRATEGY 11.2.2: *Assist local businesses with the development of business continuity plans.*									
1. Conduct a business impact analysis.					X				PRD, EDC, MC Chamber
4. Conduct training for the business continuity team and testing and exercises to evaluate the plan's recovery strategies.					X		X		PRD, EDC, MC Chamber
5. Develop recovery strategies for information technology so technology can be restored in time to meet the needs of the business.					X		X		PRD, EDC, MC Chamber

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	Year 1-3	Years 3-10	10+ Years	Capital Projects	Policies and Programs	Regulations and Standards	Partnerships and Coordination	More Targeted Planning	
FOCUS AREA 7: SUSTAINABILITY, RESILIENCE, AND HEALTHY COMMUNITIES									
OBJECTIVE 11.3: Value and promote healthy living in Michigan City.									
STRATEGY 11.3.1: *Continually monitor community health.*									
1. Monitor health metrics within the Planning Area.					X		X		PRD, MCCD, LaPorte County Health Dept., Franciscan
2. Coordinate with State Department of Health and Franciscan Health Michigan City on public health and environmental justice issues related to land use.					X		X		PRD, SD, MCCD, LaPorte County Health Dept.
STRATEGY 11.3.4: *Engage the community in developing a healthy foods program.*									
3. Ensure land use and development regulations encourage community gardens and farmer's markets.					X	X	X		MCC, PRD, PC, MCCD
STRATEGY 11.3.5: *Develop a "Buy Local" program.*									
4. Increase community food development.					X	X	X		PRD, MCCD
5. Encourage community promotion of local food.					X	X	X		PRD, MCCD
STRATEGY 11.3.6: *Develop a Healthy Corner Stores program in the Planning Area.*									
1. Share information with convenience / corner store owners about the potential returns from selling fresh, healthy products.					X		X		PRD, MCCD
2. Encourage corner store owners to sell fresh produce that are important ingredients to local ethnic cuisine.					X		X		PRD, MCCD
FOCUS AREA 8: LAND USE AND COMMUNITY CHARACTER									
GOAL 12.0: A balanced mix of land uses and development patterns that support a healthy community comprised of livable neighborhoods, vibrant economic districts, compatible industrial areas, and appealing open spaces.									
OBJECTIVE 12.1: Develop a *Future Land Use Plan* that anticipates the variety and spatial distribution of land uses and associated development densities and intensities required to accommodate the projected population of Michigan City in 2040.									
STRATEGY 12.1.1: *Encourage the redevelopment of properties along CR 400 N (Keiffer Road), from County Line Road east to Interstate 94.*									
1. Rezone land on both sides of CR W 400 N (Kieffer Road) from B2 – General Commercial, M2 – Heavy Industrial, and B3 – Highway Commercial, to OS – Office Service District.					X	X		X	MCC, PRD, PC
STRATEGY 12.1.5: *Revise Sign ordinance and standards within the Planning Area.*									
Revise Sign ordinance and standards within the Planning Area.					X	X		X	MCC, PRD, PC
STRATEGY 12.1.6: *Encourage mixed use development as designated in the Plan to allow people to live, work, shop, learn and play in close proximity while minimizing conflicts between land uses.*									
Encourage mixed use development.					X	X			MCC, PRD, PC
STRATEGY 12.1.7: *Provide industrial sanctuaries. Encourage the growth of industrial activities in the City by preserving industrial land primarily for manufacturing and mixed employment purposes.*									
Provide industrial sanctuaries. Encourage the growth of industrial activities.					X			X	MCC, PRD, PC, EDC, RDC

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	Year 1-3	Years 3-10	10+ Years	Capital Projects	Policies and Programs	Regulations and Standards	Partnerships and Coordination	More Targeted Planning	
FOCUS AREA 8: LAND USE AND COMMUNITY CHARACTER									
STRATEGY 12.1.10: *Require full disclosure of anticipated Municipal Airport impacts to adjacent properties.*									
Require full disclosure of anticipated Municipal Airport impacts to adjacent properties.					X			X	PRD, MC Muncipal Airport (Airport)
STRATEGY 12.1.11: *To mitigate airport impacts to adjacent properties, employ sound attenuation techniques for all new residential construction.*									
1. Require contractors to provide optional noise abatement/ attenuation construction techniques.					X			X	PRD, MC Inspection Dept. (MCID)
2. Prepare a noise contour map that depicts noise contours down to 65 DNL. Share this map with Michigan City's real estate community.					X			X	PRD, Airport
STRATEGY 12.1.12: *Encourage the protection of the Michigan City Municipal Airport from adjacent incompatible land uses and/or activities that could impact the present and/or future use of the airport as an Essential Public Facility (EPF), endanger the lives of people on the ground and/ or promote inadvertent growth of incompatible land uses.*									
2. Discourage the siting of uses adjacent to airports that attract birds, create visual hazards, discharge any particulate matter in the air that could alter atmospheric conditions, emit transmissions that would interfere with aviation communications and/or instrument landing systems, or otherwise obstruct or conflict with aircraft patterns, or result in potential hazards to aviation.					X		X	X	PRD, Airport
4. Adopt a combination of zoning techniques including compatible zoning districts, overlay districts, and development siting criteria for evaluating uses or activities in key areas adjacent to the airport.						X			MCC, PRD, Airport
5. Encourage economic development opportunities and aviation related uses adjacent to airports and promote the efficient mobility of goods and services region-wide consistent with the economic development element and the regional transportation strategy.					X			X	PRD, EDC, Airport
IMPLEMENTATION									
STRATEGY IMP.1.1: *Encourage residents and neighborhood based groups to become active participants in their City government and the decision-making process.*									
Encourage residents and neighborhood based groups to become active participants in their City government and the decision-making process.					X		X		PRD, MCCD
STRATEGY IMP.1.2: *Plan to reconcile the City's Zoning Ordinance and Subdivision Regulations with the Comprehensive Plan.*									
1. Prepare an ordinance for adoption that outlines how land use decisions will be made during the interim, before the Zoning Ordinance and *Official Zoning Map* can be revised.					X	X		X	MCC, PRD, PC
STRATEGY IMP.1.3: *Develop a Unified Development Ordinance.*									
1. Develop Strategic Assessment report.					X			X	MCC, PRD, PC
2. Prepare an Annotated Outline to depict how the City's land development ordinances will be restructured.					X			X	MCC, PRD, PC

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	Initiate			Action Type					Action Leaders
	Year 1-3	Years 3-10	10+ Years	Capital Projects	Policies and Programs	Regulations and Standards	Partnerships and Coordination	More Targeted Planning	
IMPLEMENTATION									
STRATEGY IMP.1.4: *Engage in Capital Improvements Programming (CIP).*									
1. Adopt the policy of developing and updating a capital improvements program (CIP) for budgeting municipal revenues over time.					X				MCC, MCCO, PRD, RDC, SD, WD
STRATEGY IMP.1.5: *Consider becoming a member of the Shared Ethics Advisory Commission.*									
Become a member of the Shared Ethics Advisory Commission.					X				MCC, MCCO
STRATEGY IMP.1.6: *Prepare a plan for the provision of municipal services prior to annexation of land into the City limits.*									
Prepare a plan for the provision of municipal services prior to annexation of land into the City limits.					X	X		X	PRD, MCCO, SD
STRATEGY IMP.1.7: *Consider incorporating a fiscal impact analysis in development reviews.*									
1. Adopt a requirement for a full fiscal impact analysis for all major projects.					X		X	X	MCC, MCCO, PRD
2. Maintain adequate and current information on the costs of government services.					X		X	X	MCCO
3. Train local government staff and Plan Commission and utilities boards to understand fiscal analysis and how it relates to infrastructure provision associated with development decisions.					X		X	X	MCCO
4. Require fiscal impact analysis of effects on other service providers and surrounding jurisdictions.					X		X	X	MCCO
5. Keep capital improvement plans current and include appropriate development projections.					X		X	X	MCCO
STRATEGY IMP.1.8: *Consider developing an intergovernmental agreement between the City of Michigan City and LaPorte County whereby the County assigns the City the responsibility of providing development review and approving construction permits for all development within the Planning Area.*									
Develop an intergovernmental agreement between the City of Michigan City and LaPorte County.					X	X	X	X	MCC, PRD, PC

Short-Term Implementation Actions

Based on the results of the prioritization exercise during the joint workshop involving the Michigan City Planning Commission and City Council, the following IMP Table 4, *Short-term Implementation Actions*, identifies what short-term implementation activities should be prioritized over the next three years.

The recommended actions listed in IMP Table 3, *Implementation Action Plan*, were prioritized by members of the City Council, Plan Commission, Redevelopment Commission, Economic Development Corporation, Comp Plan Advisory Committee, and members of the community who attended the September 17-18 CPAC meeting, Joint Workshop, and Open House. Primary Actions are placed within the 1-3 Year timeframe. Secondary Actions are placed within the 3-10 Year timeframe. Tertiary Actions are within the 10+ Year timeframe. It is recommended that every two to three years, the actions identified within IMP Table 3, *Implementation Action Plan*, be re-prioritized to establish the Primary Actions to be accomplished in the near term.

CONSULTANT PERSPECTIVE

All of the strategies listed and prioritized within IMP Table 4, *Short-term Implementation Action*, are the most important activities to implement over the next three years. The Consultant Team recommends that Michigan City's City Council advance due consideration of the following actions.

IMP Table 4, Short-Term Implementation Actions

1	**STRATEGY 9.2.6:** *Enforce property maintenance of housing units, especially rental properties and eliminate substandard housing conditions.*
2	**STRATEGY 3.1.1:** *Protect and manage the natural hydrology of the Trail Creek watershed to minimize sediment, nutrient, and bacteria loading into the stream, for the health, safety and enjoyment of all its user groups.*
3	**STRATEGY 8.1.1:** *Continue to promote and market Downtown assets, activities, and events.*
4	**STRATEGY 10.1.1:** *Improve the quality of the City's housing stock and neighborhoods.*
5	**STRATEGY 8.2.4:** *Develop a Transit Oriented Development (TOD) Plan focused on the 11th Street Station.*
6	**STRATEGY 2.3.4:** *Expand programs to promote and sustain entrepreneurship.*
6	**STRATEGY 8.1.9:** *Preserve the historic significance and integrity of the Elston Grove Historic District.*
7	**STRATEGY IMP.1.1:** *Encourage residents and neighborhood based groups to become active participants in their City government and the decision-making process.*
8	**STRATEGY 2.3.5:** *Provide a range of affordable housing options for a diverse and expanding workforce.*
8	**STRATEGY 9.1.2:** *Consider formulating and implementing an affordable housing strategy.*
9	**STRATEGY 9.2.1:** *Encourage a variety of housing types that fit the character of Michigan City while providing housing options for all residents.*
10	**STRATEGY 4.6.3:** *Work with LaPorte County to establish a parkland dedication ordinance that would apply, at minimum, to residential development within the Planning Area.*

Momentum: Michigan City 2040 Comprehensive Plan

Appendix: The Existing City

Kendig Keast Collaborative **ADOPTED November 20, 2018**

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Introduction

This report provides background and insights about Michigan City as it is today. This information is presented in topic areas relevant to the City's long-range plan for physical growth and development, which is technically referred to as a city's "Comprehensive Plan." The report also highlights key planning considerations for the years ahead, which will set the stage for updating the Comprehensive Plan in terms of community needs and desires for the next 20 years; in this case, through Future Year 2040. The report content is based on initial background studies to date by the City's community planning consultant, Kendig Keast Collaborative, and their team of seasoned professionals, including American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham; as well as leadership from municipal Government, and community input received to this point. The report also points readers to other sources for more detailed information to ensure the brevity of this document and to avoid duplication of available reports and profiles of Michigan City.

GUIDING CHANGE

Planning is concerned with the future. Whether linear or iterative, planning is a process composed of a series of conceptual phases related to one another in an orderly fashion. It usually begins with establishing a series of actionable, programmatic objectives – *what is it we are trying to accomplish?* Objectives are then framed by a series of underlying premises, assumptions or conditions, based on an understanding of key issues pertaining to the community within which the plan is being developed – *what factors must we consider that will prevent or enable reaching our objectives, and within what timeframe?* Having defined objectives and outlined planning premises, policies and strategies are formulated, the implementation of which is intended to accomplish the desired results. Alternative plans of action may be developed and carefully evaluated, to determine the best course of action. Operational plans reflecting commitments to process, time and resource expenditures are developed to then carry out the program of activities.

BENEFITS

As discussed, a comprehensive plan is a long-range (10 to 20 years), community-based, policy document that lays the groundwork for how communities can take charge of, invest in, and realize their future.

Comprehensive Plans:

- Provide public officials with a greater understanding of existing conditions in their community, and the larger trends and forces that are impacting growth and development (or lack thereof); and a long-term outlook at the potential consequences of land use, infrastructure, and other decisions;
- Establish priorities for implementation strategies and actions to achieve preferred outcomes;
- Place communities in favorable positions when pursuing and securing grants and capital partnerships;
- Offer an opportunity for constructive and meaningful public input, education, and engagement through a variety of forums; including one-on-one meetings, focus groups, town hall-style community workshops, and online surveys;
- Provide policy guidance and legally defensible basis for effective and implementable land development regulations;
- Provide a framework to enable local officials to make better-informed decisions based upon a coordinated plan to guide the orderly growth and development of their community.
- Provide the umbrella for weaving together a series of small area plans, through which greater synergies can be created.

Engaging in a local comprehensive planning program will enable the City of Michigan City to have a greater measure of control over its future and the opportunities and challenges that change will bring. Planning will enable the City to proactively manage future growth and development / redevelopment as opposed to reacting to development proposals on a case-by-case basis without adequate and necessary consideration of community-wide issues.

PLANNING AUTHORITY

Cities in Indiana derive their authority for comprehensive planning from the State. Indiana law requires comprehensive plans to be adopted by resolution, in order to advance the public health, safety, morals, convenience, order, and general welfare of its citizens. In Indiana, the state also requires that a local plan provide "efficiency and economy in the process of development. This focus on fiscal responsibility reflects the values of the State. According to Indiana Code 36-7-4-502, a comprehensive plan must contain at least the following elements:

1. A statement of objectives for the future development of the jurisdiction.
2. A statement of policy for the land use development of the jurisdiction.
3. A statement of policy for the development of public ways, public places, public lands, public structures, and public utilities.

In summary, *Momentum: Michigan City 2040* Comprehensive Plan covers the conventional plan elements found in a traditional comprehensive planning program and then some. State law defines the purpose for planning in Indiana as follows:

1. Highway systems be carefully planned;
2. New communities grow only with adequate public way, utility, health, educational, and recreation facilities;
3. Needs of agriculture, forestry, industry, and business be recognized in future growth;
4. Residential areas provide healthful surroundings for family life;
5. Growth of the community is commensurate with and promotive of the efficient and economical use of public funds.

The state regulations also anticipate a coordinated and visionary approach to connection of roadways. State legislation specifically calls for the careful planning of highways. The provisions regarding local roadway planning anticipate that the location of future roads will follow the location and functional classification as reflected on the Thoroughfare Plan. The characteristics of a roadway may only be changed as prescribed in the adopted comprehensive plan. This provision also allows a city's capital improvements program (CIP), if available, to be incorporated into the comprehensive plan. Doing so enables a stronger connection between public and private implementation of the comprehensive plan.

Indiana state law authorizes and limits housing programs, economic development, and property maintenance. The applicable state laws will be reviewed within the appropriate sections of this Comprehensive Plan to ensure the City remains on firm legal ground but also to be sure that all planning tools are thoroughly understood.

APPROACH (EXISTING CITY – FUTURE CITY)

The Existing City - Future City approach to Comprehensive Plan development provides a thorough understanding of the existing relationships between social, environmental (both natural and built), and economic municipal systems and the synergies therein. As outlined below, this approach involves five key phases:

1. The Existing City
2. Plan Direction and Assumptions
3. The Future City
4. Implementation
5. Plan Finalization and Adoption

The Plan focuses first on providing a snapshot of existing conditions, through the lens of multiple plan elements, and culminates in this report. **Phase 1, *The Existing City*** report of the Comprehensive Plan summarizes existing conditions as well as the status of the strategies and recommendations found within the several plans and studies developed by the City - what has been implemented, and what have been the barriers to implementation. This approach to existing conditions analysis avoids the common pitfalls of analyzing plan elements in isolation, and covers all of the plan elements together, to further understand the inter-relationships between natural and constructed systems; rather than a more traditional approach, which results in silo-ing existing conditions, and then preferred, future conditions, into specific chapters. This Phase 1 report includes a discussion about the City's history, location and physical characteristics and highlights the City's demographic composition and trends. A summary of key indicators, from the latest available U.S. Census data and other sources, illustrate historical and current conditions and context relevant to the Comprehensive Plan. As will be discussed later in this report, a series of demographically similar, "comparison communities" have been used throughout the comprehensive planning

process to evaluate the results of varying municipal planning, regulatory, and other practices to determine relevance and applicability to Michigan City.

Phase 2, *Plan Direction and Assumptions*, is a transition phase. The consultant team coalesces its findings about current conditions within the existing city and sets the trajectory for Phase 3, *The Future City*, and the general orientation of strategies and recommendations.

Phase 2 will involve:

- Itemizing a core set of assumptions upon which the Comprehensive Master Plan will be based, especially related to projected population;
- Highlighting the key opportunities and challenges the community will face in the years ahead, which the Plan must address; and
- Drafting a series of guiding principles for the plan that will be refined in conjunction with each of the major planning topics considered during Phase 3, *The Future City*.

A set of population projections will be prepared, in five-year increments through the 20-year planning horizon (Future Year 2040) and work toward consensus on the most likely future population range that should be assumed for the new Comprehensive Master Plan (recognizing that such projections must be monitored and revisited year by year as actual trends unfold). This exercise will also take into account projections included in other City plans and studies and relevant forecasts produced by regional, state and national entities.

As mentioned, comprehensive plans are future-oriented, and prescribe policies that are intended to advance a set of preferred conditions. As such, **Phase 3, *The Future City*** component and its implementation strategies, programs, and projects will be the focus of *Momentum: Michigan City 2040* Comprehensive Plan. *The Future City* portion of the Comprehensive Plan includes recommended strategies, programs and initiatives, actions and projects for accommodating growth, development and redevelopment of the City's neighborhoods, commercial districts and corridors, while preserving community character, enhancing quality of life, and improving economic well-being.

Within **Phase 4, *Implementation and Intergovernmental Coordination***, the results of Phase 3, *The Future City*, will be consolidated into an overall strategy for executing the new Comprehensive Plan, particularly for the highest-priority initiatives that will be first on the community's action agenda, as well as a longer-term series of implementation efforts anticipated over the next decade. The resulting Implementation section will also outline crucial procedures for monitoring and revisiting the plan policies and action priorities every year, and for completing future plan updates at appropriate milestones. These processes provide an essential "feedback loop" into the City's long-range planning and strategic decision-making, leading to necessary plan adjustments based on implementation successes and challenges and ongoing changes in physical, economic and social conditions in the community and region. A reporting function is also embedded in the implementation program to provide a means of accountability. Activities include outlining the required organizational framework to ensure successful implementation of the plan, including strategies for staffing, roles of boards and commissions, plus ongoing monitoring and reporting, as well as necessary interaction with other public and private implementation partners:

- Coordinate with City staff to compile from the Draft Comprehensive Master Plan those action items that are near-term and strategic in nature so they may be addressed in more detail in the Implementation element and focused on during the third and final joint workshop with the City Council, Plan Commission, Redevelopment Commission, Economic Development Corporation, and Comp Plan Steering Committee.
- Clarify respective implementation roles of the City Council, Plan Commission, and City staff.
- Highlight opportunities for the City to coordinate implementation efforts with other key agencies and entities, with other jurisdictions as appropriate, and with other private and non-profit partners.
- Embed an annual review and reporting function into the implementation program to provide a means for gauging progress and ensuring accountability.

The final phase of the planning program is **Phase 5, *Plan Finalization and Adoption*** and will involve final public review and input from the City's Plan Commission and City Council, leading to adoption of the Comprehensive Plan.

Plan Contents

PLAN FOCUS AREAS

As mentioned, the Comprehensive Plan is organized around key plan elements, or focus areas. The ***Growth Capacity and Infrastructure*** **Focus Area** evaluates the City's ability to accommodate new development and/or redevelopment with existing and planned utility infrastructure and services.

The ***Economic Outlook*** **Focus Area** assesses the region's appeal to prospective employers, including industrial composition and major employers; geographic location and transportation access; telecommunications and other infrastructure (planned and existing); available sites; and incentives. The section summarizes key regional and local economic, social and environmental indicators to illustrate historical / current conditions and context; and reviews the City's annexation history and current plan for potential / planned annexation activity and assess the outlook for the incorporation of additional territory to accommodate future development.

The ***Transportation*** **Focus Area** ensures orderly development and improvement of the City's transportation system, considering facilities for automobiles and other modes of transportation (e.g., commuter rail, pedestrian and bicycle circulation), existing and future public transportation needs.

The ***Housing and Neighborhoods*** **Focus Area** assesses the local housing market and evaluates the design and planning of neighborhoods within the context of the City's current development regulations and the impact this has on housing development, community form, land use compatibility and connectivity. Housing development options are evaluated and policy adjustments recommended to encourage varied housing development.

The ***Parks, Recreation and Open Space*** **Focus Area** evaluates the community's livability and "green infrastructure" amenities, particularly its parks and recreation facilities, open space areas and linkages, and critical natural resources. This analysis identifies any deficiencies in the provision of parks, recreation areas and facilities, and programs; evaluates whether existing facilities are consistent with the community's preferences; and ensures that future land acquisition and facility improvements keep pace with new development. The conservation of land for open space uses, both for agriculture and natural resources, is another focus of this plan element.

The ***Land Use and Character*** **Focus Area** assesses the community's long-range development outlook and establishes guidance for making policy decisions about the compatibility and appropriateness of individual developments within the context of the larger community. Other considerations include City capabilities for preserving valued areas and lands, protecting the integrity of neighborhoods, and safeguarding and enhancing community image.

Using conventional and readily available health indicators, the ***Community Wellbeing*** **Focus Area** examines the general health of local residents in response to issues pertaining to Michigan City's built environment and access to healthy lifestyles and foodways, and the ability of residents to be healthy.

The ***Sustainability*** **Focus Area** reviews the City's physical plant operations and practices; formulates strategies and recommendations for becoming more sustainable; and identifies procedures and metrics for benchmarking progress.

The ***Community Resilience*** **Focus Area** examines community management programs, policies, and plans designed to reduce the impacts caused by unforeseen natural and economic disasters impacting Michigan City; and promotes a series of strategies geared toward preserving the health, safety, and welfare of area residents and maintaining business continuity.

Context

Michigan City and Environs

Michigan City is located in northwest Indiana, on the southern shore of Lake Michigan, and is approximately six miles from the Michigan state border. It is approximately half-way between the cities of Gary, Indiana and South Bend, Indiana. The closest metropolitan city to Michigan City is Chicago, Illinois which is approximately 60 miles to west (refer to TEC Map 1, *Regional Contex*t). Michigan City is located in LaPorte County. The City is approximately 19.7 square miles in area (12,632.0 acres). According to the U.S. Census, the estimated 2016 population of Michigan City is 31,157, which represents a slight decrease in population compared to the 2010 Census which estimated the population to be 31,479.

Physiographic areas surrounding and within the City include Lake Michigan, the Calumet Lacustrine Plain located along Lake Michigan, and the Valparaiso Morainal Plain. Preservation areas that are within and near the City include Trail Creek, West Branch Trail Creek, and East Branch Trail Creek. TEC Map 2, *Planning Area*, indicates the locations of these areas.

Michigan City is located within the Michigan City – La Porte, Indiana Metropolitan Statistical Area (MSA) which is part of the Chicago-Naperville-Michigan City Combined Statistical Area.

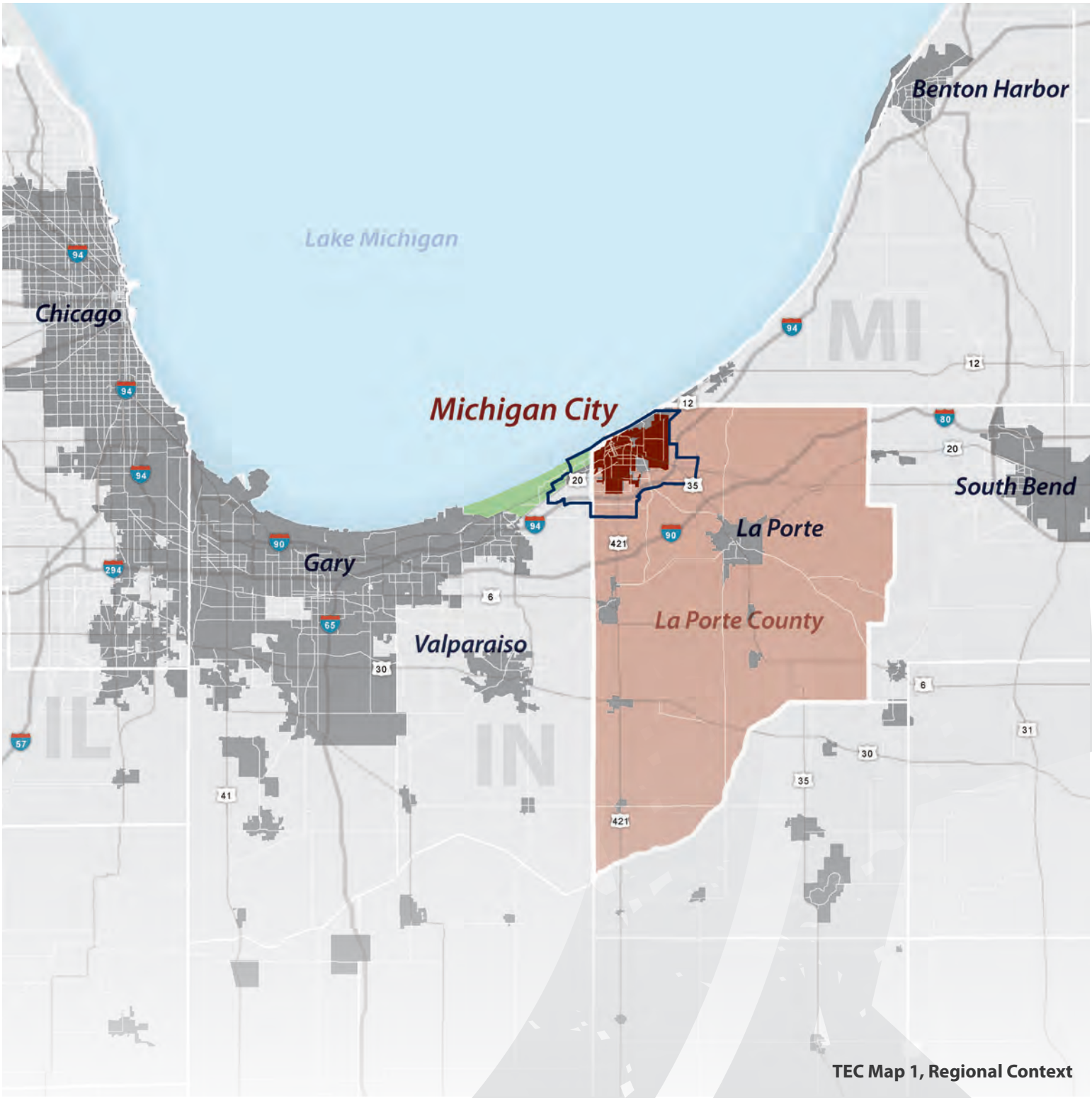
The principal roadways that traverse Michigan City or are in proximity include:

- U. S. Highway 12 is a southwest-northeast facility that follows the perimeter of Lake Michigan starting near New Buffalo, Michigan and continuing south to Michigan City; extending to Gary, Indiana. The roadway traverses the Michigan City limits and is generally a four-lane undivided highway.
- U.S. Highway 20 acts as the south loop around Michigan City. Once it connects to East Michigan Boulevard on the southeast side of the City, it continues in an east-west direction from the City to South Bend, Indiana. Portions of U.S. Highway 20 are within the City limits and it is generally a four-lane highway.
- Interstate 94 is aligned just outside the southern and eastern limits of the City and extends in a southwest-northeast direction around the City. South of the City it is a six-lane divided facility with a concrete median.
- There are four major north-south roadways within the City. On the western side of the City is 1) County Line Road (two-lane roadway) which extends from U. S. Highway 12 to U.S. Highway 6, south of the City; 2) Franklin Street (generally a four-lane divided highway with a center left-turn lane) extends from near W. Michigan Boulevard (U. S. Highway 12) south to U.S. Highway 20, where it becomes U.S. Highway 421 (and continues south to Interstate 94); 3) Johnson Road (two-lane facility) extends from E. Michigan Boulevard and continues south, past Interstate 94 to U.S. Highway 35 in La Porte; and 4) E. Michigan Boulevard (four-lane facility).

Parks and preserves in the area include Indiana Dunes National Lakeshore, which is a national park preserve operated and maintained by the National Park Service, and located west of the City. Other major parks and preserves in the area include Washington Park, Krueger Memorial Park, Friendship Botanic Gardens, and Father Basil Moreau Nature Preserve.

With respect to agriculture land uses, the following are the 2016 estimates of LaPorte County's major crops.

- Corn, harvested: 119,000 acres;
- Soybeans, harvested: 81,800 acres;
- Winter Wheat, harvested: 3,620 acres;
- Alfalfa Hay, harvested: 5,300 acres;
- Other Hay, harvested: 750 acres.



TEC Map 1, Regional Context

TEC Table 1, History of Michigan City

1674	Father Marquette, a French missionary, travels through the Trail Creek region, preaching to the Potawatomi Indians.
1800	Indiana Territory is formed, with Vincennes as its capital (May 7).
1816	The State of Indiana is formed, with Corydon as its capital. Its boundaries are expanded to include a ten mile strip on the south shore of Lake Michigan, originally part of Michigan Territory.
1826	The Potawatomi cede a ribbon of land 100 feet wide from the Ohio River to Lake Michigan, for the creation of Michigan Road.
1827	The U.S. Congress authorized the Indiana General Assembly to build Michigan Road.
1830	Real estate speculator, Isaac C. Elston purchases 160 acres of land at the mouth of Trail Creek for $200. The land is divided into 206 lots, a public park, and a marketplace, all sold to the Michigan City Land Company.
1832	Michigan City is selected as the endpoint for Michigan Road, having been called "the most suitable site for a commercial town and the place the best harbor could be had" by the selection committee.
1836	Michigan City is incorporated. As a stopping point for stagecoaches the town consisted of a church, post office, newspaper, and a thriving commercial district with 12 dry goods stores and 10 hotels. The town had grown to 15 square miles and had a population of 1,500 persons. The state grants $20,000 for the creation of a port at Michigan City.
1852	The Michigan Central Railroad reaches Michigan City and connects the city to Eastern towns. A central depot is built for the railroad. A railroad freight car manufacturer is founded in Michigan City. The firm of Haskell, Barker and Aldridge eventually became Michigan City's largest and longest surviving industry, at one time producing 15,000 cars a year.
1858	The Old Lighthouse is built.
1860	Construction begins on the Indiana State Prison. The prison was completed in 1868. Charles Seely, the first warden, oversaw the construction.
1870	First transcontinental rail passengers travel Michigan Central route through Michigan City during seven-day journey from Boston to San Francisco.
1880	The Roeske Mill is built by Christopher and August Roeske. The mill processed lumber, grist, bricks, and flour.
1891	Development of Washington Park begins.
1893	Chicago's Columbia Club holds their first Race to Michigan City. This annual event is the oldest continually run freshwater race in the world.
1908	The first South Shore train arrives in Michigan City from Chicago, under the name "Chicago, Lake Shore and South Bend Railroad." The first South Shore train runs between Michigan City and South Bend (June 30). The South Shore is the oldest remaining interurban train in the U.S.
1927	The Eleventh Street Station for the South Shore Line opens (May). The two-story building cost more than $200,000 to complete. It has a terra-cotta facade and neoclassical design. The station was the longest lasting storefront urban depot, closing in 1986.
1929	NIPSCO begins construction on the generating plant at the site of the former Hoosier Slide, once a 200-foot sand dune that had been mined for 30 years for glassmaking. The plant is completed around 1931.
1930-1937	The Civilian Conservation Corps, Federal Emergency Relief Administration, and Works Progress Administration (federal programs employing people during the Great Depression) renovates and restores Washington Park. Workers build lakefront walls, many installations at Washington Park Zoo, the Washington Park Observation Tower, gardens, tennis courts, parking lots, picnic areas, and more.

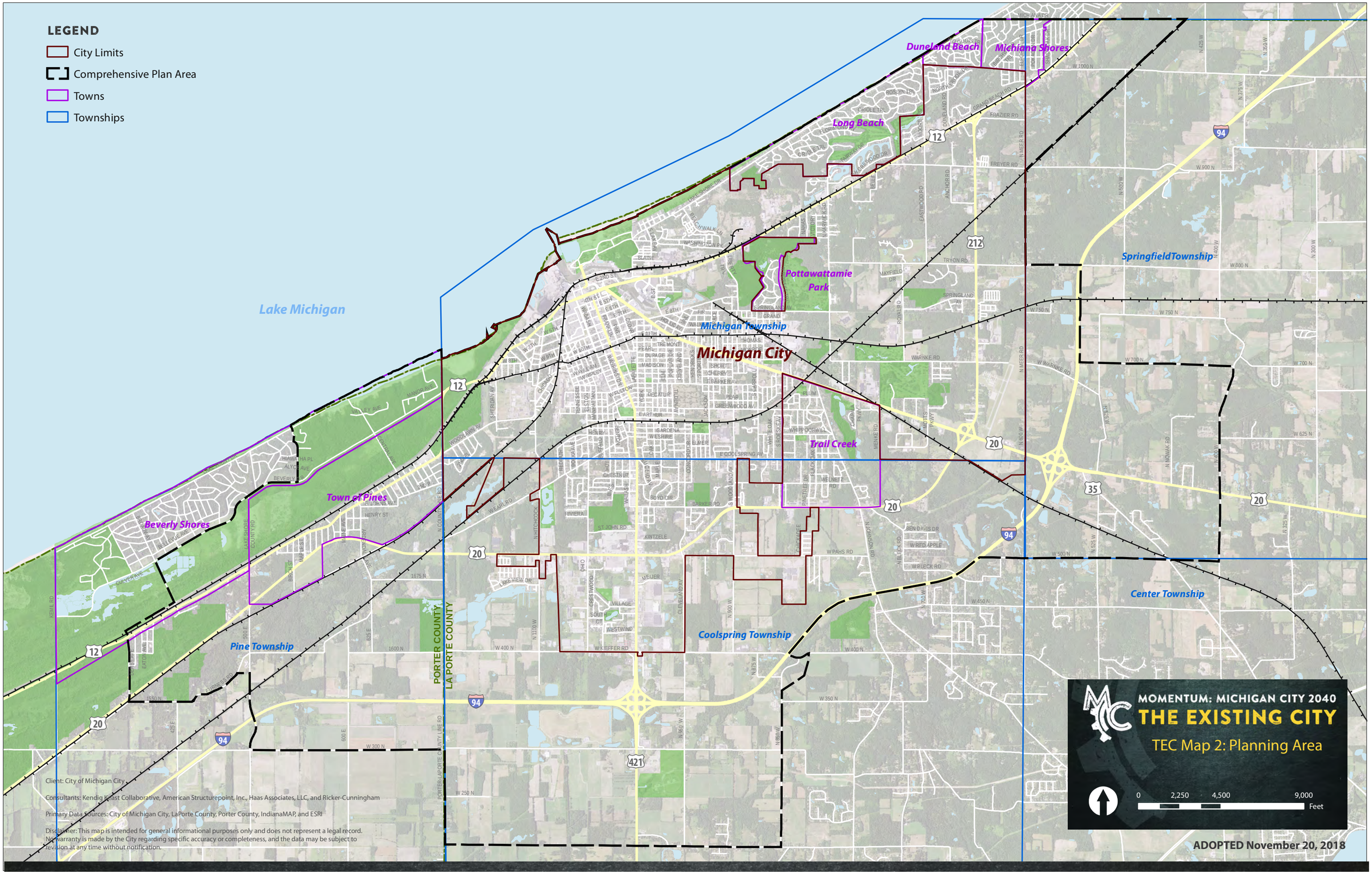
1930	A new airfield is dedicated (June 18). Construction of the airfield, located on the site of the old Majot farm off U.S. 212 near the intersection of U.S. 20 & 35, began in the fall of 1929. The airport was operated by the private Michigan City Airport Corporation. The city had planned to purchase the field, but was unable to do so after the onset of the Great Depression. In the mid-1940s, the field became the Joe Phillips Airport. Service was offered to Midway Airport (beginning in 1946) and O'Hare (beginning in 1955). In 1986, the Joe Phillips Airport was sold to the city and became the new Michigan City Municipal Airport.
1934	Amelia Earhart visits Michigan City to speak in support of the city's new airfield.
1940	Babe Ruth makes a guest appearance with the Michigan City Cubs, a semi-professional baseball team that played in Ames Field throughout the 1940s.
1941	The United States enters World War II. Ninety-nine Michigan City men are killed in action during the war. Michigan City citizens contributed $18 million in war bonds.
1950S	The decade marks the end of large ferry service to Michigan City. Throughout the preceding 50 years, ferries such as the Theodore Roosevelt, Eastland, Missouri, and United States brought hundreds of thousands of visitors a year to the city.
1959	The Smith Brothers Cough Drop Factory closes.
1965	Plans for Marquette Mall are unveiled. Sears, J.C. Penney, and other retailers move from downtown to the new shopping center.
1970	Construction begins on the new NIPSCO generating plant and cooling tower.
1977	The Michigan City Public Library moves to a new facility designed by Helmut Jahn. It is dedicated on October 30, 1977. The old library building is sold to John Blank to be used as a community art center.
1981	Amtrak begins making scheduled stops in Michigan City. The first Amtrak train, the Wolverine, stopped at Michigan City on April 26.
1987	Lighthouse Place outlet shopping center opens.
1997	Blue Chip Casino opens.
2009	The organization overseeing the South Shore proposes realigning the tracks and removing the embedded tracks in 11th Street, provoking discussion and criticism.
2013	Nathan Woessner, a six-year-old boy from Illinois, fell into a sinkhole in Mount Baldy, leading to an hours-long rescue operation. He is rescued unharmed from under eleven feet of sand in an incident dubbed "the Miracle on Mount Baldy." The story is featured on national news. Mt. Baldy is closed to the public indefinitely after more sinkholes are discovered.
2015	Michigan City adopts a new slogan: Create. Play. Repeat.
2016	A new police station opens at 1201 E. Michigan Boulevard.

Planning Area

GENERAL DESCRIPTION AND BOUNDARIES

As depicted in TEC Map 2, *Planning Area*, the Planning Area includes the lands within the City's corporate limits, and encompasses the lands that make up the Michigan City Area Schools jurisdiction, as well as the Michigan City Water Department's service area. The Planning Area extends generally westward to N 375 E in Porter County; eastward to the Michigan State line and approximately two miles beyond the Interstate 94 – US Highway 35 interchange. The southern boundary of the Planning Area generally follows Interstate 94, extending one mile south of the Interstate around the US Highway 421 interchange, extending westward to County Line Road. The Planning Area includes the Town of Pines, Beverly Shores, Pottawattamie Park, the Town of Long Beach, and Michiana Shores.

The Planning Area is 32,121.8 acres or 50.2 square miles, which includes the lands within the City Limits, which is 12,632.0 acres, or 19.7 square miles.


LEGEND
City Limits
Comprehensive Plan Area
Towns
Townships
Lake Michigan
Dunelands Beach
Michiana Shores
Long Beach
Pottawattamie Park
Michigan Township
Michigan City
Trail Creek
SpringfieldTownship
Town of Pines
Beverly Shores
Pine Township
PORTER COUNTY
LA PORTE COUNTY
Coolspring Township
Center Township
12
20
94
212
35
421
Client: City of Michigan City
Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham
Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI
Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.
MOMENTUM: MICHIGAN CITY 2040
THE EXISTING CITY
TEC Map 2: Planning Area
0
2,250
4,500
9,000
Feet
ADOPTED November 20, 2018

Comparison Communities

A common element of successful communities is that they consistently look to similarly situated communities to understand opportunities and challenges but also to use other communities as a barometer with which to evaluate how their own community is changing. The study identifies seven peer communities that will be used throughout the analysis section of the document.

SELECTION CRITERIA

The communities on this page were used to document prevailing trends and characteristics that would potentially shed light on "best practices" for Michigan City. Each jurisdiction was selected based on the following criteria:

- Historic and projected population and growth rates;
- Demographic and socioeconomic composition;
- Major economic engines, such as educational and healthcare institutions;
- Great Lakes lake shore Community;
- Comparable distance to major metropolitan areas; and
- Aspirational characteristics to culture, lifestyle, and image.

Although "apples" to "apples" comparisons do not exist, the method for selecting the comparison communities involved a rigorous vetting process utilizing City staff inputs. It should be noted however, that while each of these communities is similar to Michigan City in one way or another, every community is conditioned by a unique set of circumstances that set each apart from the other communities.

TEC Figure 1, *Comparison Communities*, identifies the locations and characteristics of the seven communities which will be used to further analyze Michigan City:

- Duluth, Minnesota;
- Marquette, Michigan;
- Sheboygan, Wisconsin;
- Muskegon, Michigan;
- Holland, Michigan;
- Bay City, Michigan; and
- Lorain, Ohio

Community Profile

FACTORS

When drafting public policy focused on improving the lives of people, decisions must rely on data that answer who these people are, where and how they live, and how their lives are changing. Demographic and related data that answer these questions are essential to policymakers and development planners across nearly every sector of society. Demographics provide a snapshot pertaining to the current statistical characteristics of a given population, such as its size, composition and spatial distribution, as well as the process through which populations change. Planners study demographic trends to determine historical changes in a population over time, in order to help fulfill the needs of their constituency and plan for change as accurately as possible. Information pertaining to the City of Michigan City as well as comparison communities was obtained from the 2010 U.S. Census.

TEC Figure 2, *Demographic Summary* (page A.13-14), provides an interesting overview of Michigan City's demographic composition compared to its peer communities.

TEC Figure 1, Comparison Communities

Lake Superior

Lake Michigan

Lake Huron

Lake Erie

Duluth, MN

Marquette, MI

Green Bay

Sheboygan, WI

Bay City, MI

Muskegon, MI

Milwaukee

Grand Rapids

Holland, MI

Detroit

Chicago

Michigan City, IN

Lorain, OH

MN

WI

MI

MI

IL

IN

OH

DULUTH, MN

- Population 87,190
- 87.4 square miles
- Duluth and Superior, WI are twin ports. The cities share the Duluth–Superior harbor and together are the Great Lakes' largest port, transporting coal, iron ore (taconite), and grain.
- United States' only all-freshwater aquarium
- As the city has grown, its populace has tended to hug Lake Superior's shoreline
- 4 lighthouses
- 8 Breweries

MARQUETTE, MI

- Population 21,382
- 19.5 square miles
- Largest city in Michigan's Upper Peninsula
- A major port on Lake Superior, known primarily for shipping iron ore
- Northern Michigan University
- Marquette Underwater Preserve lies offshore
- Presque Isle Park
- 5 lighthouses
- 4 Breweries

SHEBOYGAN, WI

- Population 48,827
- 14.1 square miles
- On Lake Michigan's west coast between Green Bay (64 miles) and Milwaukee (50 miles)
- No active port
- Alliant Energy's Edgewater Generation Station, a coal-fired power plant on the south side on the lake
- Sheboygan Breakwater Lighthouse
- 2 Breweries

MICHIGAN CITY, IN

- Population 31,791
- 19.7 square miles
- 60 miles to Chicago, 1 hour 30 minutes by car and 1 hour 45 minutes by train
- Amtrak and South Shore line train services
- Indiana State Prison
- Michigan City Power Plant on the lake
- Blue Chip Casino
- Tourist location
- Indiana Dunes State Park and National Lakeshore
- Michigan City East Pierhead Lighthouse
- 3 Breweries

MUSKEGON, MI

- Population 39,151
- 18.1 square miles
- Host to numerous music and cultural festivals
- Home to the largest amusement park in the state, Michigan's Adventure
- Muskegon State Park, PJ Hoffmaster State Park and Pere Marquette Beach
- Muskegon is the eastern port of the Lake Express High Speed Car Ferry that crosses Lake Michigan to Milwaukee, WI
- Muskegon Lighthouse
- 2 Breweries

HOLLAND, MI

- Population 33,717
- 17.4 square miles
- Hope College
- Large percentage of citizens of Dutch American heritage
- Tulip Time Festival - 6 million tulips are used throughout the city
- Amtrak Station
- Holland State Park
- Haworth, Herman Miller, Johnson Controls and Kraft Heinz are major employers
- Vibrant downtown and main street shopping
- Big Red Lighthouse
- 5 Breweries

BAY CITY, MI

- Population 34,532
- 11.2 square miles
- 112 miles north of Detroit, 1 hour 45 minute drive
- The city is geographically divided by the Saginaw River
- Numerous festivals and celebrations in the summer months held in major parks along the river
- Consumers Energy - D.E. Karn/J.C. Weadock Generating Complex on the lake
- Amtrak Station
- Saginaw River Lighthouse
- 2 Breweries

LORAIN, OH

- Population 63,428
- 24.1 square miles
- 30 miles west of Cleveland
- notable for its deindustrialized economy, formerly home to shipbuilding, car assembly plant and a steel mill
- A Rust Belt city with issues including population decline and urban decay
- "The International City", home to 70 different nationalities
- Lorain Lighthouse "Jewel of the Port"
- 7 Breweries

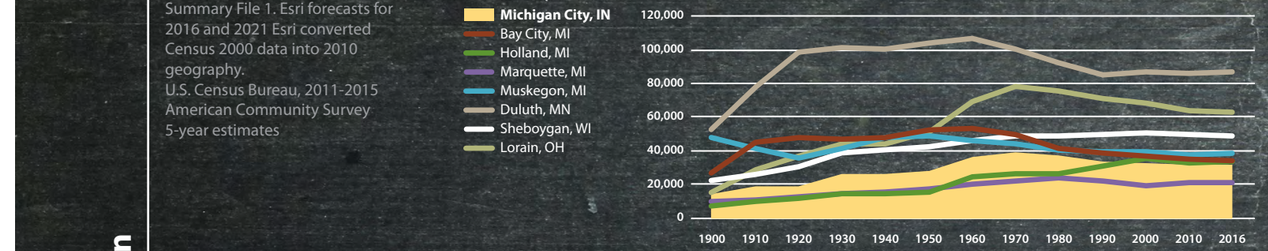
ADOPTED November 20, 2018

TEC Figure 2, Demographic Summary

U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2016 and 2021 Esri converted Census 2000 data into 2010 geography.
U.S. Census Bureau, 2011-2015 American Community Survey 5-year estimates

Population

Historic Population (1900 - 2010)



Population loss may be due to major employer closures causing people to move to seek work.

Population Change (2000-2016) and Total Population (2016)

Tapestry Segments (2016)

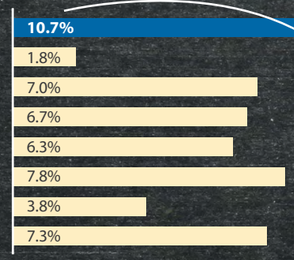
Who Lives in Michigan City?
Learn more on page A.19 - 38

		Michigan City	US
1	Traditional Living	41.2%	2.0%
2	Hardscrabble Road	11.0%	2.5%
3	Heartland Communities	10.4%	2.8%
4	Set to Impress	9.5%	3.2%
5	Retirement Communities	7.6%	1.4%
6	Midlife Constants	6.8%	2.5%
7	Small Town Simplicity	3.1%	1.9%
8	The Great Outdoors	2.8%	1.6%
9	Silver and Gold	2.1%	0.8%
10	Rustbelt Traditions	2.0%	2.2%

Income and Housing

Median Household Income (2016)

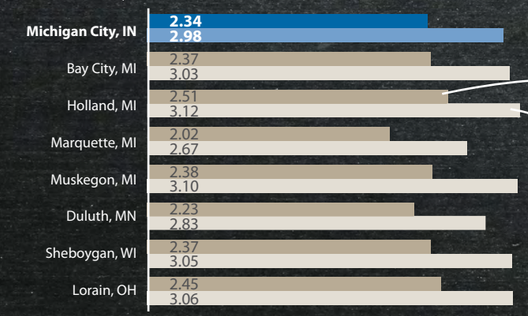
Percent of Homes Built in 2000 or Later (2015)



It will be important to offer a wide variety of housing choices. The population seeks housing due to cost and preference.

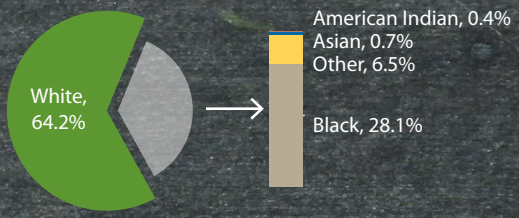
Average Household and Family Size (2015)

A large household and family size trend should have a strong influence on the types of housing necessary to accommodate the changing demands of the population, as well as the types of new construction necessary to satisfy the unique demands of larger households and families.

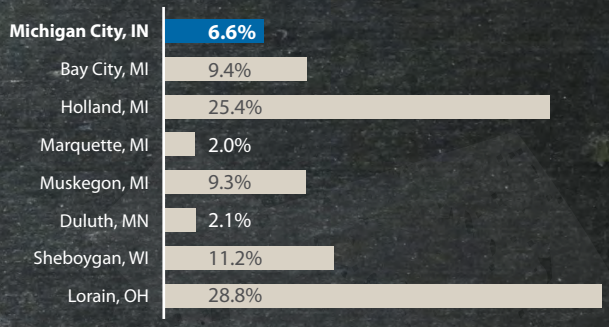


Diversity and Education

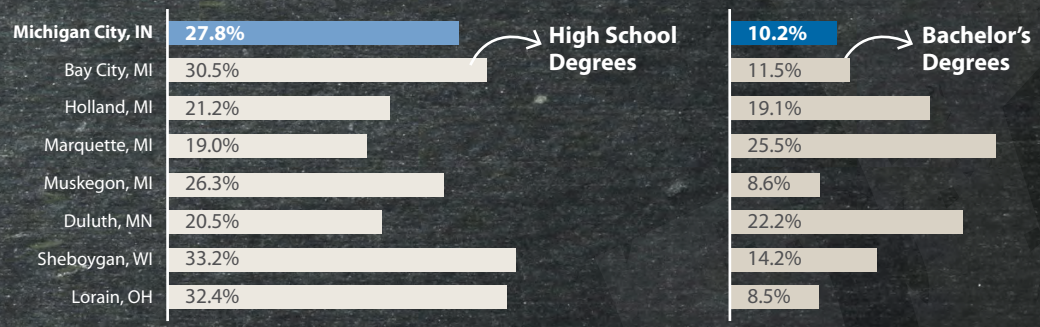
Michigan City Race/Ethnicity Composition (2016)



Hispanic Composition (2016)



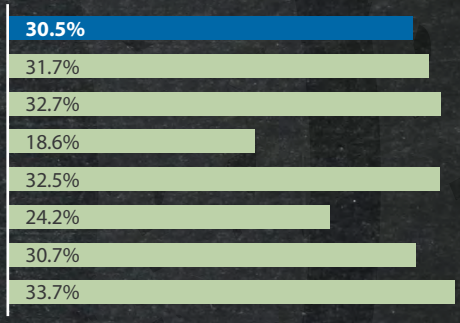
Attainment of High School and Bachelor's Degrees (2016)



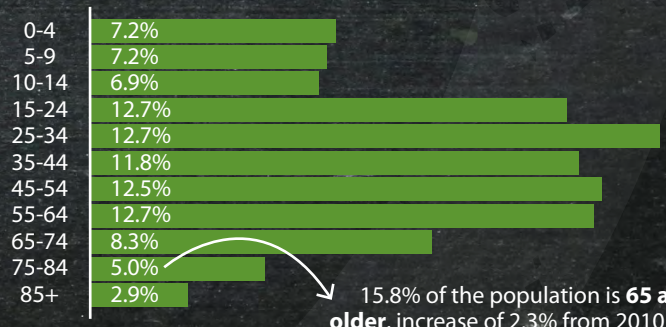
Age and Families

Median Age (2016)

Households with Children (2016)



Population Age Breakdown (2016)



Majority of the population is between the **ages of 15 and 64** which is made up of Millenials, Hipsters and Traditional Living.

15.8% of the population is **65 and older**, increase of 2.3% from 2010 and is expected to grow to 17.9% by 2021

Population Age is a major determinant in the consideration for future development such as recreational amenities and employment opportunities in order to meet the specific needs of a younger population.

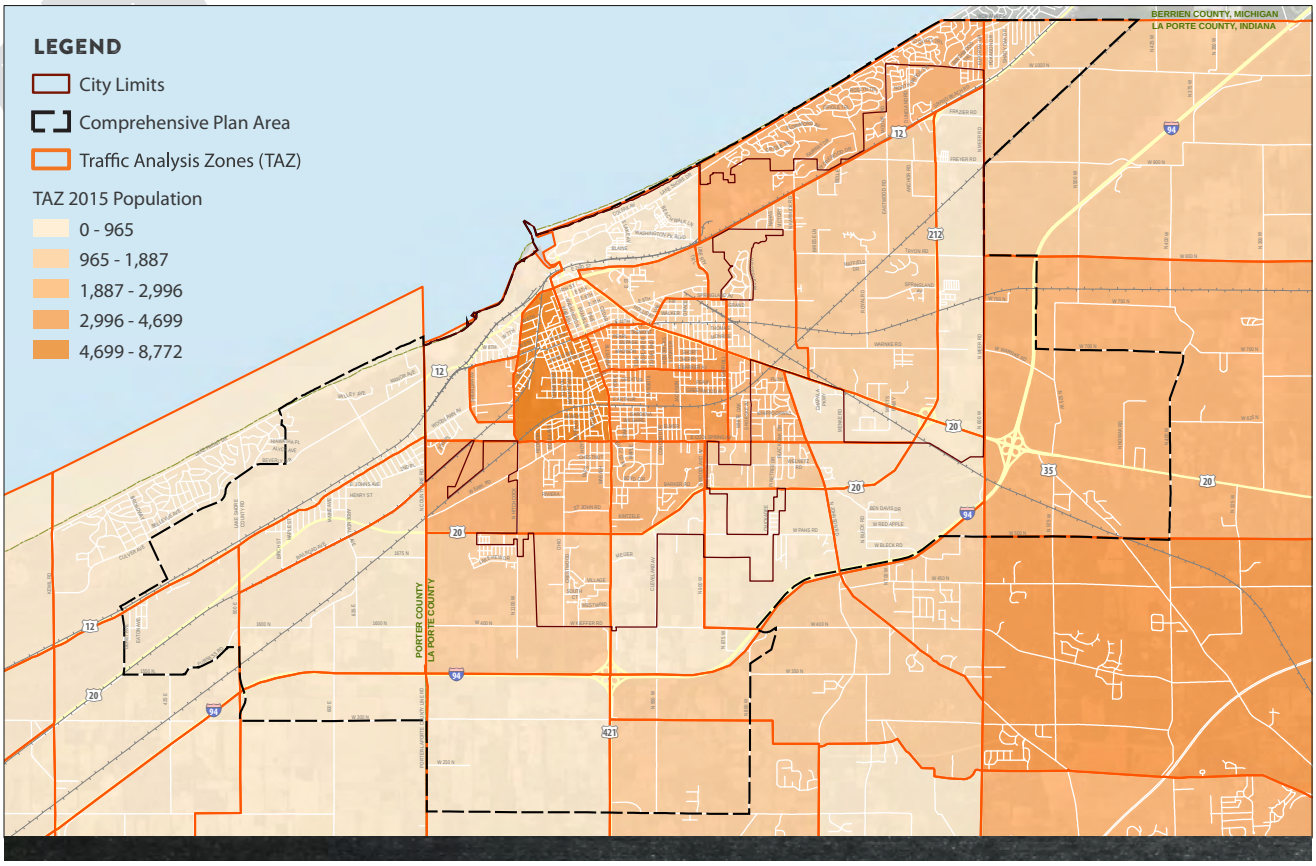
Traffic Analysis Zones

PURPOSE

A traffic analysis zone (TAZ) is a special area delineated by state and/or local transportation officials (in this case, the Northern Indiana Regional Planning Commission) for tabulating and modeling vehicular trip-related data, especially journey-to-work and place-of-work statistics; for the purposes of long-range transportation planning. A TAZ usually consists of one or more census blocks, block groups, or census tracts. 30 TAZs compose the Planning Area.

TEC Map 3, *Traffic Analysis Zones (TAZ) 2015 Population*, depicts Base Year 2015 population estimates for each TAZ.

TEC Map 3, Traffic Analysis Zones (TAZ) 2015 Population



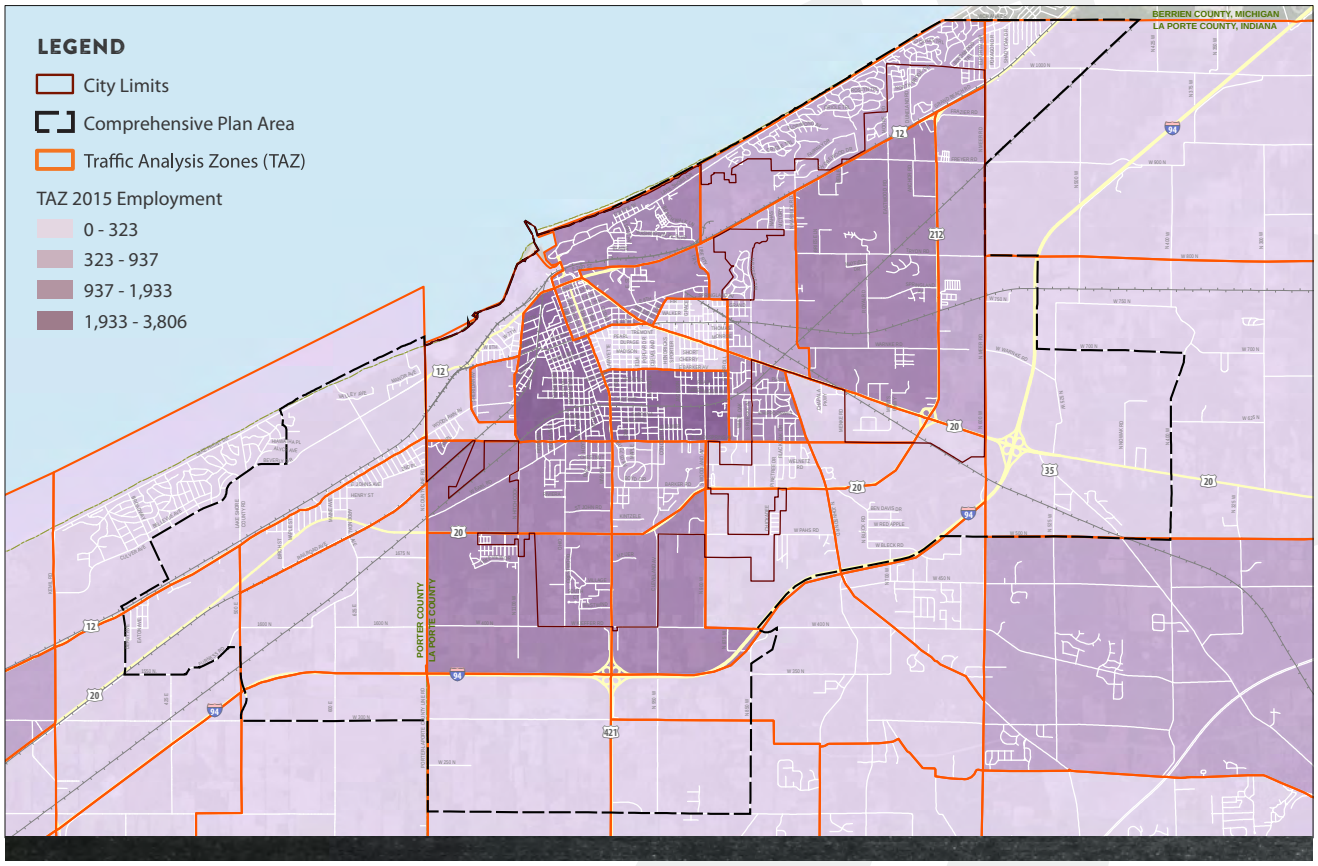
Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

TEC Map 4: *Traffic Analysis Zones (TAZ) 2015 Employment*, depicts the level of trip generation resulting from trips to and from places of employment.

Transportation planners will input Base Year TAZ data, based on existing land uses, and compare it with Future Year TAZ estimates, based on a Future Land Use Plan, to analyze trip generation, thoroughfare capacities and levels of service; in order to estimate the likelihood of needed roadways and roadway expansion in the future, based on anticipated development trends.

TEC Map 4, Traffic Analysis Zones (TAZ) 2015 Employment



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Psychographic Profile

Psychographics is a term used to describe the characteristics of people and neighborhoods which, instead of being purely demographic, speak more to attitudes, interests, opinions and lifestyles. Tapestry (ESRI) is a leading system for categorizing day- and night-time populations into one of 67 distinct lifestyle segments based on these factors. Many commercial retail developers rely on psychographics to measure a market's depth for certain consumer preferences and propensity to spend across select retail categories. Similarly, a growing number of residential developers are interested in an area's psychographic profile because it can serve to eliminate some of the uncertainty associated with delivering unproven product types to a market.

Tapestry organizes the segments into "LifeMode groups," which represent markets that share a common experiences or significant demographic traits and "Urbanization" groups, markets that share a common locale. The largest segments for the Trade Area are summarized in Table 2, *Trade Area Psychographic Overview*, along with a breakdown of LifeMode and Urbanization Groups. Each segment listed in the table includes: total area households which fall into these groups; the percent they represent of all households in the Trade Area; and the national index for this segment (or comparative number of households in the nation that fall in this group). Psychographic characteristics among the Trade Area's largest population groups and across all lifestyle segments appear to show the greatest support for middle-income housing products, e.g., attached ownership units including townhomes, rowhouses, and paired units; along with affordable and market-rate rental units. Further, a sizable share of Trade Area residents have a profile that suggests a preference for renting versus owning.

TEC Table 2, Trade Area* Psychographic Overview			
Tapestry Segment	**2017 Households**	**% of Total Households**	**U.S. Index=100****
Traditional Living	32,971	10.3%	469
Green Acres	32,212	10.1%	335
Rustbelt Traditions	28,412	8.9%	454
Salt of the Earth	27,419	8.6%	219
Middleburg	20,326	6.4%	247
Total Above Segments	141,340	44.3%	--

LifeMode Group	**2017 Households**	**% of Total Households**	**U.S. Index=100****
Cozy Country Living	79,797	25.0%	175
GenXurban	67,541	21.2%	197
Hometown	65,861	20.6%	326
Family Landscapes	36,032	11.3%	171
Middle Ground	23,932	7.5%	73
Total Above Groups	273,163	85.6%	--

Urbanization Group	**2017 Households**	**% of Total Households**	**U.S. Index=100****
Metro Cities	71,920	22.5%	118
Urban Periphery	71,225	22.3%	152
Suburban Periphery	64,456	20.2%	67
Rural	65,287	20.4%	104
Semirural	45,159	14.1%	136
Total Above Groups	**318,047**	**99.6%**	--
Total Trade Area	**319,278**	**100.0%**	--

* includes Jasper, Lake, La Porte, Newton and Porter Counties to the west and portions of Berrien County to the northeast.

** Indicates concentration of this segment relative to US average. A segment index of 200 would mean that this group contains 2 times the concentration of households compared to the average US neighborhood.

Source: ESRI, Inc. and Ricker | Cunningham.

TEC Figure 3, Michigan City Tapestry Segments and Percent of Households (2016)

Source: ESRI

LifeMode Group: Hometown

Traditional Living

12B

Households: 2,369,000

Average Household Size: 2.50

Median Age: 34.8

Median Household Income: $37,000

Percent of Michigan City Households

41.2%

WHO ARE WE?

Residents in this segment live primarily in low-density, settled neighborhoods in the Midwest. The households are a mix of married-couple families and singles. Many families encompass two generations who have lived and worked in the community; their children are likely to follow suit. The manufacturing, retail trade, and health care sectors are the primary sources of employment for these residents. This is a younger market—beginning householders who are juggling the responsibilities of living on their own or a new marriage, while retaining their youthful interests in style and fun.

OUR NEIGHBORHOOD

- Married couples are the dominant household type, but fewer than expected from the younger age profile and fewer with children (Index 79); however, there are higher proportions of single-parent (Index 146) and single-person households (Index 112).
- Average household size is slightly lower at 2.50.
- Homes are primarily single family or duplexes in older neighborhoods, built before 1940 (Index 183).
- Most neighborhoods are located in lower-density urban clusters of metro areas throughout the Midwest and South.
- Average commuting time to work is slightly shorter (Index 88).
- Households have one or two vehicles.

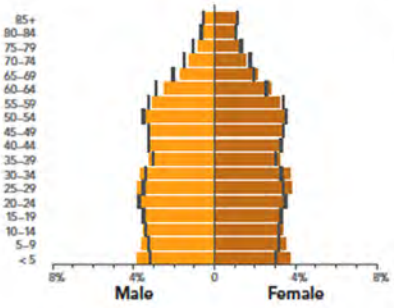
SOCIOECONOMIC TRAITS

- Over 70% have completed high school or some college.
- Unemployment is higher at 10.9% (Index 127); labor force participation is also a bit higher at 64.6%.
- Over three quarters of households derive income from wages and salaries, augmented by Supplemental Security Income (Index 122) and public assistance (Index 149).
- Cost-conscious consumers that are comfortable with brand loyalty, unless the price is too high.
- Connected and comfortable with the Internet, they are more likely to participate in online gaming or to access dating websites.
- TV is seen as the most trusted media.

AGE BY SEX (Esri data)

Median Age: 34.8 US: 37.6

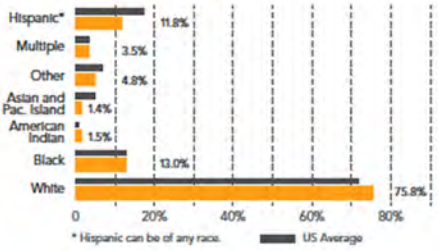
Indicates US



RACE AND ETHNICITY (Esri data)

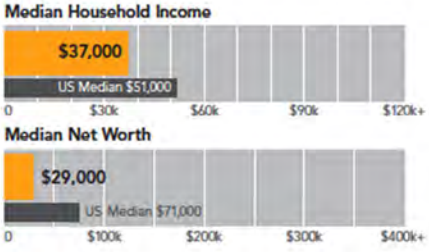
The Diversity Index summarizes racial and ethnic diversity. The index shows the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity).

Diversity Index: 53.1 US: 62.1



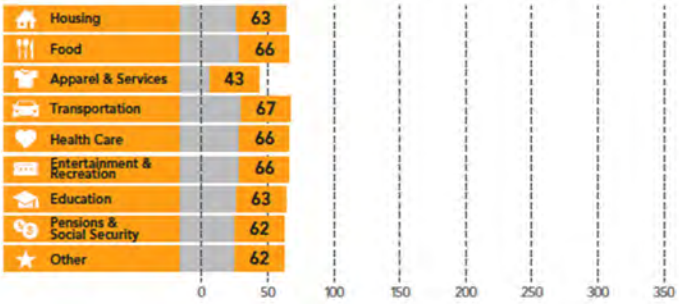
INCOME AND NET WORTH

Net worth measures total household assets (homes, vehicles, investments, etc.) less any debts, secured (e.g., mortgages) or unsecured (credit cards). Household income and net worth are estimated by Esri.



AVERAGE HOUSEHOLD BUDGET INDEX

The index compares the average amount spent in this market's household budgets for housing, food, apparel, etc., to the average amount spent by all US households. An index of 100 is average. An index of 120 shows that average spending by consumers in this market is 20 percent above the national average. Consumer expenditures are estimated by Esri.



OCCUPATION BY EARNINGS

The five occupations with the highest number of workers in the market are displayed by median earnings. Data from the Census Bureau's American Community Survey.

12B

LifeMode Group: Hometown

Traditional Living

TAPESTRY SEGMENTATION
esri.com/tapestry

MARKET PROFILE (Consumer preferences are estimated from data by GfK MRI)

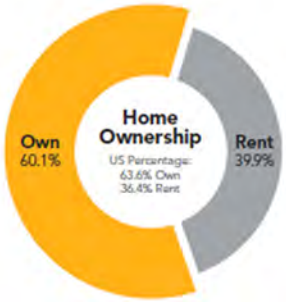
- They shop for groceries at discount stores such as Walmart supercenters; Kmart is also a favorite for apparel and sundry household and personal care products.
- Convenience stores are commonly used for fuel or picking up incidentals like lottery tickets.
- They tend to carry credit card balances, have student loans, and pay bills in person.
- Half of households have abandoned landlines for cell phones only.
- They watch their favorite channels including QVC, CMT, and Game Show Network.
- They're fast food devotees.
- They enjoy outdoor activities such as camping and taking trips to the zoo.

HOUSING

Median home value is displayed for markets that are primarily owner occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

Typical Housing:
Single Family

Median Value:
$79,000
US Median: $177,000

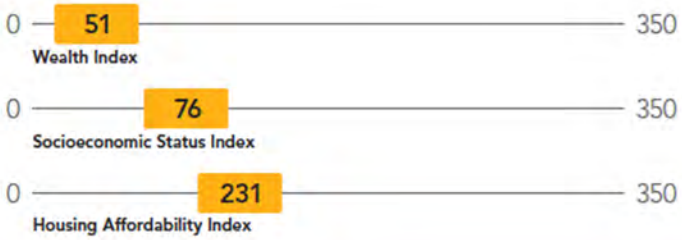


POPULATION CHARACTERISTICS

Total population, average annual population change since Census 2010, and average density (population per square mile) are displayed for the market relative to the size and change among all Tapestry markets. Data estimated by Esri.

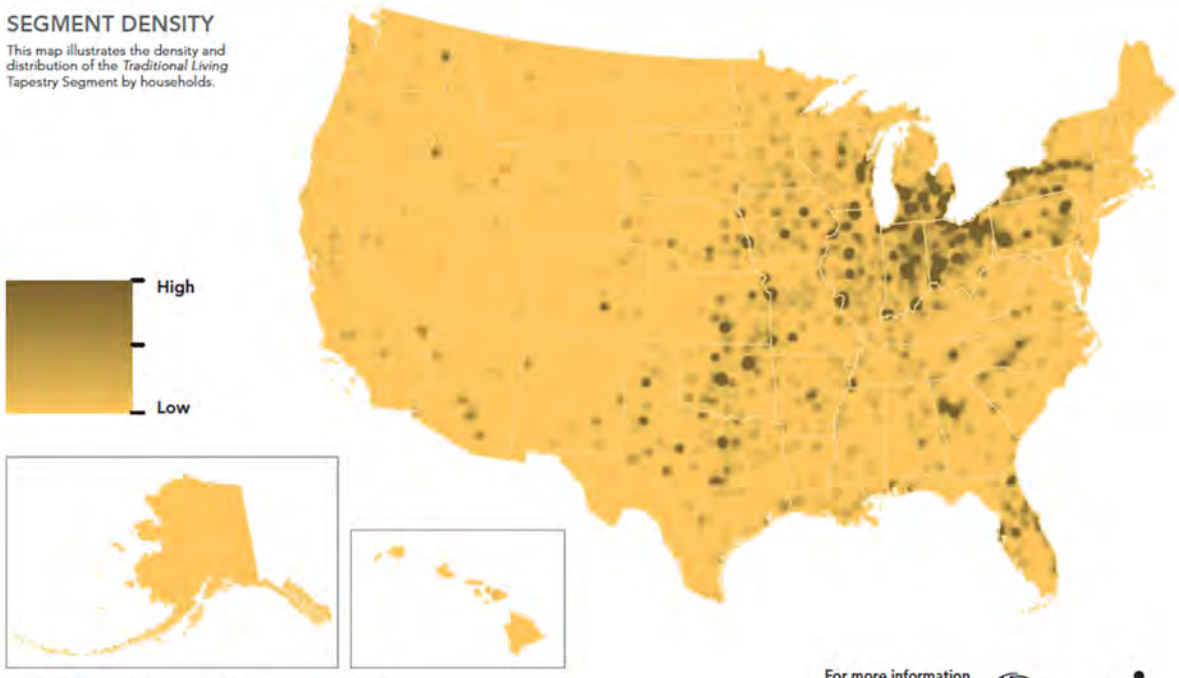
ESRI INDEXES

Esri developed three indexes to display average household wealth, socioeconomic status, and housing affordability for the market relative to US standards.



SEGMENT DENSITY

This map illustrates the density and distribution of the *Traditional Living* Tapestry Segment by households.



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info@esri.com
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TEC Figure 4, Michigan City Tapestry Segments and Percent of Households (2016) Source: ESRI

LifeMode Group: Middle Ground

Hardscrabble Road

8G

Households: 1,489,000

Average Household Size: 2.64

Median Age: 31.7

Median Household Income: $26,000

Percent of Michigan City Households

11.0%

WHO ARE WE?

Hardscrabble Road neighborhoods are in urbanized areas within central cities, with older housing, located chiefly in the Midwest and South. This slightly smaller market is primarily a family market, married couples (with and without children) and single parents. Younger, highly diverse (with higher proportions of black, multiracial, and Hispanic populations), and less educated, they work mainly in service, manufacturing, and retail trade industries. Unemployment is high (almost twice the US rate), and median household income is half the US median. Almost 1 in 3 households have income below the poverty level. Approximately 60% of householders are renters, living primarily in single-family homes, with a higher proportion of dwellings in 2–4 unit buildings. This market is struggling to get by.

OUR NEIGHBORHOOD

- Renters: About three-fifths of households.
- Primarily family households, married couples with or without children, single parents (Index 203), and multigenerational households (Index 137).
- Primarily single-family homes (61%), with a higher proportion of dwellings in 2–4 unit buildings (Index 225).
- Older housing, built before 1960 (62%), with a higher proportion built in the 1940s (Index 211) or earlier (Index 252).
- Four-fifths of owned homes valued under $100,000 (more than 3.5 times the US).
- Higher percentage of vacant housing units at 17% (Index 147).
- Most households with 1 or 2 vehicles (71%), but 18% have no vehicle (Index 202).

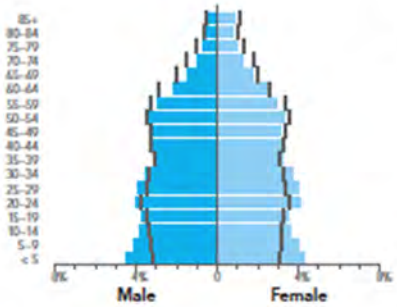
SOCIOECONOMIC TRAITS

- Education completed: 38% with a high school diploma only (Index 133); 25% with some college or an associate's degree (Index 86).
- Unemployment rate is higher at 16.6%, almost twice the US rate.
- Labor force participation rate is lower at 57.4%.
- Wages and salaries are the primary source of income for 71% of households, with contributions from Supplemental Security Income for 10% (Index 242) and public assistance for 7% (Index 280).
- These cost-conscious consumers purchase sale items in bulk and buy generic over name brands.
- They tend to save money for a specific purpose.

AGE BY SEX (Esri data)

Median Age: 31.7 US: 37.6

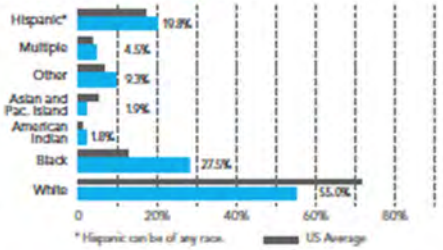
| Indicates US



RACE AND ETHNICITY (Esri data)

The Diversity Index summarizes racial and ethnic diversity. The index shows the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity).

Diversity Index: 74.2 US: 62.1



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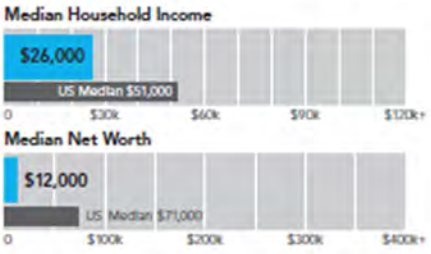
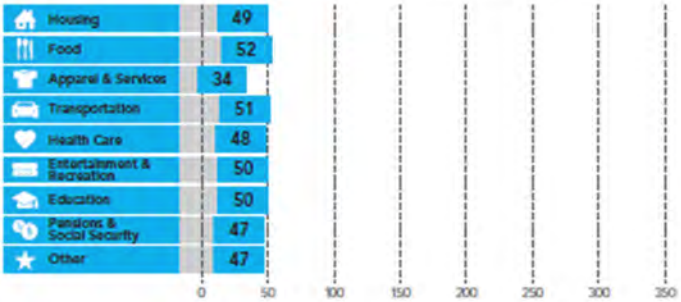


AVERAGE HOUSEHOLD BUDGET INDEX

The index compares the average amount spent in this market's household budgets for housing, food, apparel, etc., to the average amount spent by all US households. An index of 100 is average. An index of 120 shows that average spending by consumers in this market is 20 percent above the national average. Consumer expenditures estimated by Esri.



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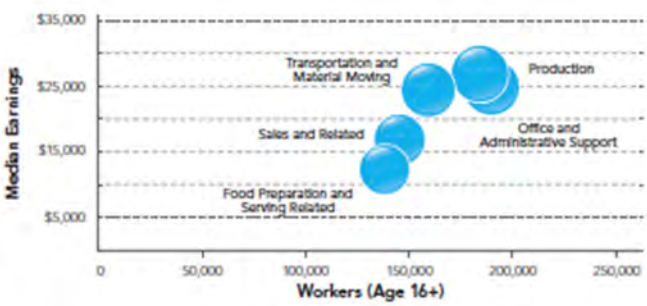


8G

LifeMode Group: Middle Ground

Hardscrabble Road

TAPESTRY SEGMENTATION
esri.com/tapestry

MARKET PROFILE (Consumer preferences are estimated from data by GfK MRI)

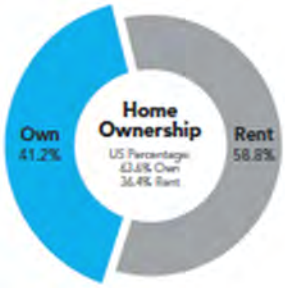
- Little extra money to invest in retirement savings plans, stocks, or bonds.
- For those with young children at home, watching Disney Channel, Cartoon Network, and Nickelodeon on TV is popular; diapers, baby food, and children's clothing are priority expenditures.
- Favor shopping through an in-home sales rep, QVC, or HSN.
- Read parenting and health magazines.
- Watch programs on BET, MTV, and Game Show Network.
- Prefer to listen to gospel, R&B, rap, and hip-hop music.
- Participate in basketball, football, and volleyball.

HOUSING

Median home value is displayed for markets that are primarily owner occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

Typical Housing:
Single Family

Average Rent:
$690
US Average: $990



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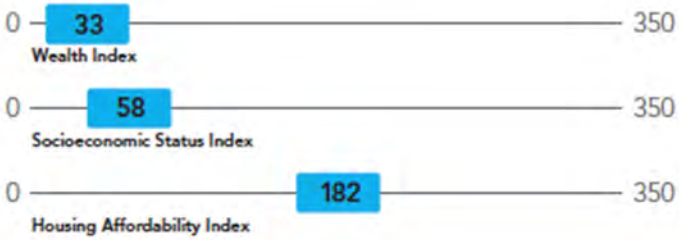

SEGMENT DENSITY

This map illustrates the density and distribution of the *Hardscrabble Road* Tapestry Segment by households.

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TEC Figure 5, Michigan City Tapestry Segments and Percent of Households (2016)

Source: ESRI

LifeMode Group: Cozy Country Living

Heartland Communities

6F

Households: 2,864,000

Average Household Size: 2.38

Median Age: 41.5

Median Household Income: $39,000

Percent of Michigan City Households

10.4%

WHO ARE WE?

Well settled and close-knit, *Heartland Communities* are semirural and semiretired. These older householders are primarily homeowners, and many have paid off their mortgages. Their children have moved away, but they have no plans to leave their homes. Their hearts are with the country; they embrace the slower pace of life here but actively participate in outdoor activities and community events. Traditional and patriotic, these residents support their local businesses, always buy American, and favor domestic driving vacations over foreign plane trips.

OUR NEIGHBORHOOD

- Rural communities or small towns are concentrated in the Midwest, from older Rustbelt cities to the Great Plains.
- Distribution of household types is comparable to the US, primarily (but not the majority) married couples, more with no children, and a slightly higher proportion of singles (Index 112) that reflects the aging of the population.
- Residents own modest, single-family homes built before 1970.
- They own one or two vehicles; commutes are short (Index 95).

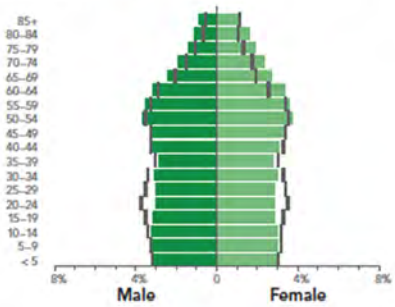
SOCIOECONOMIC TRAITS

- Retirees in this market depress the average labor force participation rate to less than 60% (Index 95), but the unemployment rate is comparable to the US.
- More workers are white collar than blue collar; more skilled than unskilled.
- The rural economy of this market provides employment in the manufacturing, construction, and agriculture industries.
- These are budget savvy consumers; they stick to brands they grew up with and know the price of goods they purchase. Buying American is important.
- Daily life is busy, but routine. Working on the weekends is not uncommon.
- Residents trust TV and newspapers more than any other media.
- Skeptical about their financial future, they stick to community banks and low-risk investments.

AGE BY SEX (Esri data)

Median Age: 41.5 US: 37.6

| Indicates US



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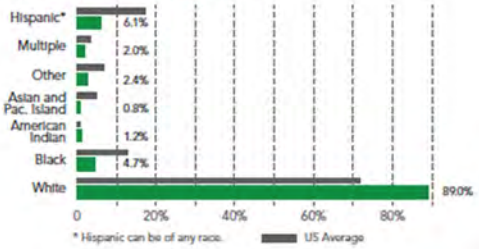
Diversity Index: 29.6 US: 62.1



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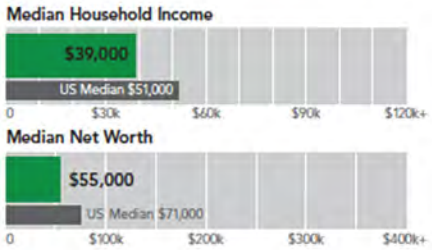
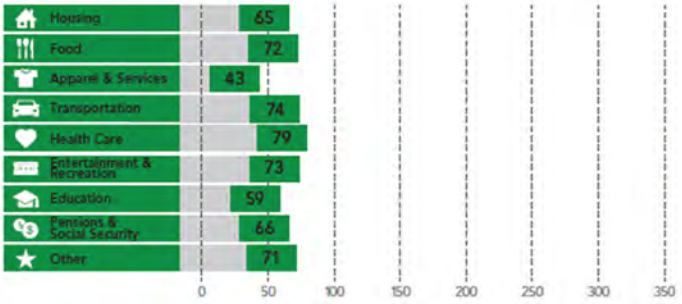


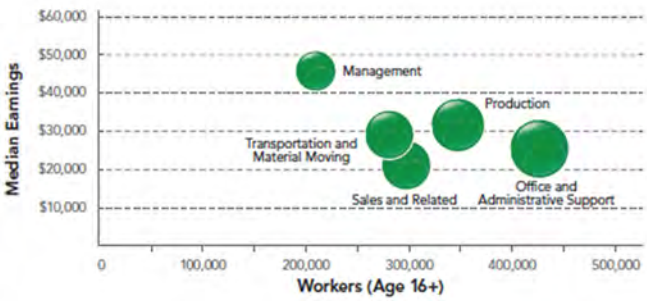
AVERAGE HOUSEHOLD BUDGET INDEX

The index compares the average amount spent in this market's household budgets for housing, food, apparel, etc., to the average amount spent by all US households. An index of 100 is average. An index of 120 shows that average spending by consumers in this market is 20 percent above the national average. Consumer expenditures are estimated by Esri.



OCCUPATION BY EARNINGS

The five occupations with the highest number of workers in the market are displayed by median earnings. Data from the Census Bureau's American Community Survey.



6F LifeMode Group: Cozy Country Living
Heartland Communities

TAPESTRY SEGMENTATION
esri.com/tapestry

MARKET PROFILE (Consumer preferences are estimated from data by GfK MRI)

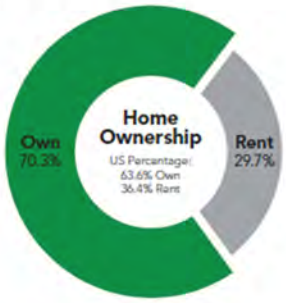
- Traditional in their ways, residents of *Heartland Communities* choose to bank and pay their bills in person and purchase insurance from an agent.
- Most have high-speed Internet access at home or on their cell phone but aren't ready to go paperless.
- Many residents have paid off their home mortgages but still hold auto loans and student loans. Noninterest checking accounts are common.
- To support their local community, residents participate in public activities.
- Home remodeling is not a priority, but homeowners do tackle necessary maintenance work on their cherished homes. They have invested in riding lawn mowers to maintain their larger yards.
- They enjoy country music and watch CMT.
- Motorcycling, hunting, and fishing are popular; walking is the main form of exercise.
- To get around these semirural communities, residents prefer domestic trucks or SUVs.
- They prefer to travel in the US and favor the convenience of packaged deals.

HOUSING

Median home value is displayed for markets that are primarily owner occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

Typical Housing:
Single Family

Median Value:
$89,000
US Median: $177,000



POPULATION CHARACTERISTICS

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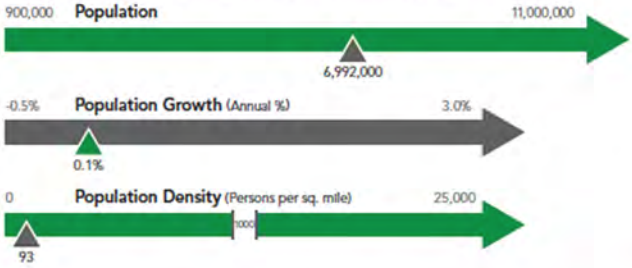
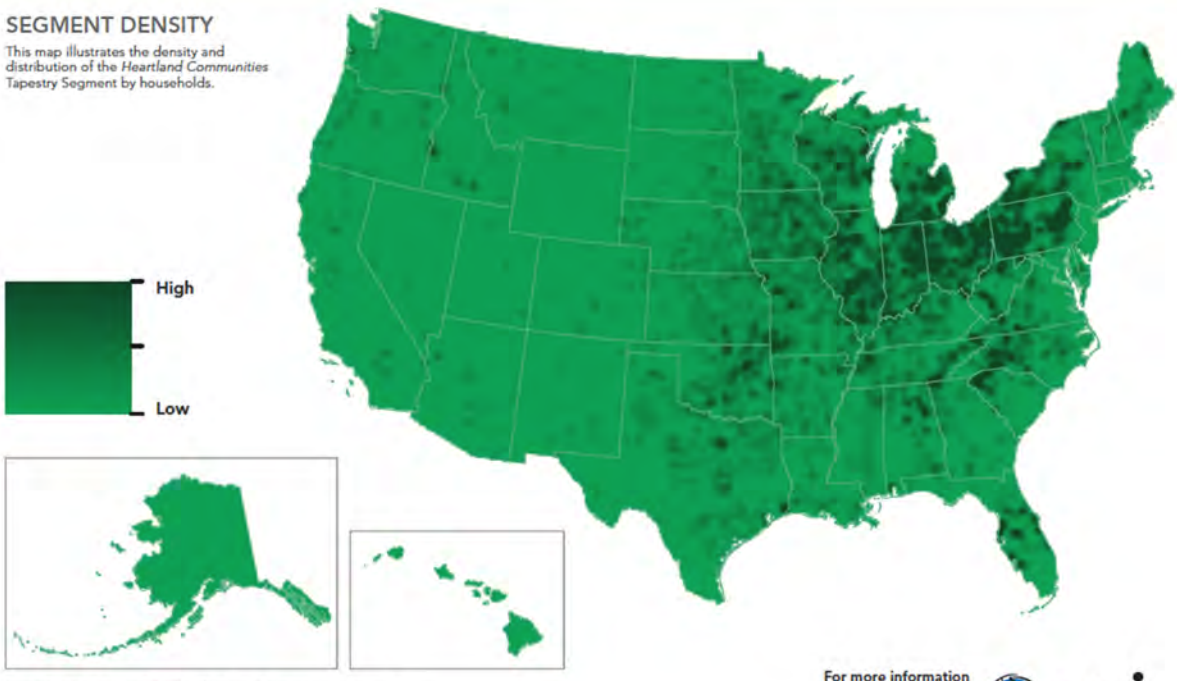


ESRI INDEXES

Esri developed three indexes to display average household wealth, socioeconomic status, and housing affordability for the market relative to US standards.

SEGMENT DENSITY

This map illustrates the density and distribution of the *Heartland Communities* Tapestry Segment by households.



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esri

TEC Figure 6, Michigan City Tapestry Segments and Percent of Households (2016)

Source: ESRI

LifeMode Group: Midtown Singles

Set to Impress

11D

Households: 1,657,000

Average Household Size: 2.10

Median Age: 33.1

Median Household Income: $29,000

Percent of Michigan City Households

9.5%

WHO ARE WE?

Set to Impress is depicted by medium to large multiunit apartments with lower than average rents. These apartments are often nestled into neighborhoods with other businesses or single-family housing. Nearly one in three residents is 20 to 34 years old, and over half of the homes are nonfamily households. Although many residents live alone, they preserve close connections with their family. Income levels are low; many work in food service while they are attending college. This group is always looking for a deal. They are very conscious of their image and seek to bolster their status with the latest fashion. *Set to Impress* residents are tapped into popular music and the local music scene.

OUR NEIGHBORHOOD

- Apartment complexes represented by multiple multiunit structures are often nestled in neighborhoods with either single-family homes or other businesses.
- Renters make up nearly three quarters of all households.
- They're found mostly in urban areas, but also in suburbs.
- Single-person households make up over 40% of all households.
- It is easy enough to walk or bike to work for many residents.

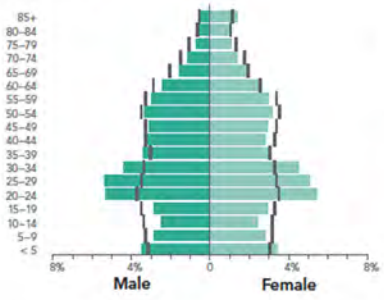
SOCIOECONOMIC TRAITS

- Residents are better educated and mobile.
- Unemployment is higher, although many are still enrolled in college (Index 146).
- They always have an eye out for a sale and will stock up when the price is right.
- They prefer name brands, but will buy generic when it is a better deal.
- Quick meals on the run are a reality of life.
- They're image-conscious consumers that dress to impress and often make impulse buys.
- They maintain close relationships with family.

AGE BY SEX (Esri data)

Median Age: 33.1 US: 37.6

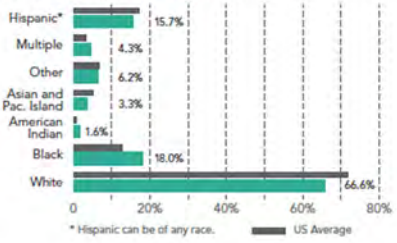
Indicates US



RACE AND ETHNICITY (Esri data)

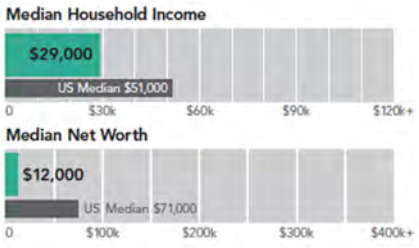
The Diversity Index summarizes racial and ethnic diversity. The index shows the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity).

Diversity Index: 64.9 US: 62.1



INCOME AND NET WORTH

Net worth measures total household assets (homes, vehicles, investments, etc.) less any debts, secured (e.g., mortgages) or unsecured (credit cards). Household income and net worth are estimated by Esri.



AVERAGE HOUSEHOLD BUDGET INDEX

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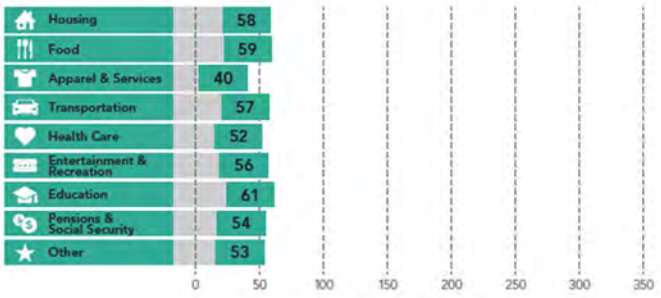

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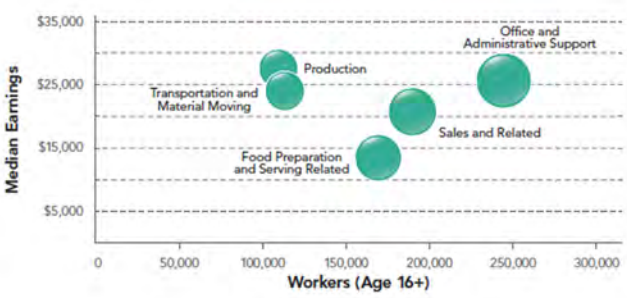


11D

LifeMode Group: Midtown Singles

Set to Impress

TAPESTRY SEGMENTATION
esri.com/tapestry

MARKET PROFILE (Consumer preferences are estimated from data by GfK MRI)

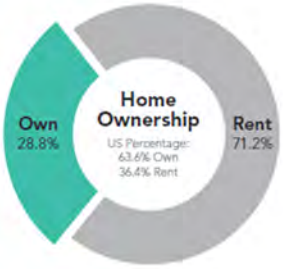
- They listen to a variety of the latest music and download music online.
- Majority have cell phones only, no landlines.
- They use the Internet for social media and managing finances.
- They own used, imported vehicles.
- They shop at Walgreens.
- They enjoy leisure activities including going to rock concerts, night clubs, and the zoo.

HOUSING

Median home value is displayed for markets that are primarily owner occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

Typical Housing:
Multiunit Rentals;
Single Family

Average Rent:
$750
US Average: $990



POPULATION CHARACTERISTICS

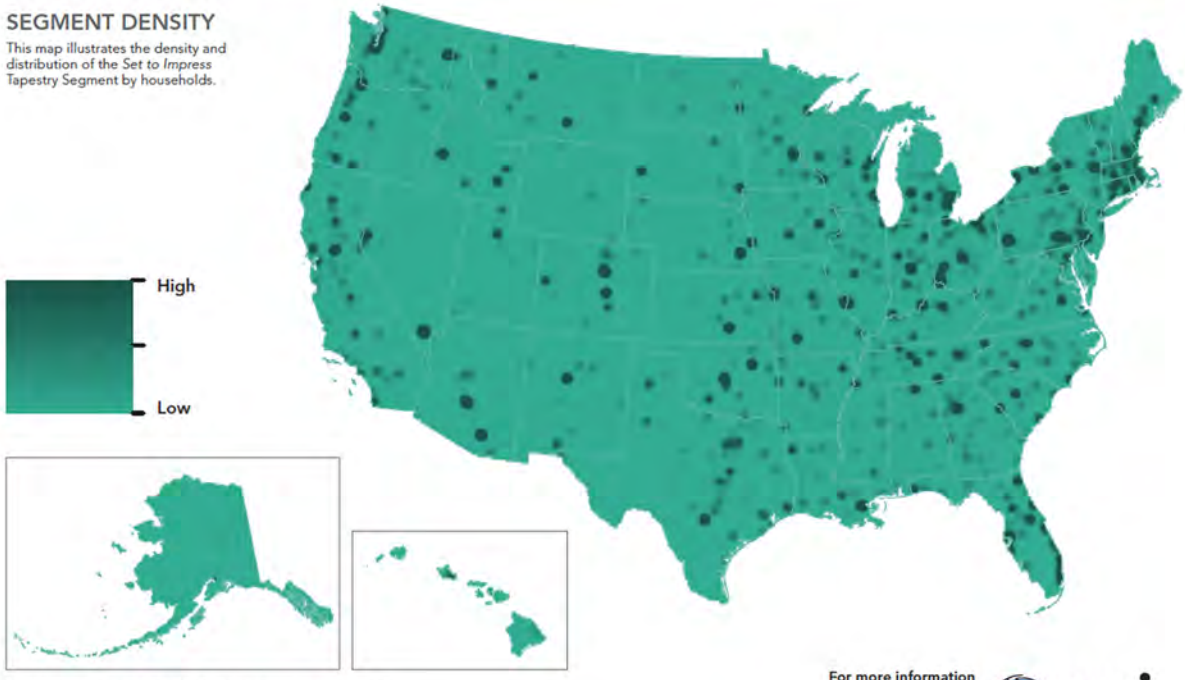
Total population, average annual population change since Census 2010, and average density (population per square mile) are displayed for the market relative to the size and change among all Tapestry markets. Data estimated by Esri.

ESRI INDEXES

Esri developed three indexes to display average household wealth, socioeconomic status, and housing affordability for the market relative to US standards.

SEGMENT DENSITY

This map illustrates the density and distribution of the *Set to Impress* Tapestry Segment by households.



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TEC Figure 7, Michigan City Tapestry Segments and Percent of Households (2016)

Source: ESRI

LifeMode Group: Senior Styles

Retirement Communities

9E

Households: 1,451,000

Average Household Size: 1.86

Median Age: 52.0

Median Household Income: $35,000

Percent of Michigan City Households

7.6%

WHO ARE WE?

Retirement Communities neighborhoods are evenly distributed across the country. They combine single-family homes and independent living with apartments, assisted living, and continuous care nursing facilities. Over half of the housing units are in multiunit structures, and the majority of residents have a lease. This group enjoys watching cable TV and stays up-to-date with newspapers and magazines. Residents take pride in fiscal responsibility and keep a close eye on their finances. Although income and net worth are well below national averages, residents enjoy going to the theater, golfing, and taking vacations. While some residents enjoy cooking, many have paid their dues in the kitchen and would rather dine out.

OUR NEIGHBORHOOD

- Much of the housing was built in the 1970s and 1980s—a mix of single-family homes and large multiunit structures that function at various levels of senior care.
- Small household size; many residents have outlived their partners and live alone.
- Over half of the homes are renter occupied.
- Average rent is slightly below the US average.
- One in five households has no vehicle.

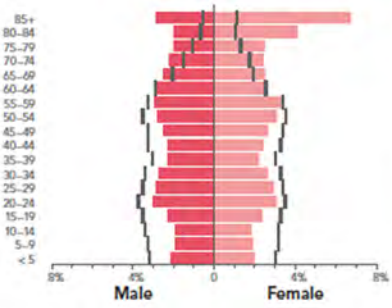
SOCIOECONOMIC TRAITS

- Brand loyal, this segment will spend a little more for their favorite brands, but most likely they will have a coupon.
- Frugal, they pay close attention to finances.
- They prefer reading magazines over interacting with computers.
- They are health conscious and prefer name brand drugs.

AGE BY SEX (Esri data)

Median Age: 52.0 US: 37.6

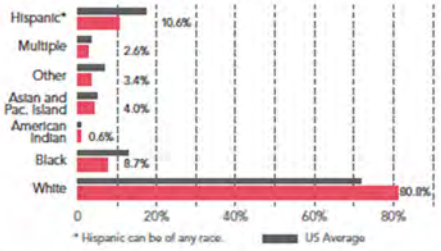
I Indicates US



RACE AND ETHNICITY (Esri data)

The Diversity Index summarizes racial and ethnic diversity. The index shows the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity).

Diversity Index: 46.4 US: 62.1



INCOME AND NET WORTH

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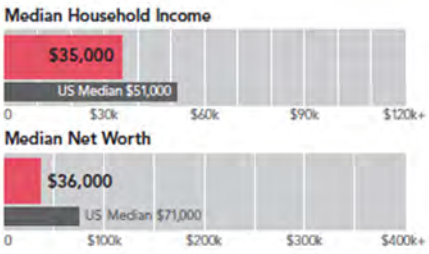

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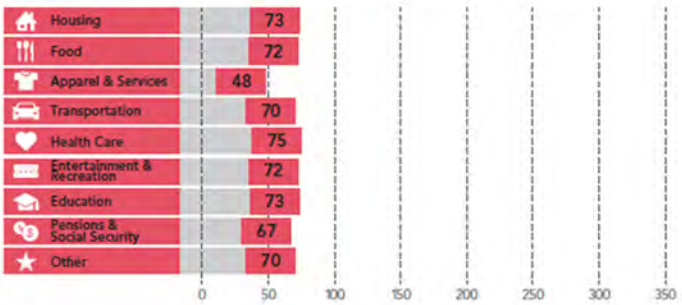

OCCUPATION BY EARNINGS

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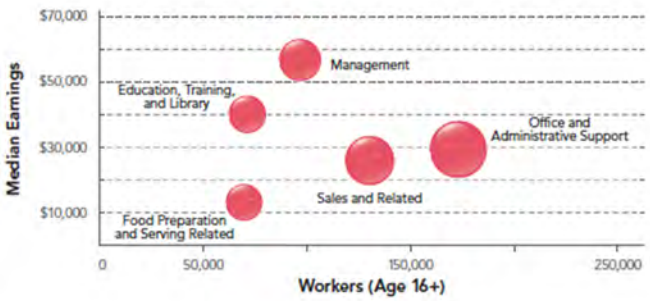


9E

LifeMode Group: Senior Styles

Retirement Communities

TAPESTRY SEGMENTATION
esri.com/tapestry

MARKET PROFILE (Consumer preferences are estimated from data by GfK MRI)

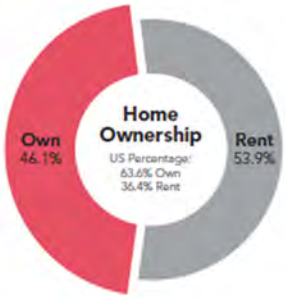
- Enjoy hard-cover books, book clubs, crossword puzzles, and Sudoku.
- Contribute to political organizations and other groups.
- Entertainment preferences: bingo, opera, and the theater.
- Watch QVC, Golf Channel, CNN, and sports on TV.
- Like to travel—including visits to foreign countries.
- Shop at large department stores for convenience.

HOUSING

Median home value is displayed for markets that are primarily owner occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

Typical Housing:
Multiunits;
Single Family

Average Rent:
$980
US Average: $990



POPULATION CHARACTERISTICS

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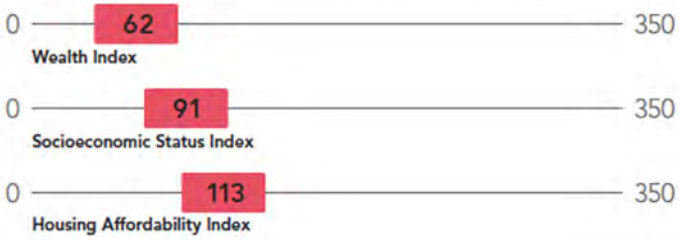
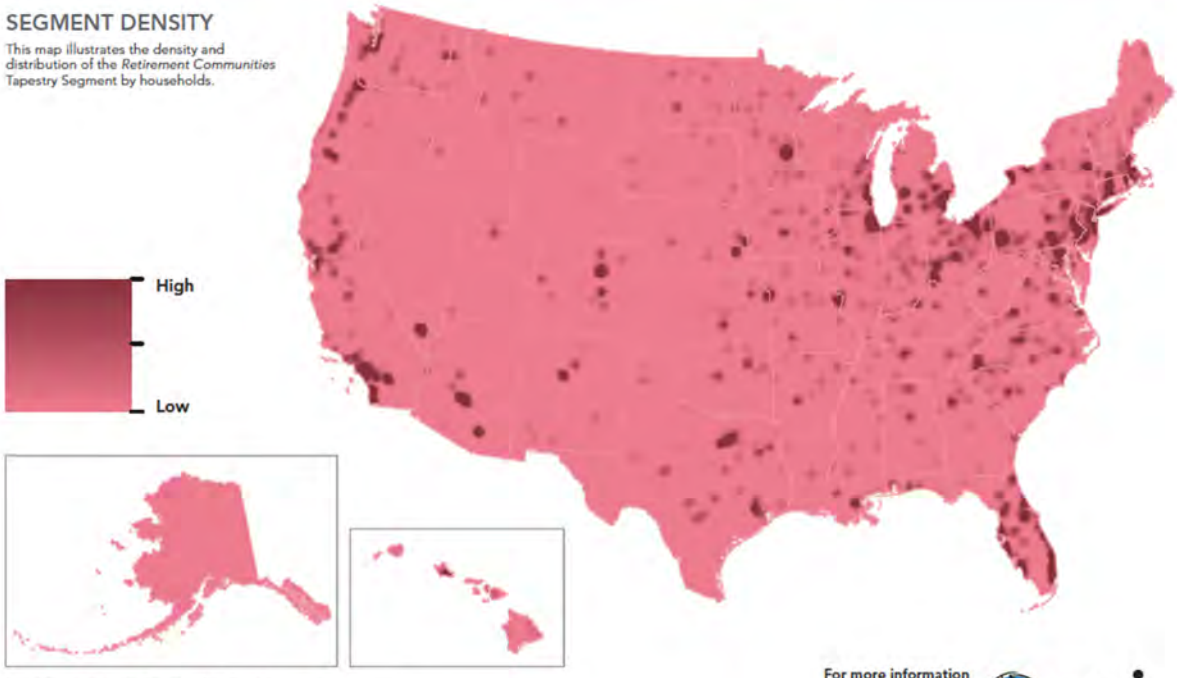


SEGMENT DENSITY

This map illustrates the density and distribution of the *Retirement Communities* Tapestry Segment by households.



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TEC Figure 8, Michigan City Tapestry Segments and Percent of Households (2016)

Source: ESRI

LifeMode Group: GenXurban

Midlife Constants

5E

Households: 3,043,000

Average Household Size: 2.30

Median Age: 45.9

Median Household Income: $48,000

Percent of Michigan City Households

6.8%

WHO ARE WE?

Midlife Constants residents are seniors, at or approaching retirement, with below average labor force participation and above average net worth. Although located in predominantly metropolitan areas, they live outside the central cities, in smaller communities. Their lifestyle is more country than urban. They are generous, but not spendthrifts.

OUR NEIGHBORHOOD

- Older homes (most built before 1980) found in the suburban periphery of smaller metropolitan markets.
- Primarily married couples, with a growing share of singles.
- Settled neighborhoods with slow rates of change and residents that have lived in the same house for years.
- Single-family homes, less than half still mortgaged, with a median home value of $141,000 (Index 80).

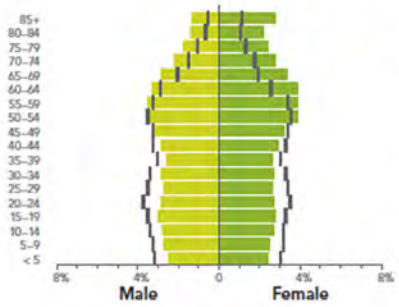
SOCIOECONOMIC TRAITS

- Education: 64% have a high school diploma or some college.
- Unemployment is lower in this market at 7.4% (Index 86), but so is the labor force participation rate (Index 89).
- Almost 42% of households are receiving Social Security (Index 150); 28% also receive retirement income (Index 160).
- Traditional, not trendy; opt for convenience and comfort, not cutting-edge. Technology has its uses, but the bells and whistles are a bother.
- Attentive to price, but not at the expense of quality, they prefer to buy American and natural products.
- Radio and newspapers are the media of choice (after television).

AGE BY SEX (Esri data)

Median Age: 45.9 US: 37.6

Indicates US



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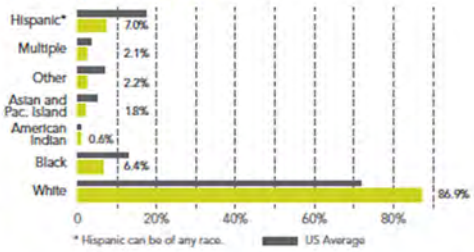

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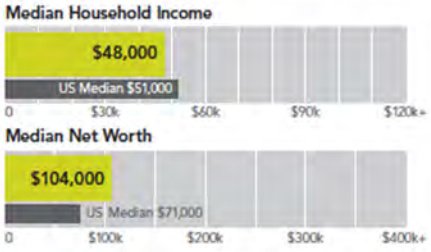

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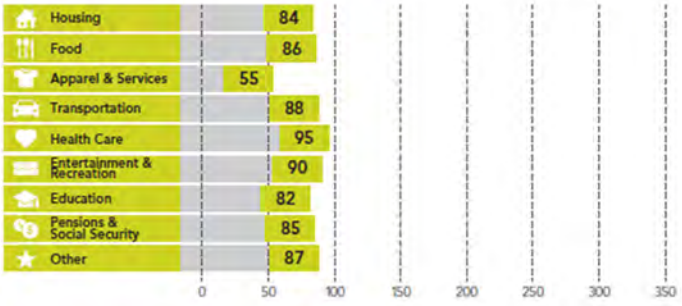

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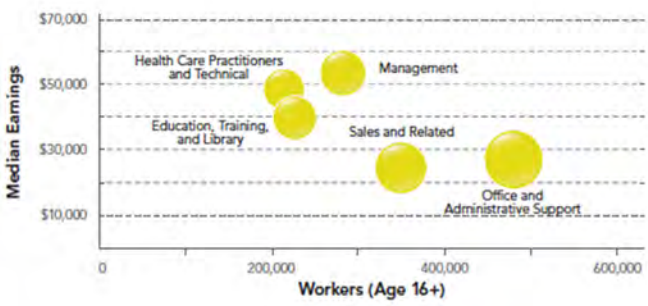


5E

LifeMode Group: GenXurban

Midlife Constants

TAPESTRY SEGMENTATION
esri.com/tapestry

MARKET PROFILE (Consumer preferences are estimated from data by GfK MRI)

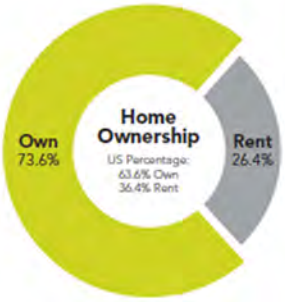
- Prefer practical vehicles like SUVs and trucks (domestic, of course).
- Sociable, church-going residents belonging to fraternal orders, veterans' clubs and charitable organizations and do volunteer work and fund-raising.
- Contribute to arts/cultural, educational, political, and social services organizations.
- DIY homebodies that spend on home improvement and gardening.
- Media preferences: country or Christian channels.
- Leisure activities include scrapbooking, movies at home, reading, fishing, and golf.

HOUSING

Median home value is displayed for markets that are primarily owner occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

Typical Housing:
Single Family

Median Value:
$141,000
US Median: $177,000



POPULATION CHARACTERISTICS

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ESRI INDEXES

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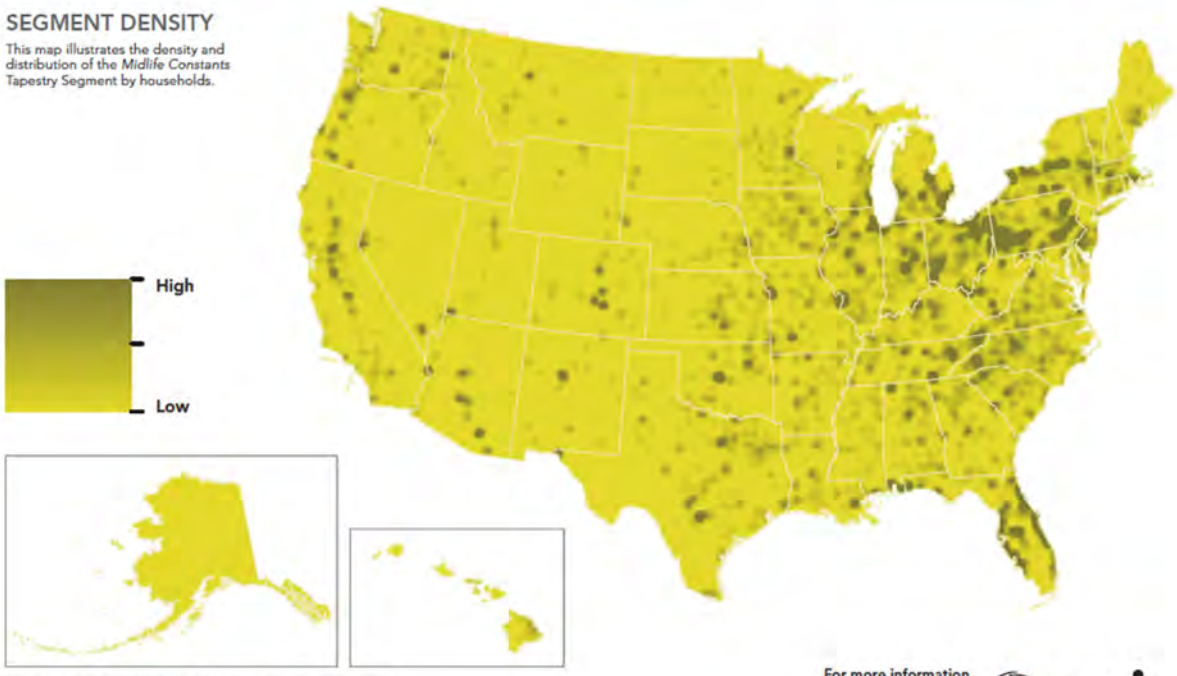
SEGMENT DENSITY

This map illustrates the density and distribution of the *Midlife Constants* Tapestry Segment by households.



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TEC Figure 9, Michigan City Tapestry Segments and Percent of Households (2016)

Source: ESRI

LifeMode Group: Hometown

Small Town Simplicity

12C

Households: 2,305,000

Average Household Size: 2.25

Median Age: 40.0

Median Household Income: $27,000

Percent of Michigan City Households

3.1%

WHO ARE WE?

Small Town Simplicity includes young families and senior householders that are bound by community ties. The lifestyle is down-to-earth and semirural, with television for entertainment and news, and emphasis on convenience for both young parents and senior citizens. Residents embark on pursuits including online computer games, scrapbooking, and rural activities like hunting and fishing. Since almost 1 in 4 households is below poverty level, residents also keep their finances simple—paying bills in person and avoiding debt.

OUR NEIGHBORHOOD

- They reside in small towns or semirural neighborhoods, mostly outside metropolitan areas.
- Homes are a mix of older single-family houses (61%), apartments, and mobile homes.
- A majority, 51%, of homes are owner occupied. (Index 80).
- Median home value of $88,000 is about half the US median.
- Average rent is $600 (Index 62).
- This is an older market, with almost half of the householders aged 55 years or older, and predominantly single-person households (Index 139).

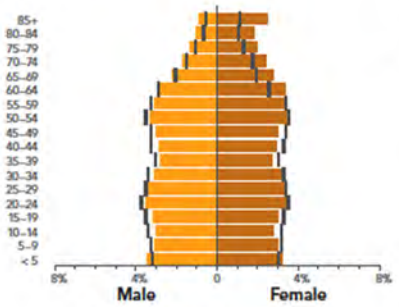
SOCIOECONOMIC TRAITS

- Education: 65% with high school diploma or some college.
- Unemployment higher at 11.9% (Index 138).
- Labor force participation lower at 51% (Index 81), which could result from lack of jobs or retirement.
- Income from wages and salaries (Index 82), Social Security (Index 142) or retirement (Index 112), increased by Supplemental Security Income (Index 203).
- Price-conscious consumers that shop accordingly, with coupons at discount centers.
- Connected, but not to the latest or greatest gadgets; keep their landlines.
- Community-orientated residents; more conservative than middle-of-the-road.
- Rely on television or newspapers to stay informed.

AGE BY SEX (Esri data)

Median Age: 40.0 US: 37.6

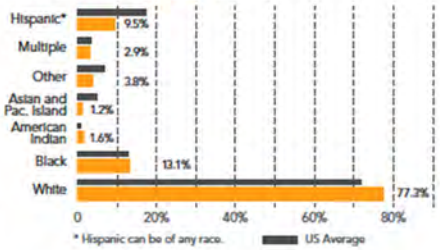
Indicates US



RACE AND ETHNICITY (Esri data)

The Diversity Index summarizes racial and ethnic diversity. The index shows the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity).

Diversity Index: 49.1 US: 62.1



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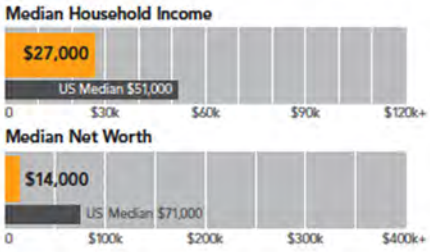

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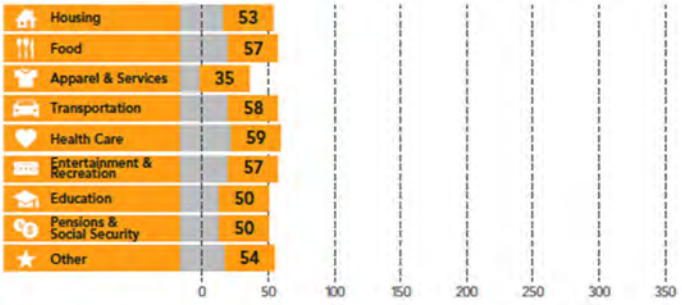
The index compares the average amount spent in this market's household budgets for housing, food, apparel, etc., to the average amount spent by all US households. An index of 100 is average. An index of 120 shows that average spending by consumers in this market is 20 percent above the national average. Consumer expenditures are estimated by Esri.



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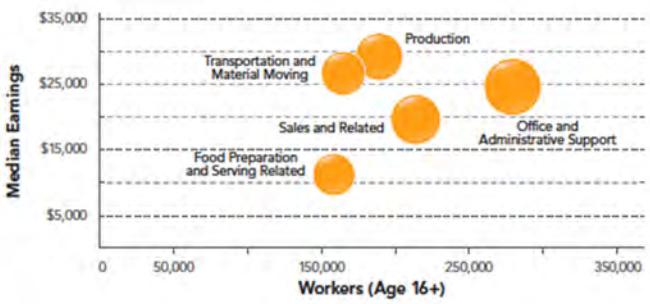


12C

LifeMode Group: Hometown

Small Town Simplicity

TAPESTRY SEGMENTATION
esri.com/tapestry

MARKET PROFILE (Consumer preferences are estimated from data by GfK MRI)

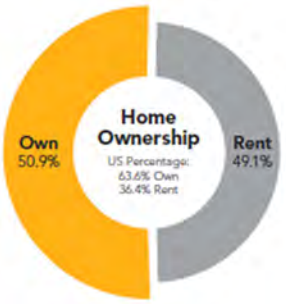
- *Small Town Simplicity* features a semirural lifestyle, complete with trucks (domestic, of course), ATVs, and vegetable gardens.
- Hunting, fishing, and target shooting are favorite pastimes.
- A large senior population visit doctors and health practitioners regularly.
- However, a largely single population favors convenience over cooking—frozen meals and fast food.
- Home improvement is not a priority, but vehicle maintenance is.

HOUSING

Median home value is displayed for markets that are primarily owner occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

Typical Housing:
Single Family

Median Value:
$88,000
US Median: $177,000



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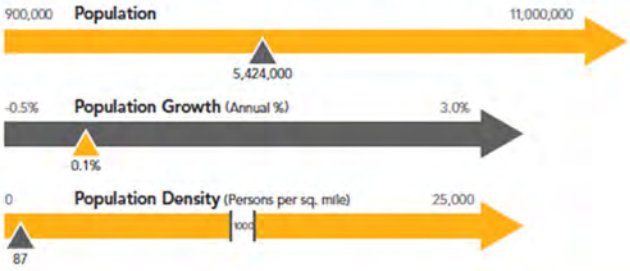

ESRI INDEXES

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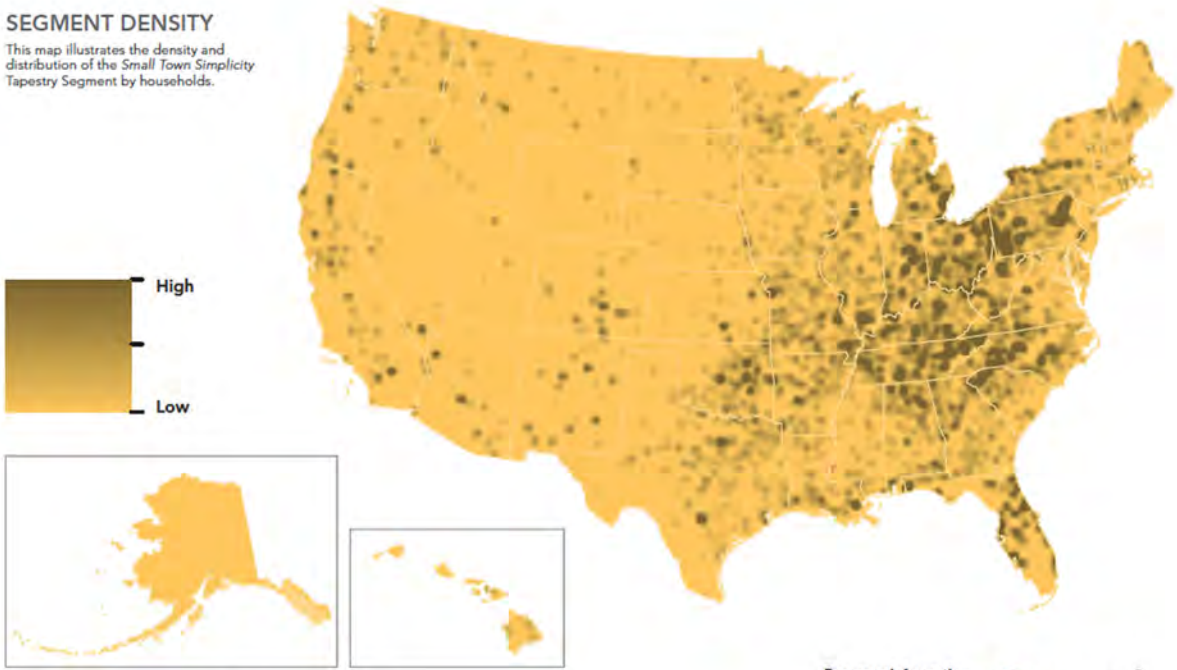
SEGMENT DENSITY

This map illustrates the density and distribution of the *Small Town Simplicity* Tapestry Segment by households.



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info@esri.com
esri.com

esri

TEC Figure 10, Michigan City Tapestry Segments and Percent of Households (2016) Source: ESRI

LifeMode Group: Cozy Country Living

The Great Outdoors

6C

Households: 1,850,000

Average Household Size: 2.43

Median Age: 46.3

Median Household Income: $53,000

Percent of Michigan City Households

2.8%

WHO ARE WE?

These neighborhoods are found in pastoral settings throughout the United States. Consumers are educated empty nesters living an active but modest lifestyle. Their focus is land. They are more likely to invest in real estate or a vacation home than stocks. They are active gardeners and partial to homegrown and home-cooked meals. Although retirement beckons, most of these residents still work, with incomes slightly above the US level.

OUR NEIGHBORHOOD

- Over 55% of households are married-couple families; 36% are couples with no children living at home.
- Average household size is slightly smaller at 2.43.
- Typical of areas with rustic appeal, the housing inventory features single-family homes (76%) and mobile homes (16%); a significant inventory of seasonal housing is available (Index 398).
- Residents live in small towns and rural communities throughout the West, South, and Northeast regions of the country.
- More than half of all homes were constructed between 1970 and 2000.
- Most households have one or two vehicles; average travel time to work is slightly higher (28 minutes) despite a disproportionate number that work from home (Index 155).

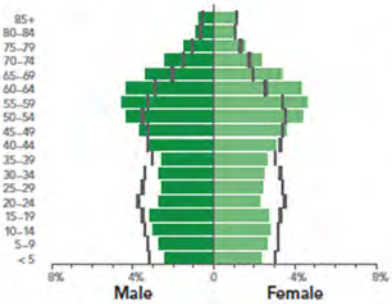
SOCIOECONOMIC TRAITS

- Nearly 60% have attended college or hold a degree.
- Unemployment is lower at 8% (Index 88), but so is labor force participation at 60%.
- Typical of neighborhoods with older residents, income from retirement and Social Security is common, but residents also derive income from self-employment and investments.
- Residents are very do-it-yourself oriented and cost conscious.
- Many service their own autos, work on home improvement and remodeling projects, and maintain their own yards.
- They prefer domestic travel to trips abroad.

AGE BY SEX (Esri data)

Median Age: 46.3 US: 37.6

Indicates US



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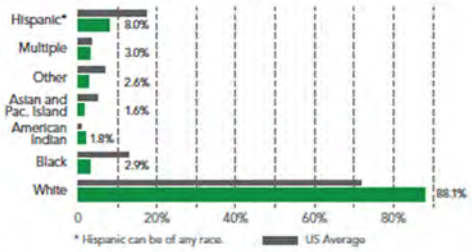
Diversity Index: 33.7 US: 62.1



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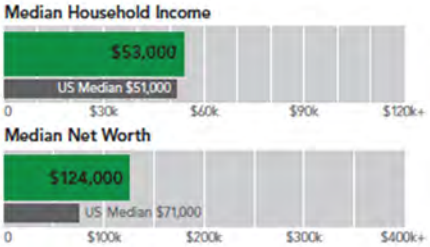

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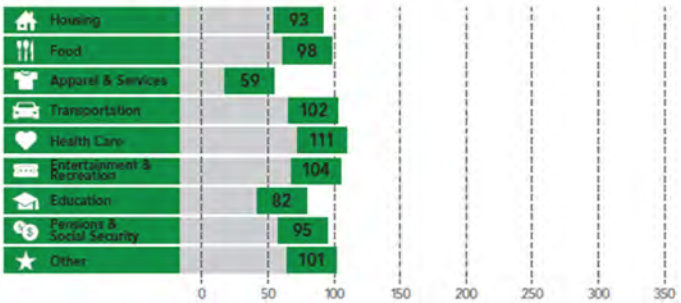

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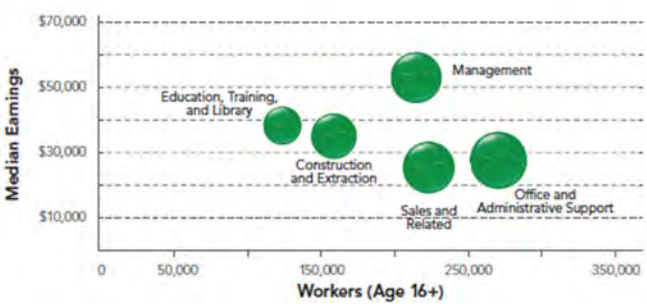


6C

LifeMode Group: Cozy Country Living

The Great Outdoors

TAPESTRY SEGMENTATION
esri.com/tapestry

MARKET PROFILE (Consumer preferences are estimated from data by GfK MRI)

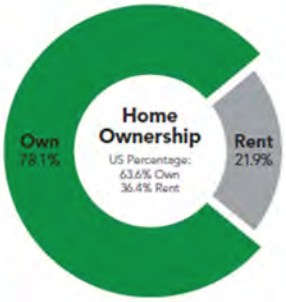
- Satellite dishes and riding lawn mowers are familiar sights in these rural settings, along with multiple vehicles; four-wheel drive trucks are popular, too.
- Residents are members of AARP and veterans' clubs and support various civic causes.
- Technology is not central in their lives: light use of Internet connectivity for shopping and entertainment.
- Most households have pets—dogs or cats.
- Television channels such as CMT, History, and Fox News are popular.
- They enjoy outdoor activities such as hiking, hunting, fishing, and boating.

HOUSING

Median home value is displayed for markets that are primarily owner occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

Typical Housing:
Single Family

Median Value:
$189,000
US Median: $177,000



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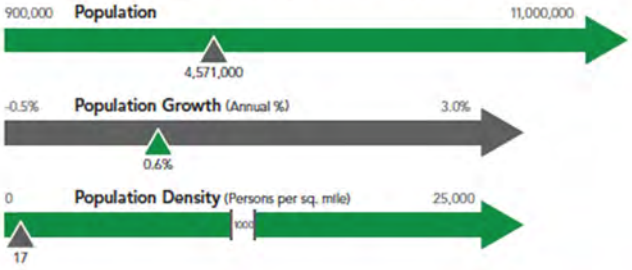

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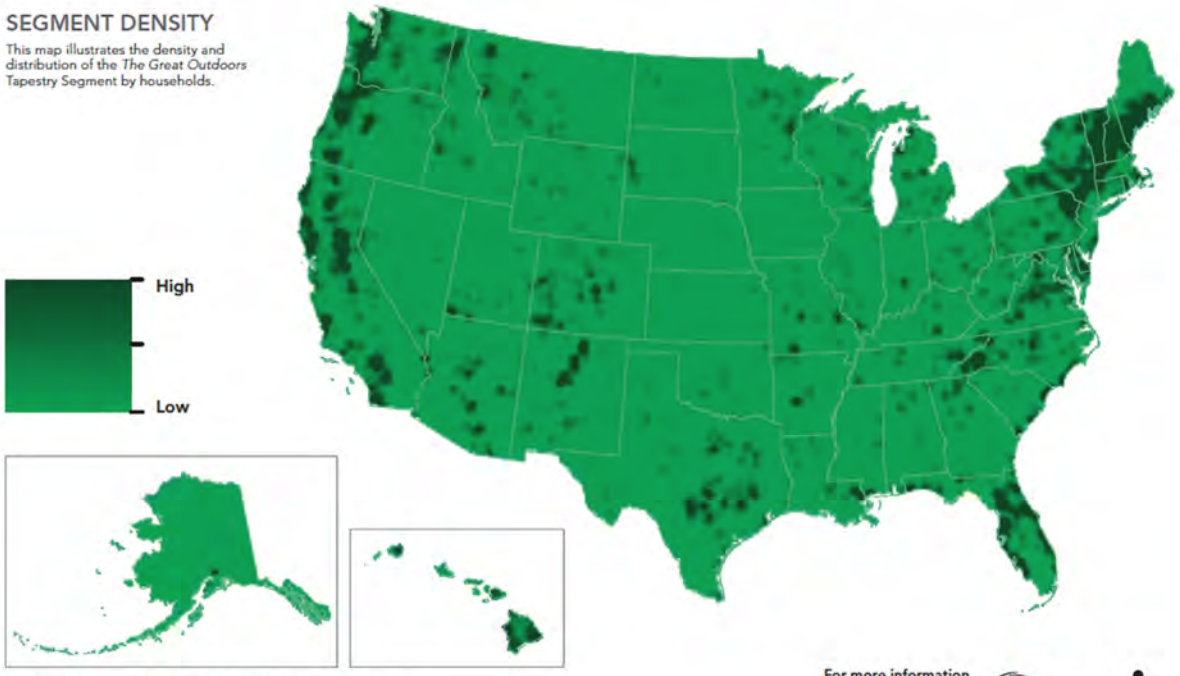

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TEC Figure 11, Michigan City Tapestry Segments and Percent of Households (2016) Source: ESRI

LifeMode Group: Senior Styles

Silver and Gold

9A

Households: 883,000

Average Household Size: 2.02

Median Age: 61.8

Median Household Income: $63,000

Percent of Michigan City Households

2.1%

WHO ARE WE?

Almost the oldest senior market (second to *The Elders*), the difference of 10 years in median age reveals a socioeconomic difference: This is the most affluent senior market and is still growing. The affluence of *Silver and Gold* has afforded the opportunity to retire to sunnier climates that feature exclusive communities and vacation homes. These consumers have the free time, stamina, and resources to enjoy the good life.

OUR NEIGHBORHOOD

- Residents of *Silver and Gold* prefer a more bucolic setting, but close to metropolitan cities.
- Predominantly single-family, owner-occupied homes that have a median value of $289,000 (Index 163).
- Neighborhoods include seasonal or vacation homes, reflected in the high vacancy rate of 35%.
- Mostly older married couples with no children, average household size is 2.02.

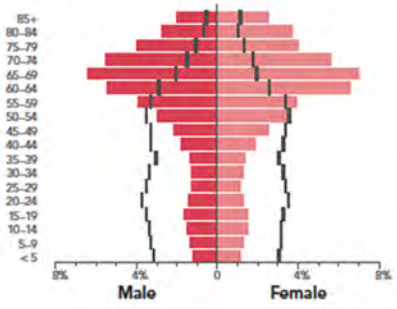
SOCIOECONOMIC TRAITS

- Well-educated seniors, 44% have college degree(s).
- Primarily retired, but many still active in the labor force, participation rate of 41%.
- Low unemployment at 7.2% (Index 83); with self-employment highest among Tapestry markets (Index 222).
- More than half of the households with income from wages/salaries, Social Security, or investments, many drawing retirement income (Index 219).
- Connected, but primarily to get news and track investments, more likely to own an e-reader or tablet than a smartphone.

AGE BY SEX (Esri data)

Median Age: 61.8 US: 37.6

Indicates US



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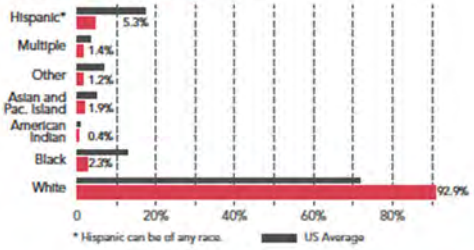

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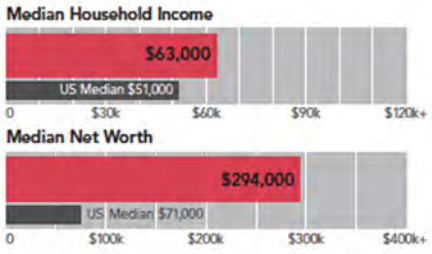

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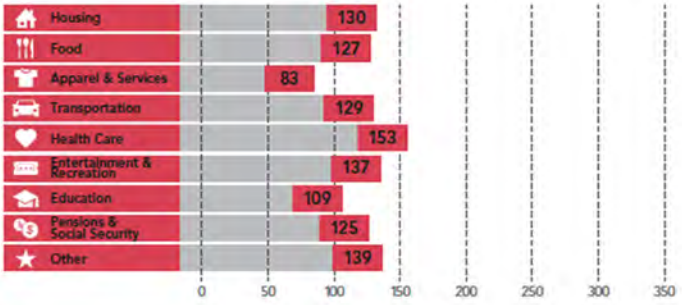

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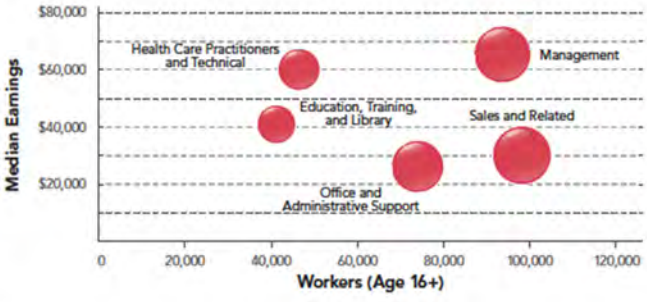

9A

LifeMode Group: Senior Styles

Silver and Gold

TAPESTRY SEGMENTATION
esri.com/tapestry

MARKET PROFILE (Consumer preferences are estimated from data by GfK MRI)

- Partial to luxury cars or SUVs; highest demand market for convertibles.
- Active seniors that maintain a regular exercise regimen and pay attention to healthier eating habits.
- Pursue the luxuries that well-funded retirement affords: an active social life, travel, hobbies, and sports (especially golf and boating) and liberal use of home maintenance services to minimize chores.
- Avid readers of newspapers, magazines (sports and travel), and books (audio, e-readers, or tablets).
- Generous supporters of charitable organizations.

HOUSING

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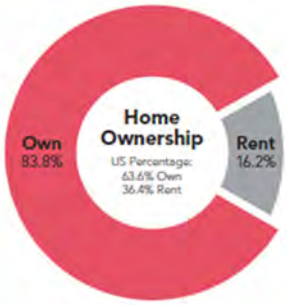

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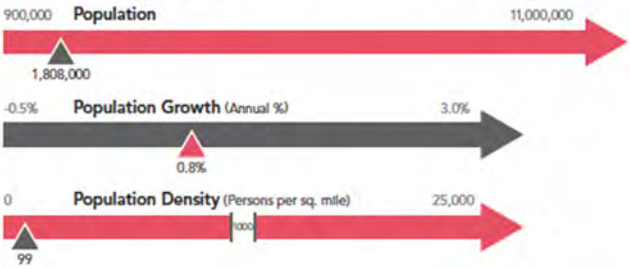

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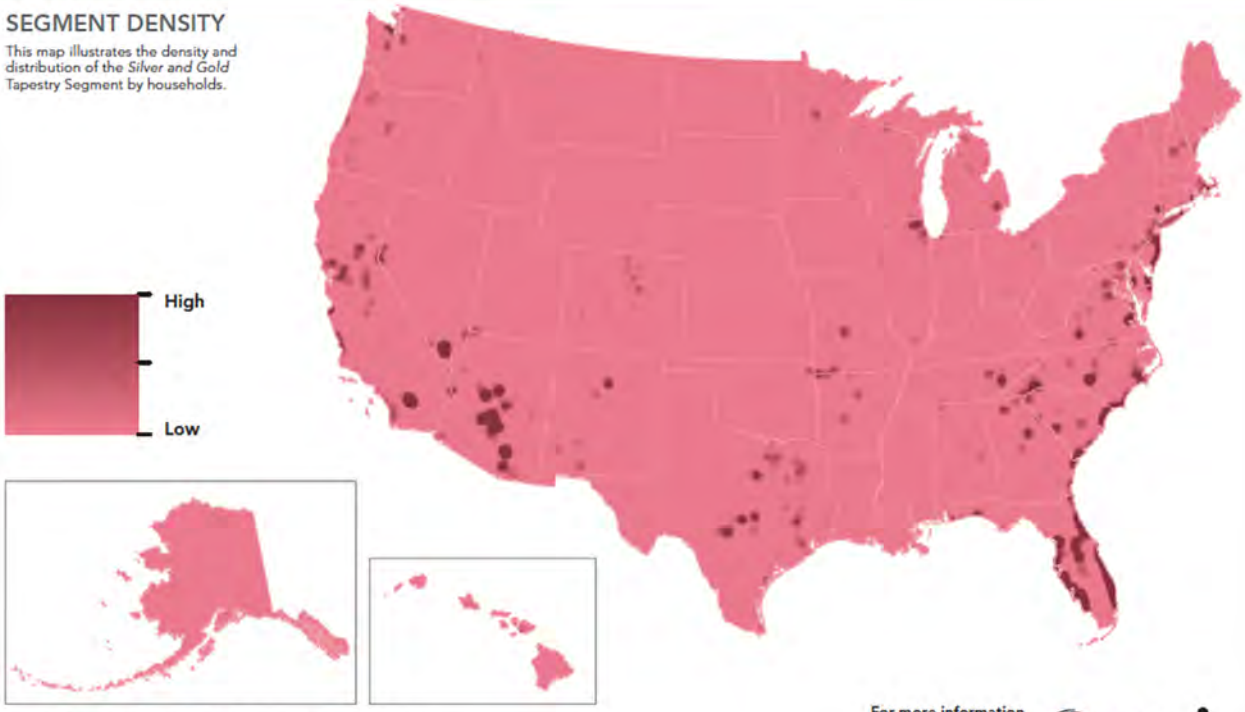

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TEC Figure 12, Michigan City Tapestry Segments and Percent of Households (2016)

Source: ESRI

LifeMode Group: GenXurban

Rustbelt Traditions

5D

Households: 2,685,000

Average Household Size: 2.46

Median Age: 38.4

Median Household Income: $49,000

Percent of Michigan City Households

2.0%

WHO ARE WE?

The backbone of older industrial cities in states surrounding the Great Lakes, *Rustbelt Traditions* residents are a mix of married-couple families and singles living in older developments of single-family homes. While varied, the work force is primarily white collar, with a higher concentration of skilled workers in manufacturing, retail trade, and health care. *Rustbelt Traditions* represents a large market of stable, hard-working consumers with modest incomes but above average net worth (Index 111). Family oriented, they value time spent at home. Most have lived, worked, and played in the same area for years.

OUR NEIGHBORHOOD

- Almost half (46%) of the households are married-couple families, similar to the US (48%), most without children (also similar to the US); the slightly higher proportion of singles (Index 105) reflects the aging of the population.
- Average household size is slightly lower at 2.46.
- They are movers, slightly more mobile than the US population (Index 109), but almost half of householders (46%) moved into their current homes before 2000.
- Most residents live in modest, single-family homes in older neighborhoods built in the 1950s (Index 218).
- Nearly three quarters own their homes; over half of households have mortgages.
- A large and growing market, *Rustbelt Traditions* residents are located in the dense urban fringe of metropolitan areas throughout the Midwest and South.
- Most households have two or more vehicles available.

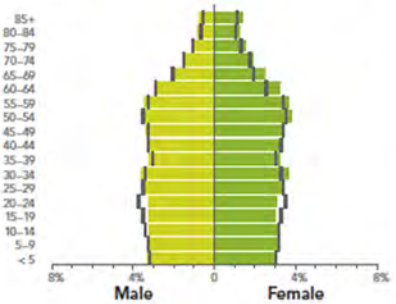
SOCIOECONOMIC TRAITS

- Most have graduated from high school or spent some time at a college or university.
- Unemployment below the US at 8%; labor force participation slightly higher than the US at 67%.
- While most income derived from wages and salaries, nearly 30% of households collecting Social Security and nearly 20% drawing income from retirement accounts.
- Family-oriented consumers who value time spent at home.
- Most lived, worked, and played in the same area for years.
- Budget aware shoppers that favor American-made products.
- Read newspapers, especially the Sunday editions.

AGE BY SEX (Esri data)

Median Age: 38.4 US: 37.6

| Indicates US



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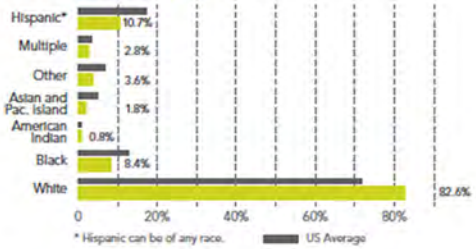

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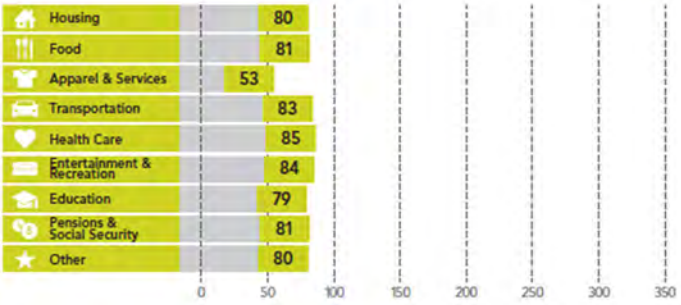
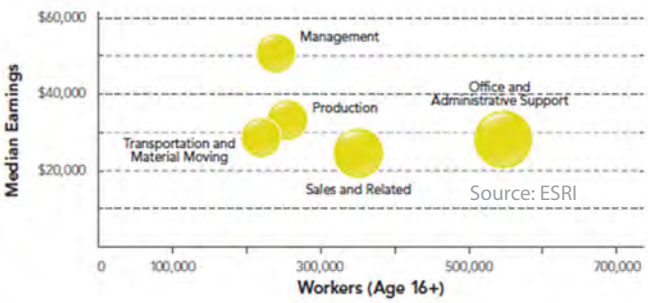


OCCUPATION BY EARNINGS

The five occupations with the highest number of workers in the market are displayed by median earnings. Data from the Census Bureau's American Community Survey.



5D

LifeMode Group: GenXurban

Rustbelt Traditions

TAPESTRY SEGMENTATION
esri.com/tapestry

MARKET PROFILE (Consumer preferences are estimated from data by GfK MRI)

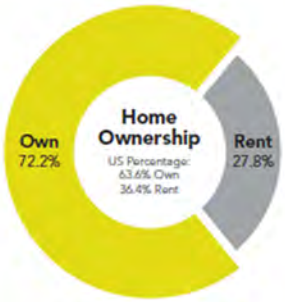
- Residents take advantage of convenience stores for fueling up and picking up incidentals.
- Watching television is a common pastime; many households have more than four TVs.
- Favorite programming ranges from ESPN, Animal Planet, and AMC to children's shows on Nickelodeon and Cartoon Network.
- Residents are connected; entertainment activities like online gaming dominate their Internet usage.
- Favorite family restaurants include Applebee's, Outback Steakhouse, and Texas Roadhouse.
- Radio dials are typically tuned to classic rock stations.

HOUSING

Median home value is displayed for markets that are primarily owner occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

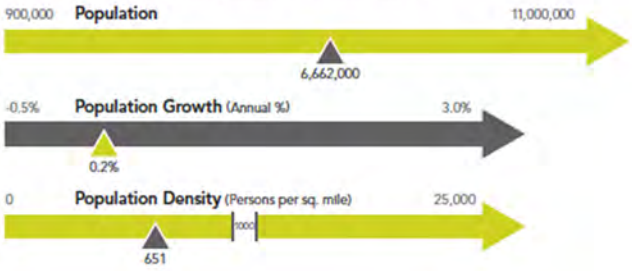
Typical Housing:
Single Family

Median Value:
$118,000
US Median: $177,000



POPULATION CHARACTERISTICS

Total population, average annual population change since Census 2010, and average density (population per square mile) are displayed for the market relative to the size and change among all Tapestry markets. Data estimated by Esri.

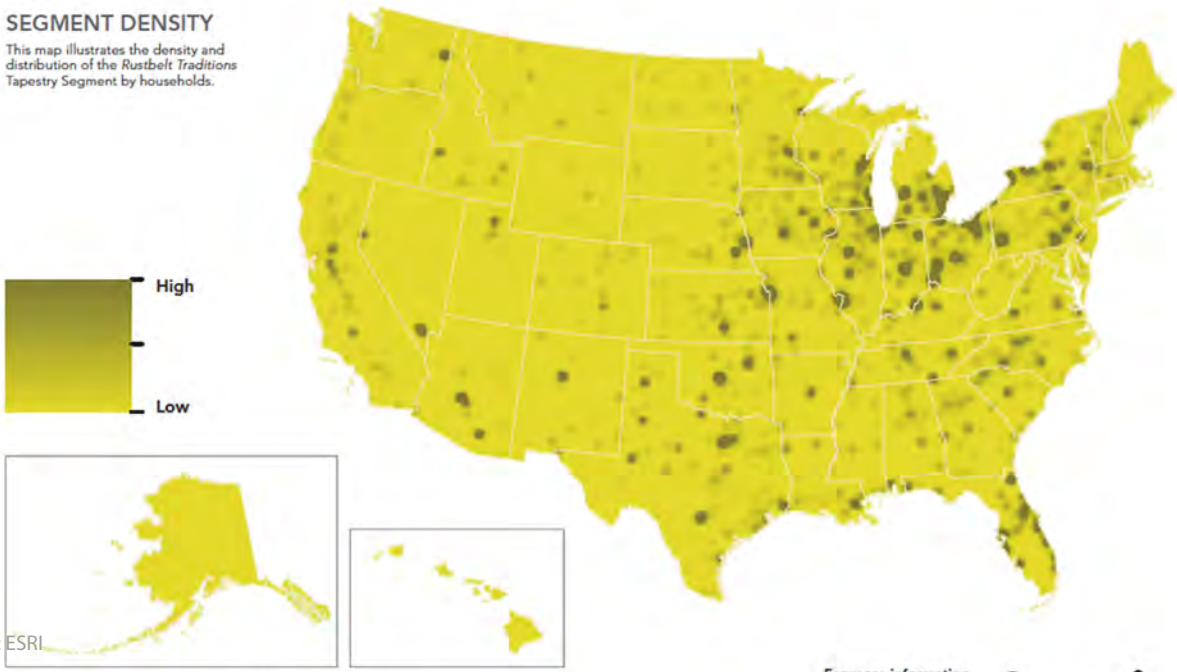


ESRI INDEXES

Esri developed three indexes to display average household wealth, socioeconomic status, and housing affordability for the market relative to US standards.

SEGMENT DENSITY

This map illustrates the density and distribution of the *Rustbelt Traditions* Tapestry Segment by households.



Source: ESRI

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Economic Context

OVERVIEW

The City of Michigan City is at a critical point in growing and diversifying its economic development "infrastructure."[1] As a Midwestern community located on the shores of Lake Michigan, in LaPorte County, along Interstate Highway 94 (I-94), in one of the most favorable taxation states for business and industry, Michigan City has long benefited from its strategic location and abundant natural resources. However, despite these advantages and its position as an outer ring community to the third largest economy in the nation, in recent years, Michigan City, like so many other communities in what was once referred to as the nation's rust belt, has struggled with navigating the "peaks" and "valleys" of economic cycles. Going forward, given the highly competitive environment for industry attraction and expansion, Michigan City will need to partner with multiple advocacy entities, leverage limited resources and take a holistic approach to economic development. A community's economic development infrastructure is multi-faceted. In order to effectively accomplish its economic development goals, it must first see itself through the lens of the corporate site seeker. Michigan City's potential must be assessed in terms of those factors that are important in the facility location and business expansion decision-making process, notwithstanding quality of life features which are important to both residents and business owners.

Whereas the primary purpose behind any economic development initiative is to achieve new gains in the financial and fiscal growth of the community, these pursuits most often involve:

- creating business activity and jobs through attraction, expansion and retention efforts;
- reducing unemployment; and
- increasing the earnings of residents that will, in turn, be reinvested back into the municipality.

Critical to the City's sustained success is growth across multiple sectors. Any community dependent on a single industry or a few industries will experience highly volatile economic cycles of expansion and contraction. Diversification of its economic base, together with completion of improvements that benefit both employers and residents, and public support for every aspect of its economic development infrastructure, is essential and a viable approach to insulating the community from outside influences including regional and national policies that cannot be influenced at the local level.

The analysis of the community's economic development infrastructure presented on the following pages is intended to provide an objective, unbiased assessment of Michigan City's competitive position relative to other geographies including the Michigan City - La Porte

Economic Development Infrastructure

PEOPLE: as an element of a community's economic development infrastructure includes its resident and non-resident employees, its labor force and its employers.

SITES AND BUILDINGS: as an element of a community's economic development infrastructure include opportunity sites and buildings which can effectively leverage public incentives for development and redevelopment.

INCENTIVES AND BUSINESS SUPPORT: as an element of a community's economic development infrastructure includes public programs, projects and policies which overcome limited resources and facilitate private investment.

INFRASTRUCTURE: as an element of a community's economic development infrastructure includes roadways – modes, service, coordination, connections and, utility systems including power, water, sewer, cable, etc. which support private investment.

QUALITY OF LIFE: as an element of a community's economic development infrastructure includes recreation amenities, social services, public facilities, etc., which both visitors and residents can access.

Source: Ricker | Cunningham.

1 Economic development infrastructure = people + infrastructure + sites and buildings + incentives + business climate + quality of life.

MSA and larger trade area within which businesses and industry compete for investment. The facts and figures presented are based on primary and secondary research, along with review of existing municipal resources, plans and reports. Conclusions drawn from this work should inform initiatives of the City and its partners in positioning itself for growth and development.

PEOPLE

AS explained in the previous psychographic overview, people, as an element of a community's economic development infrastructure include its resident and non-resident employees, its labor force, and its employers. TEC Table 3, *Labor Force and Employment*, provides an overview of these economic indicators for the city, MSA and competitive trade area referred to herein as the Expanded Trade Area, to illustrate the magnitude of each one and comparative relationship among these various geographies. Definitions of each indicator are provided in the adjacent text box.

According to the *Michigan City Economic Development Action Initiative* report prepared in April 2014, job growth in key industry groups helped Michigan City and the larger MSA rebound following the Great Recession,

People Infrastructure

LABOR FORCE: All the members of a particular organization or population who are able to work, employed and unemployed.

EMPLOYEES: Persons 16 years and over in the civilian non-institutional population who work as paid employees.

UNEMPLOYMENT: People who are not working, have not actively looked for work in the past four weeks, and are currently available for work; also, people who were temporarily laid off and waiting to be called back to that job are included.

LABOR FORCE PARTICIPATION RATE: Percentage of the population that is either employed or unemployed (working or actively seeking work)

Source: Bureau of Labor Statistics and Ricker | Cunningham.

TEC Table 3, Labor Force and Employment

Area	2010	2017 YTD August	% Change
Michigan City			
Labor Force	13,671	12,499	-8.6%
Employment	11,894	11,812	-0.7%
Unemployment	1,777	687	-61.3%
Unemployment Rate	13.0%	5.5%	-57.7%
Michigan City - La Porte MSA			
Labor Force	51,336	46,900	-8.6%
Employment	45,158	44,610	-1.2%
Unemployment	6,178	2,290	-62.9%
Unemployment Rate	12.0%	4.9%	-59.4%
Expanded Trade Area*			
Labor Force	333,944	339,153	1.6%
Employment	298,991	321,172	7.4%
Unemployment	34,953	17,981	-48.6%
Unemployment Rate	10.5%	5.3%	-49.3%

* includes Jasper, Lake, La Porte, Newton and Porter Counties.
Source: Indiana Workforce Development; ESRI, Inc.; and Ricker | Cunningham.

TEC Table 4, Employment by Industry

	Michigan City		Michigan City - La Porte MSA		Expanded Trade Area*	
	# of Employees	% of Total	# of Employees	% of Total	# of Employees	% of Total
Natural Resources, Mining and Construction	790	3.5%	2,724	5.4%	18,709	5.7%
Manufacturing	2,134	9.6%	6,820	13.5%	29,155	8.8%
Trade, Transportation and Utilities	6,190	27.7%	12,037	23.8%	69,373	21.0%
Information	266	1.2%	930	1.8%	4,472	1.4%
Financial and Real Estate Activities	1,017	4.6%	2,046	4.0%	16,018	4.9%
Professional and Business Services	1,217	5.4%	2,513	5.0%	22,664	6.9%
Educational and Health Services	4,421	19.8%	9,402	18.6%	82,880	25.1%
Leisure and Hospitality	3,960	17.7%	6,544	12.9%	45,531	13.8%
Other Services	838	3.8%	2,260	4.5%	18,952	5.7%
Government	1,500	6.7%	5,315	10.5%	21,980	6.7%
Unclassified	11	0.0%	19	0.0%	308	0.1%
Totals	**22,344**	**100%**	**50,610**	**100%**	**330,042**	**100%**

* includes Jasper, Lake, La Porte, Newton and Porter Counties.
Source: U.S. Census Bureau; Indiana Business Research Center; and Ricker | Cunningham.

nearly reaching pre-Recession levels. According to the Pew Research Center, two Indiana metro areas ranked among the top ten for loss of economic status during the Great Recession. Fort Wayne and Michigan City - La Porte both saw an 11 percent decline between 2000 and 2014, largely due to a drop in manufacturing jobs, making them the fifth and sixth hardest hit cities in the nation.

Despite their losses, manufacturing continues to be a primary industry group in both Michigan City and LaPorte County, largely due to their geographic locations within 55 miles of Chicago and 10 miles of the Michigan state line. With access to numerous east-west and north-south region-serving interstate and state highways, the Michigan City - La Porte MSA has become a leader in production and distribution facilities and has grown its number of logistics businesses.

As reflected in TEC Table 4, *Employment by Industry,* other major industry groups include Trade, Transportation and Utilities, Educational and Health Services, and Leisure and Hospitality. In 2016, these sectors employed more than 65 percent of all employees in Michigan City and approximately 55 percent of all MSA employees. Manufacturing in Michigan City represents 9.6 percent of the City total, also sizable, yet half the percent of the three primary segments, and 13.5 percent of the MSA total. Total employment in the City represents approximately 44 percent of the MSA total and MSA employment represents approximately 15 percent of the regional total.

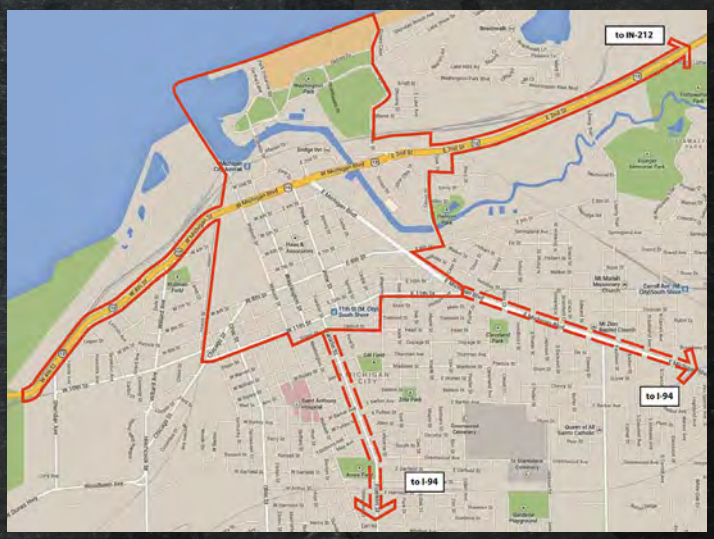
Lake Michigan Gateway Implementation Strategy

The Lake Michigan Gateway Implementation Strategy (LMGIS) Study Area focuses on a 700 acre site centered around the Uptown Arts District (or downtown) and includes Washington Park, Lighthouse Place Premium Outlets, Blue Chip Casino, the Route 12 corridor within city limits, and Franklin Street and Washington Boulevard entry points. The purpose of LMGIS is to capitalize on the extraordinary potential of the Study Area and to transform it into an impressive gateway to the Downtown and Lakefront. The project will offer a framework for investment and policy decisions as well as feasible, priority implementation projects. To maximize investment in the LMGIS Study Area, the project also includes recommendations on infrastructure, pedestrian and vehicular circulation, and land use improvements.

The overall goal of LMGIS is to "make Michigan City Indiana's great lakefront destination community". Three themes steer the project to its goal: first, market and program (why come and why stay?). Second, identity and arrival (getting here and getting around) and third, the environment (why come back and stay longer?). The project objectives to meet the project's goal are, first, support a cluster of year-round activities and destinations for the whole family. Second, easy access and navigation of the area. Third, experience an extraordinarily attractive environment. And finally, strive to increase private sector investment; produce more jobs and more tax revenue.

LMGIS also offers several strategies with recommendations to accomplish the project objectives. First, it is important for the city to refine and consistently communicate the brand of Michigan City and to integrate this brand across all markets. Next, the city needs to develop more magnet and secondary attractions. The City already has major regional destinations including the lakefront, Washington Park, the Lighthouse Place Premium Outlets, and Blue Chip Casino. The recommendation is to showcase these amenities, as well as add to and update their facilities so that they complement each other, creating a "Golden Diamond" of area attractions that will entice visitors to "linger-longer". In addition to these amenities, the project calls for a new visitor-oriented entertainment district or destination at the center of the diamond. Suggested updates and programming for the "Golden Diamond" include indoor and outdoor magnet attractions like festivals, a tournament sports venue, an indoor waterpark, marina, trail improvements, small amusement park with mini-golf and go-carts, destination restaurant and retail, a movie theater, and a children's attraction.

Simplifying the connections is another important strategy. LMGIS recommends improving connectivity by updating traffic patterns in the LMGIS Study Area, updating parking on streets, capitalizing on the rail and bus routes in the city, enhancing the streetscape, and making street right-of-way improvements for better pedestrian and bicycle movement. In addition, the project introduces a possible shuttle or trolley system with routes that connect all parts of the diamond to the Indiana Dunes, the outlet mall, casino, Washington Park and the lakefront. And a final strategy is to create and maintain a memorable appearance and consistent message. The project suggests some elements that will help promote this message, including, creating a prominent Identity from I-94 to draw the attention of passing motorists to Michigan City and the lakefront. Also, additions and improvements to the wayfinding and signage program already implemented in the city will help create a consistent message to visitors. And finally, gateway statements, architectural style, landmarks buildings, and sculpture will reinforce an overall appearance of the city.



INDUSTRY TARGETS AND CLUSTERS

An important component of Michigan City's forward-thinking economic development strategy is the attraction of targeted industries and business organizations with a strong likelihood of locating in the community. With an understanding of each one, future marketing efforts can be more strategic and land use planning more reflective of actual market circumstances. By focusing the City's programs on industries most likely to seek relocation and expansion opportunities, Michigan City can make the most efficient use of available resources and more effectively position itself for investment.

The approach used to select target industries combines computer technology with practical experience in market research, corporate real estate and economic development. The process of target industry identification consists of a series of sequential screening steps designed to eliminate all but the most favorable industries and business sectors. The results of the analysis include those industries and business groups attracted to Michigan City's competitive advantages including low income taxes, moderate business costs and a diverse base of resources with which to attract and retain companies. These industries include:

Advanced Manufacturing

- Food Processing
- Metal Fabrication Machining
- Air Compressor Equipment

Transportation, Distribution, and Logistics

- Freight Management
- Warehousing
- Distribution

Professional Services

- Healthcare Services
- Call Centers
- Information Technology

For the same reason that new businesses will be attracted to the area's attributes, so too will existing businesses among these groups be likely to expand. Experience has shown that the majority of job growth in a market is a byproduct of retention and expansion among existing operators. TEC Table 5, *Michigan City Major Employers* (following page), includes a list of major industrial operators (those with more than 100 employees) located in Michigan City, most if not all of which fall within one of the community's industry targets.

Among the 80 companies listed in the *2017 Industrial Directory*, prepared by the Economic Development Corporation of Michigan City (EDCMC), 14 employ more than 100 individuals. The oldest existing company, Weil-McLain, was established in 1881 and the newest Mikropor America, Inc., was established in 2011. No other industrial operators have either been launched or relocated to Michigan City since 2011.

Major employers in LaPorte County, which includes Michigan City, along with other outlying communities, are presented in TEC Table 6, *LaPorte County Major Employers* (page A.45). As evidenced from the list, they fall within the Leisure and Hospitality, Educational and Health Services, Government and Manufacturing sectors, and most, if not all, fall within one of the industry targets.

INCOME AND WAGES

Although lower than average median wages can be considered a favorable factor among site selection experts, it may be an unfavorable factor among employees considering residency in one location versus another. As reflected in TEC Table 7, *Median Wage By Occupation* (page A.46), wages in the Michigan City - La Porte MSA are higher in 18 of the 35 categories of occupations presented. Not surprisingly, the majority of these occupations fall within industry groups with growth rates exceeding those of the nation. In 2016, the annual mean wage in the MSA was $39,050, compared to the national average of $49,630.

SITES AND BUILDINGS

As an element of a community's economic development infrastructure, sites and buildings are evaluated based on their availability, configuration, location and cost. A frequent hurdle in many community-led economic development efforts, development sites and building improvements, when effectively positioned, allow for timely business expansions and relocations. With this type of infrastructure available and in place, municipalities are able to shorten the timeframe within which businesses can be operational and can begin to realize associated economic benefits.

Source: Dwyer Instruments, Inc.

TEC Table 5, Michigan City Major Employers			
Industrial Employers with 100+ Employees	**Product Type**	**Established**	**Employees**
Dwyer Instruments, Inc.	Industrial Instruments and Controls	1955	220
Fas-Pak	Contract Packaging Services	1993	225
Fiberbond Corporation	Air Filters	1972	120
GAF Materials Corporation	Roofing Shingles	1999	150
Gypsum Express	Transportation Services, Freight Distribution	1985	120
Hearthside Food Solutions LLC	Baked Goods and Snack Foods	2009	450
Michiana Resources, Inc.	Sub Contract Assembly, Industrial Sewing	1970	121
Northern Indiana Public Service Company	Utility of Electric and Gas	1931	3,000
Sullair Corporation (A Hitachi Group Company)	Air Compression Diesel & Blast Hole Drills	1965	430
Sullivan-Palatek	Rotary Screw Air Compressors	1984	135
Tonn and Blank Construction Alverno Construction Corporation	Construction	1922	257
Vanair Manufacturing Inc.	Air Compression & Related Equipment	2008	102
Weil-McLain	Hydronic Heating Equipment	1881	180

Source: Michigan City Economic Development Corporation and Ricker | Cunningham.

The EDCMC maintains an active inventory of vacant sites and assemblages of properties in Michigan City, both served and un-served by utilities and infrastructure, which can host commercial, service and industrial operators. A synthesis of these are presented in TEC Table 8, *Michigan City Available Sites* (page A.49). As shown, there are ample opportunities within its municipal boundaries to support a range of new construction projects and broad spectrum of product types. They range in size from one to 124 acres and include stand-alone pad sites, as well as parcels within business center developments. They vary in terms of their access to and visibility from region-serving thoroughfares, but by and large, maintain zoning classifications able to accommodate the full spectrum of industry targets presented above.

Among existing improvements, while there appears to be an equally sufficient inventory of available spaces for retail, office and industrial operators, individual buildings were not investigated to determine their compatibility with the specific siting criteria of the industry targets. Additional study should be conducted in the context of a strategic economic development initiative to ensure that the location and configuration of these assets are

TEC Table 6, LaPorte County Major Employers

Major Employers	Municipality
Blue Chip Hotel Casino and Spa	Michigan City
Franciscan St. Anthony Health	Michigan City
IU Health La Porte Hospital	La Porte
Corrections Department	Westville
Indiana State Prison	Michigan City
LaPorte County Office	La Porte
Arconic Power & Propulsion	La Porte
Howmet Corporation	La Porte
Alpha Baking Company	La Porte
A-1 Eletrical Service	Michigan City

Source: Infogroup and Ricker | Cunningham.

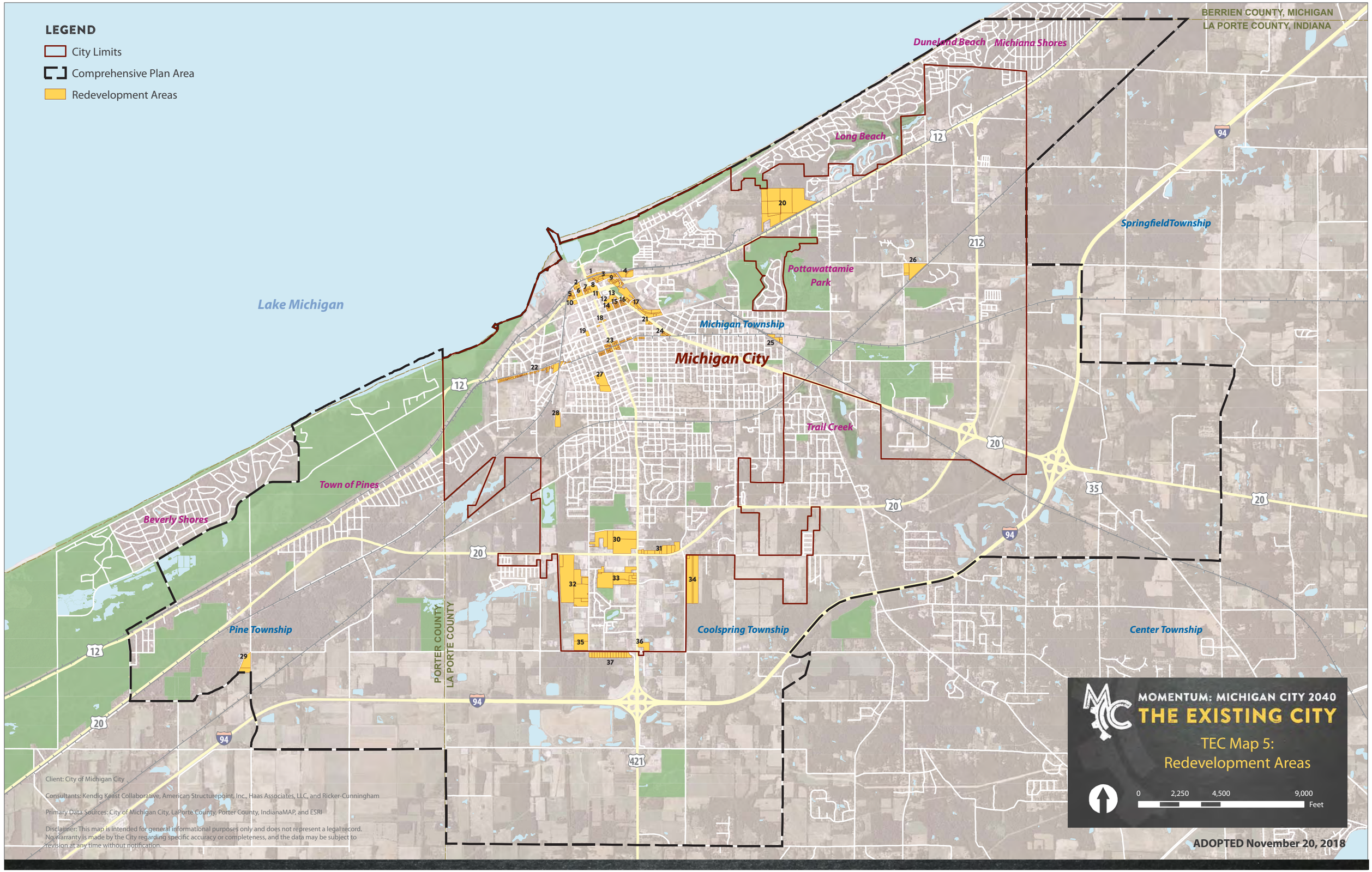
TEC Table 7, Median Wage by Occupation		
	Median Wage	
Occupation	Michigan City - La Porte MSA	Nation
Occupations with a higher wage rate in the MSA are shaded.		
Management, business, science and arts occupations	$48,009	$51,793
Management, business and financial occupations	$50,418	$59,211
Management occupations	$47,085	$61,759
Business and financial operations occupations	$52,273	$52,595
Computer, engineering and science occupations	$60,146	$67,402
Computer and mathematical occupations	$48,409	$70,594
Architecture and engineering occupations	$62,127	$70,504
Life, physical and social science occupations	$66,648	$53,069
Education, legal, community service, arts, and media occupations	$41,897	$40,170
Community and social services occupations	$27,079	$36,951
Legal occupations	$123,597	$71,323
Education, training, and library occupations	$53,577	$38,339
Arts, design, entertainment, sports and media occupations	$28,750	$35,270
Healthcare practitioner and technical occupations	$43,761	$51,763
Health diagnosing and treating practitioners and other technical occupations	$61,711	$61,845
Health technologists and technicians	$40,358	$35,234
Service occupations	$18,496	$17,061
Healthcare support occupations	$20,244	$21,548
Protective service occupations	$33,917	$40,801
Firefighting and prevention, and other protective service workers including supervisors	$45,762	$29,205
Law enforcement workers including supervisors	$33,708	$53,929
Food preparation and serving related occupations	$10,877	$12,436
Building and grounds cleaning and maintenance occupations	$25,213	$17,365
Personal care and service occupations	$21,068	$14,632
Sales and office occupations	$27,731	$27,206
Sales and related occupations	$21,878	$25,478
Office and administrative support occupations	$29,874	$28,180
Natural resources, construction, and maintenance occupations	$49,097	$32,284
Farming, fishing and forestry occupations	$21,266	$17,595
Construction and extraction occupations	$58,003	$31,228
Installation, maintenance and repair occupations	$39,094	$39,495
Production, transportation and material moving occupations	$37,265	$28,273
Production occupations	$36,639	$30,341
Transportation occupations	$37,509	$31,228
Material moving occupations	$38,409	$21,423

Source: Michigan City Economic Development Corporation and Ricker | Cunningham.

able to accommodate the requirements of expanding and new businesses. In terms of new construction, buildings able to adapt to changes in industry trends and fluctuations in market metrics, and as an approach to avoid facility obsolescence, will be important for a sustainable marketplace. TEC Table 9, *Michigan City Available Buildings* (page A.50), provides an overview of available building spaces in Michigan City. As shown, they range in size from approximately 1,200 to 500,000 square feet and include stand-alone pad sites, as well as buildings within business parks and shopping centers. Like available sites, they vary in terms of their access to and visibility from region-serving thoroughfares, but by and large, maintain zoning classifications able to accommodate the full spectrum of industry targets presented above.

TEC Map 5, Redevelopment Areas

1 Marina Park South
2 Michigan City Amtrak Station Block
3 Frontage between rail and E 2nd
4 Vacant Office / Warehouse
5 Former Service Station and Vacant Buildings
6 Former Service Station
7 Michigan City Police Department and The News-Dispatch block
8 City Hall
9 Pioneer Pier vacant block
10 Parking Lot at north end of LPP Outlets
11 Fifth Third Bank and Parking
12 Vacant Parcel at Pine and E 5th
13 Vacant Parcels by MCEDC
14 Vacant Block
15 Vacant Block
16 Vacant Block
17 Blocksom and Company Site and Old Sanitary District along Trail Creek
18 Parking Lot at Franklin and E 7th
19 Vacant Lot at Wabash and W 8th
20 Woodruff Property, Michiana Industrial Park
21 Former Brewery and vacant lot
22 Track realignment areas
23 Track realignment and TOD area
24 Former Chrysler/Plymouth dealership
25 Carroll Station Area
26 Niemann Elementary School
27 Franciscan Health Hospital
28 Central Maintenance Facility
29 Pine Elementary
30 Marquette Mall
31 Highway 20 Frontage
32 Industrial Sites
33 Dunes Plaza Area
34 Cleveland Avenue Area
35 Industrial Sites
36 Clarion Inn and Suites
37 W Kieffer Frontage


LEGEND
City Limits
Comprehensive Plan Area
Redevelopment Areas
BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA
Dunelend Beach
Michiana Shores
Long Beach
Springfield Township
Pottawattamie Park
Lake Michigan
Michigan Township
Michigan City
Trail Creek
Town of Pines
Beverly Shores
Pine Township
Coolspring Township
Center Township
PORTER COUNTY
LA PORTE COUNTY
12
20
94
212
35
421
Client: City of Michigan City
Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham
Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI
Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.
MOMENTUM: MICHIGAN CITY 2040
THE EXISTING CITY
TEC Map 5:
Redevelopment Areas
0
2,250
4,500
9,000
Feet
ADOPTED November 20, 2018

TEC Table 8, Michigan City Available SItes					
Property Location	**Zip Code**	**Acreage**	**Zoning**	**List Price**	**Description**
101 Lumber Center Rd.	46360	1.0 - 6.0 ac	Industrial	$135,000	$22,500 per acre
601 Wabash St.	46360	1.5 ac	Mixed-Use	NA	Retail Outlet
4507 East Highway 12	46360	8.0 ac	MD	$350,000	
760 North SR 212	46360	65.0 ac	Flex	$1.3 m	Existing Building 20,064 SF
NEC Hitchcock and Earl Rd.	46360	27.0 ac	General, R1, Mixed-Use	$270,000	Three (3) parcels
County Line Rd. and US 20	46360	63.0 ac	NA	$599,000	
900 South Woodland Ave.	46360	11.0 ac	M2	$200,000	
Frontage Rd. and US 421	46360	20.0 ac	General	$270,000	
1222 Garfield Ave.	46360	13.3 ac	Heavy Manufacturing, Industrial	NA	
US 35 and US 20	46360	3.0 - 40.0 ac	Industrial, Flex, Office, Warehouse / Distribution	$35,000 per ac	Woodruff Business Park
US 20	46360	6.1 ac	Office, Flex	$47,900 per ac	
5844 US 35 North and US 20	46360	4.4 ac	Mixed-Use, Warehouse / Distribution	$575,000	
US 20 East	46360	10.0 - 113.0 ac	Industrial	NA	
US 35 and US 20	46360	22.7 ac	Heavy Manufacturing, Industrial, Business Park, Mixed-Use	$47,900 per ac	
5914 West US 20	46360	5.0 - 124.36 ac	Flex, Office, Industrial	$28,900 - $35,000 per ac	Oehmstead Park
Frontage Rd. and US 421	46360	1.0 - 4.0 ac	Mixed-Use	NA	Sale or Lease
South Woodland Dr.	46360	7.23 ac	General	$79,999	
US 20 and Parker Road	46360	6.68 ac	General	$559,000	$83,682.64 per ac
US 20	46360	5.0 ac	General	$105,900	
8244 West US 20	46360	67.0 ac	Mixed-Use, General	$5.5 m	
US 35	46360	5.8 ac	Heavy / Light Manufacturing, Industrial, Business Park, Mixed-Use	$47,900 per ac	
3936 Frontage Rd.	46360	16.66 ac	B3	NA	

Source: Michigan City Economic Development Corporation and Ricker | Cunningham.

TEC Table 9, Michigan City Available Buildings							
Site/Building Name	Property Location	Zip Code	Minimum Size (sq ft)	Maximum Size (sq ft)	Building Type	Total Building Sq Ft	Lease Rate
Small Industrial Building	100 Winski Drive	46360	1,500	3,200	Industrial		
The Haskell Building	5000 Cleveland Avenue	46360	8,000	64,000	Industrial	64,000	
Ameriplex Marquette BTS	Meijer Drive & Cleveland Avenue	46360	10,080	10,080	Industrial		
1100 West Barker Avenue	1100 West Barker Avenue	46360	10,000	73,000	Industrial	73,000	$2.45
MCEC Industrial	901 South Woodland Avenue	46360	5,000	500,000	Industrial	506,650	
Dumelle Building	1264 West US Highway 20	46360	1,750	1,750	Industrial	1,750	$4,500/month
Nationwide Midwest Building	4921 Ohio Street	46360	40,000	172,800	Industrial	172,800	
Michigan City Town Center	4421 Franklin Street	46360	23,000	23,000	Mixed-Use		
Dunes Plaza	US Highway 20 and & US Highway 421	46360	1,200	30,000	Office		
MCEC Office Space	901 South Woodland Avenue	46360	2,500	50,000	Office	50,000	$8.75
Fifth-Third Bank	126 East 4th Street	46360	6,404	6,404	Office		$15.00
Park N' Shop Retail Space	3221 Franklin Street	46360	5,755	5,755	Office	5,755	$10.25
Michigan City Center	296 East US Highway 20	46360	1,185	3,883	Office		$10.00
Michigan City Plaza	4100 Franklin Street	46360	6,407	6,407	Office/Flex		$16.00
Remodeled NAPA Building	3515 Franklin Street	46360	4,100	4,100	Office/Flex		
Ruby Building	5000 South Ohio Street	46360	30,000	120,000	Office/Flex	150,000	$6.50
Eastwood Road Warehouse	1001 Eastwood Road	46360	12,700	12,700	Office/Flex		$4.80

Source: Michigan City Economic Development Corporation and Ricker | Cunningham.

Incentives and Business Support

ECONOMIC DEVELOPMENT INCENTIVES

A comprehensive complement of economic development incentives includes public programs, projects and policies used individually, and in varying combinations, to facilitate private investment. Resources provided and administered by Michigan City and its partner organizations range from financial assistance to workforce development, and include due diligence research and support in obtaining project entitlements. EDCMC is the community's principal organization leading efforts to support and pursue new and existing industries. As such, it acts as a liaison between local businesses and city government and advocates for capital projects that support the community's business environment and residents' quality of life.

LOCAL INCENTIVES

Local incentives administered by the EDCMC and Michigan City's Redevelopment Commission (RDC) include:

- Revolving Loan Fund;
- Urban Enterprise Zone;
- Tax Abatement (Real Property and Personal Property;
- Tax Increment Financing.

Each of these incentives is described below.

Michigan City Revolving Loan Fund

The Michigan City Revolving Loan Fund (MCRLF) was established in 2010 with the purpose of stabilizing and expanding the employment base and economy of Michigan City through and attraction of primary employment. In March of 2015, the EDCMC partnered with the Regional Development Company (RDC) Valparaiso, IN. The RDC works in conjunction with the EDCMC and the City of Michigan City to review and process the MCRLF.

Michigan City Urban Enterprise Zone

As summarized on the City's Economic Development Corporation website, the purpose of the Enterprise Zone program in Indiana is to stimulate local community and business redevelopment in distressed areas. An enterprise zone may consist of up to three contiguous square miles. In order to stimulate reinvestment and create jobs within the zone, businesses located within an enterprise zone are eligible for certain tax benefits and incentives.

The Urban Enterprise Association is composed of nine members; five members are appointed by the Mayor to include: one representative from the Plan Commission; one representative from the Department of Planning and Redevelopment; two representatives of business (one manufacturing) in the Urban Enterprise Zone; and one resident of the Urban Enterprise Zone. Four appointments are made by the City Council, including one member of the body whose district includes all or part of the Urban Enterprise Zone; one representative of a business located in the Urban Enterprise Zone; and two residents of the Urban Enterprise Zone.

Business Grant Program: One of the responsibilities of the Urban Enterprise Association is to administer the City's Business Grant Program, which is designed to help promote businesses located within the Urban Enterprise Zone boundaries and to assist in the overall plan for the City by promoting visual improvements, historic preservation, structural integrity, boosting the quality of product and enhancing the customer experience. The Michigan City Urban Enterprise Association desires to financially assist Michigan City Urban Enterprise Zone resident businesses in promoting their brick and mortar business and aiding in the exterior and interior rehabilitation of their building or property. Specifically, the grant is available for signage, machinery and equipment used in a business and for building improvements to exterior and interior of property. Funds are available in the form of a grant to all qualifying applicants. The Michigan City Urban Enterprise Association will reimburse 50 percent of the eligible costs not to exceed $7,500. Refer to TEC Map 6, *Special Financing Districts*. The Urban Enterprise Zone sunsets in 2019.

Real Property Tax Abatement

Real property tax abatement is a tool that allows business operators to avoid the burden of real property (equipment) taxes for a specific period of time, which is up to 10 years under the guidelines of this program. Tax abatements usually provide an almost immediate increase in the assessed value of property due to facility upgrades that result in an increase in the taxes paid and collected.

Personal Property Tax Abatement

Personal property tax abatement is a tool that allows business operators to avoid the burden of personal property (equipment) taxes for a specific period of time, which is up to 10 years under the guidelines of this program.

Tax Increment Financing (TIF)

As summarized on the Michigan City Economic Development Corporation's (MCEDC) website (http://www.edcmc.com/tax-increment-finance-zones-tif/), "Tax Increment Financing (TIF) is a tool that uses future gains in tax revenue to finance current improvements that will create those gains. When a public project such as road construction or hazardous waste cleanup is carried out, there is often an increase in the value of the surrounding real estate and perhaps new investment (new or rehabilitated for example). This increased site value and investment generate increased revenue. The increased revenues are the 'tax increment.' Tax Increment Financing dedicates increments within a certain defined district to finance debt issued to pay for the project. TIF is designed to channel funding toward improvements in distressed or underdeveloped areas where development might not otherwise occur. TIF creates a self-funding mechanism for "public" economic development projects that may otherwise be unaffordable to localities.

The Michigan City Redevelopment Commission has established four Tax Increment Finance Districts: the Community Center No. 1 Expanded Urban Renewal Area (North TIF); the Southside Redevelopment Area; the Northeast Roeske Avenue Economic Development Area; and the Eastside Economic Development Area. Following is a summary of each TIF District:

Community Center No. 1 Expanded Urban Renewal Area (North TIF)

Established:

- Original area: December 15, 1986
- Expanded area: January 6, 1997

Expiration:

- Original area: Januarty 15, 2040
- Expanded area: January 6, 2027 (30 year lifespan)

2016 TIF Distributions: $4,710,768.38

2016 Bond Payments: $1,568,330.84

2016 Project Expenditures and Fees: $7,885,843.54

Southside Redevelopment Area

Established:

- Original area): January 6, 1997
- Expanded area: March 12, 2012
- Expanded area: August 10, 2015

Expiration:

- Original area: January 6, 2027 (30 year life)
- Expanded area: March 12, 2037 (25 year life)
- Expanded area: August 10, 2040 (25 year life)

2016 TIF Distributions: $3,974,386.00

2016 Bond Payments: $589,414.00

2016 Project Expenditures and Fees: $963,344.99

Northeast Roeske Avenue Economic Development Area

Established:

- Original area: January 25, 1999

Expiration:

- Original area: January 25, 2029 (30 year life)

2016 Bond Payments: $248,784.20

Eastside Economic Development Area

Established:

- Original area: September 14, 2015

Expiration:

- Original area: September 14, 2040 (25 year life)

2017 TIF Distributions: Pending

2017 Bond Payments: Pending

2017 Project Expenditures and Fees: Pending

2017 TIF Financial Totals:

2017 Project Expenditures and Fees: Pending

2017 TIF Distributions: Pending

2017 Bond Payments: Pending

Refer to TEC Map 6, *Special Financing Districts*.

STATE INCENTIVES

State incentives administered by EDCMC include:

- Refundable Tax Credit;
- Business Investment Tax Credit;
- Industrial Recovery Tax Credit;
- Research and Development Tax Credit;
- Corporate Tax Credit.

Refundable Tax Credit: Economic Development for a Growing Economy (EDGE)

Economic Development for a Growing Economy (EDGE) is a refundable tax credit that can be offered in situations where Indiana is competing against another state or country for a company's site location investment. EDGE credits are calculated as a percentage of payroll tax withholding for net new Indiana jobs. Qualifying companies must commit to maintaining operations in Indiana for at least two years beyond the term of its EDGE credit.

Hoosier Business Investment Tax Credit (HBITC)

The Hoosier Business Investment Tax Credit (HBITC) is intended to encourage capital investment in Indiana by providing a credit against a company's Indiana tax liability. The credit amount is based on a company's qualified capital investment with the final credit amount determined by the Indiana Economic Development Corporation (IEDC), based on an analysis of the economic benefits provided by the proposed investment.

Industrial Recovery Tax Credit

The Industrial Recovery Tax Credit provides an incentive for companies to invest in facilities requiring significant and expensive rehabilitation. Once a building has been designated as an industrial recovery site, companies may be eligible for a tax credit equal to a percentage of qualified rehabilitation expenses.

Skills Enhancement Fund (SEF)

The Skills Enhancement Fund (SEF) provides financial assistance to businesses committed to training members of their workforce that are Indiana residents. SEF resources are used to reimburse eligible training expenses over a two-year term, however companies may reapply for additional SEF funds after their initial two-year term.

Industrial Development Grant Fund (IDGF)

The Industrial Development Grant Fund (IDGF) provides financial assistance to local governments for infrastructure projects associated with the expansion of an existing facility or the location of a new facility.

Research and Development Tax Credit

The Research and Development Tax Credit provides a tax credit equal to 15% of a company's first $1,000,000 of qualifying Research and Development expenditures, giving Indiana one of the highest Research and Development tax credit percentages in the country.

Indiana Corporate Tax Credit

The State offers many business tax incentives, corporate tax credits and economic development programs for companies creating new jobs and investment in Indiana. Our business tax structure is also very competitive. Indiana's corporate income tax is decreasing from the current 6.5% to 4.9% by 2021. As the decrease is phased in, the tax rate will drop each year. Indiana has a flat state corporate tax rate on adjusted gross income and no gross receipts tax or inventory tax.

FEDERAL INCENTIVES

Opportunity Zones

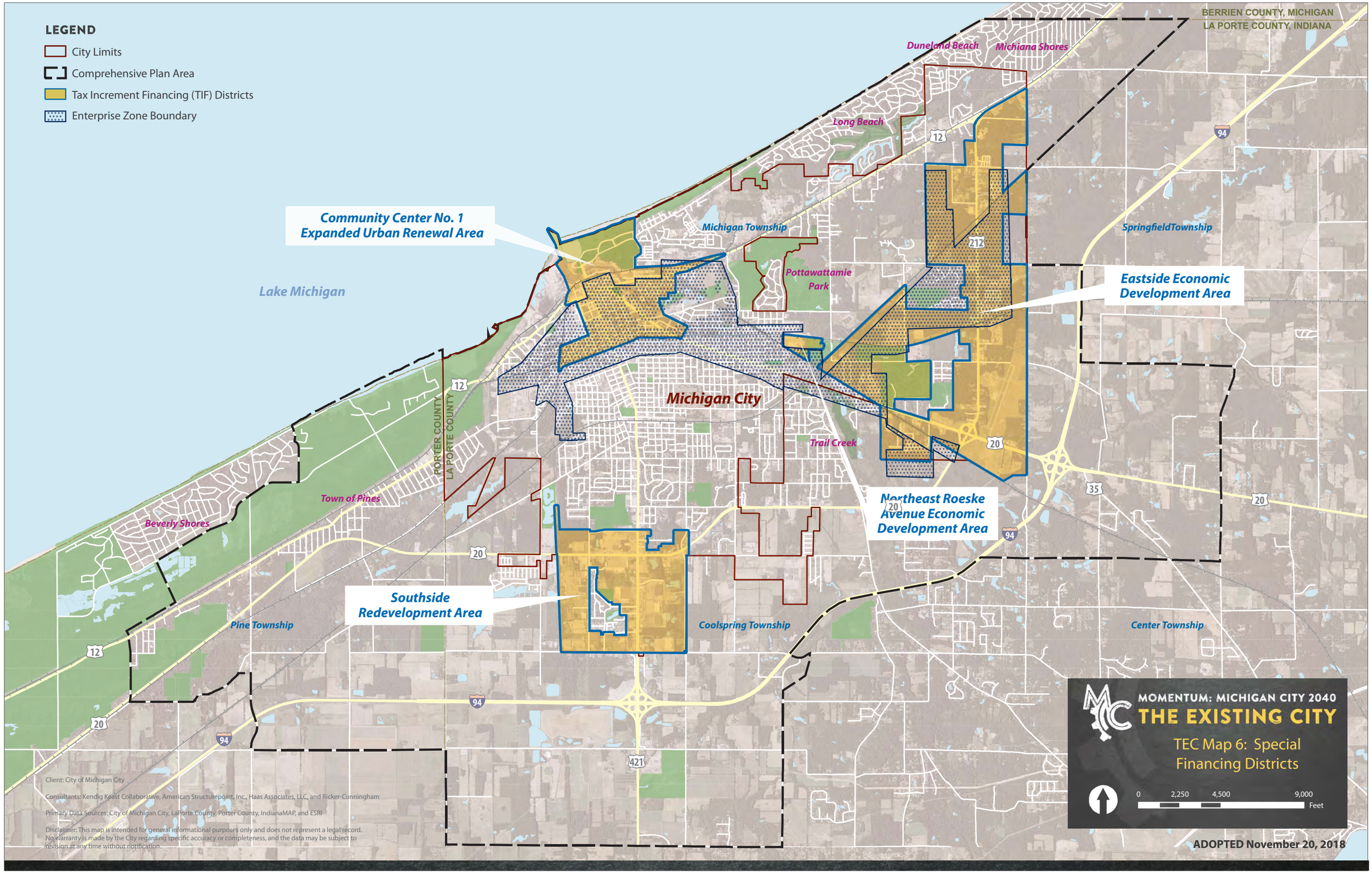
An Opportunity Zone is an economically-distressed community in which certain types of investments, made through Opportunity Funds (see below), may be eligible for preferential tax treatment. The tax incentive is designed to spur economic development and job creation in distressed communities by providing these tax benefits to investors. Any low-income census tract, as defined within the New Markets Tax Credits program, is eligible for designation as an Opportunity Zone.

Historic Tax Credit

Federal Rehabilitation Tax Credit (Historic Tax Credit) program encourages private sector investment in the rehabilitation and re-use of historic buildings. The federal tax credit allows program participants to claim 20 percent of eligible improvement expenses against their federal tax liability.

ECONOMIC DEVELOPMENT ADVOCACY ENTITIES

Groups and organizations providing a range of services and resources to Michigan City and its business base include those described here.


LEGEND
City Limits
Comprehensive Plan Area
Tax Increment Financing (TIF) Districts
Enterprise Zone Boundary
BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA
Dunelend Beach
Michiana Shores
Long Beach
Community Center No. 1
Expanded Urban Renewal Area
Michigan Township
Pottawattamie
Park
SpringfieldTownship
Eastside Economic
Development Area
Lake Michigan
Michigan City
PORTER COUNTY
LA PORTE COUNTY
Trail Creek
Town of Pines
Beverly Shores
Northeast Roeske
Avenue Economic
Development Area
Southside
Redevelopment Area
Pine Township
Coolspring Township
Center Township
12
94
20
212
35
421
Client: City of Michigan City
Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham
Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI
Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.
MOMENTUM: MICHIGAN CITY 2040
THE EXISTING CITY
TEC Map 6: Special Financing Districts
0
2,250
4,500
9,000
Feet
ADOPTED November 20, 2018

Economic Development Corporation of Michigan City (EDCMC)

The EDCMC's mission is to bring together the right mix of resources including government officials, utility engineers, and the expertise of business leaders to encourage investment and support business growth. In addition to providing services and resources to attract, retain and assist with expanding businesses within these industry groups, EDCMC has also developed programs supporting community preparedness, land assembly, brownfield redevelopment, and advancing shovel-ready projects.

Greater La Porte Economic Development Corporation (GLEDC)

The GLEDC was formed in 2001 to provide La Porte with a "One Stop Shop" for all business needs. GLEDC provides prospect development, project development, project coordination, and retention and expansion services. Areas of focus include: new business attraction efforts, incentive information and assistance, small business assistance, available property information and listings, contact for SBA 504 programs and the LaPorte County Revolving Loan, marketing and promotion efforts for development opportunities and growth, and retention and expansion efforts in conjunction with the Chamber of Commerce.

Northwest Indiana Regional Development Authority (RDA)

The RDA was created to partner with entities required to develop the infrastructure that will make Northwest Indiana economically vibrant. The legislation that created the RDA directed the organization to work equally and jointly with all groups in the region, without bias, and consider its infrastructure the region's assets, interrelated and supporting local economies that must become globally competitive.

Indiana Economic Development Corporation (IEDC)

The IEDC is the State of Indiana's lead economic development agency, and was officially established in February 2005 to replace the former Department of Commerce. It is led by Indiana's Secretary of Commerce and IEDC's President, and organized as a public private partnership governed by a board of directors. The IEDC Board is chaired by the Governor and reflects the geographic and economic diversity of state. The IEDC focuses on growing and retaining existing, and attracting new businesses.

Michigan City Chamber of Commerce

The Michigan City Area Chamber of Commerce has been assisting operators in the Michigan City market for more than 90 years, promoting and advocating for a favorable business climate for business and high quality of life.

COLLEGES AND UNIVERSITIES

In addition to groups engaged in industry attraction and expansion and development of supporting infrastructure, 20 different colleges and universities maintain campuses within a one-hour drive of Michigan City and provide educational support to the region's existing business base. Representative institutions include Indiana University, the University of Notre Dame, Purdue University, St. Mary's College and Valparaiso University. Technical training is provided by the LaPorte County Career and Technical Education Center (which is housed at the A.K. Smith Career Center) and Ivy Tech Community College. Refer to TEC Table 10, *Michigan City Educational Attainment*.

TEC Table 10, Michigan City Education Attainment (2016)	
High School Degree	27.8%
Associates Degree	7.4%
Bachelor's Degree	10.2%
Graduate / Professional Degree	6.7%

Source: US Census Bureau.

INFRASTRUCTURE

Physical infrastructure within a community primarily falls into two categories -- transportation and utilities -- both of which will be described in greater detail in this report. Of particular interest to individuals and entities involved in efforts to expand and sustain an area's economic and employment base are the presence of infrastructure, along with its capacity and condition relative to the needs of its businesses and desires of its residents. While a general discussion of capital improvements in the community will be provided in this plan, what follows here is a focused description of planned investment in the region's rail system considered to be a key component of Michigan City's efforts to grow its employment base and stabilize macroeconomic conditions.

In addition to major vehicular routes including Interstate Highway 94, east-west Interstate Highways 80 and 90, major U.S. Highways 6, 12, 20, 30, 35 and 421, and State Highways 29, 49, and 149, communities located in northern Indiana and Illinois are served by the CSX Transportation mainline and Norfolk Southern Railroad. The Chicago South Shore and South Bend Freight Railroad provide connections with all railroads in Chicago, connecting travelers to other national markets served by rail. In addition to moving raw materials and manufactured products, these rail lines also support commuter traffic between Chicago, Illinois and South Bend, Indiana. Amtrak provides passenger service to Chicago and Detroit.

Double-Tracking of the South Shore Commuter Rail Line (SSL)

The Northern Indiana Commuter Transportation District (NICTD) is the current operator of commuter trains connecting communities within four counties to the Chicago Metropolitan Area, located 55 miles to the west and South Bend 34 miles to the east. In 1977, the Indiana General Assembly passed legislation enabling the four counties served by the South Shore (St. Joseph, La Porte, Porter and Lake Counties) to create The Northern Indiana Commuter Transportation District (NICTD) for the sole purpose of maintaining and improving South Shore passenger service. NICTD initiated planning for expanded and new service on two particular lines, the West Lake Corridor and South Shore lines in the early part of the decade. Improvements identified for the South Shore Line (SSL) will include construction of a 16-mile second track between Gary and Michigan City, as well as enhancements to five existing station areas. The West lake Corridor project is estimated to cost $665 million and the SSL project is estimated to cost $312 million ($977 million total); a portion of which will include two new high-level 8-car platforms at the 11th Street station, which is located in Michigan City near Pine Street, and will include a station building and additional parking facilities.

NICTD proposed the projects in an effort to improve frequency and reliability, decrease travel times, enhance safety, and ultimately, set the stage for major economic development within the station areas along the rail lines.

The SSL currently operates mostly on a single track that is shared with freight rail. The continuous second track will allow trains and passengers to continue to their destination without stops and delays caused by passing trains, maintenance work and other track issues. In addition, current overcrowding, which is only expected to worsen as ridership increases, will be eased with additional train service and shorter travel times. Today, travel time between Michigan City and Chicago on the SSL is longer than by car, which is roughly one hour, making it a less desirable choice for travel.

The Federal Transportation Administration (FTA), the principal funding agent for Core Capacity Projects such as this, is involved in three phases including project development, engineering, and construction. During project development, the local transit entity requests authorization from the FTA to commence environmental reviews and studies, as well as consider alternatives and select a final alignment. During the engineering phase, project design is completed with enough detail to allow FTA to evaluate, rate, and approve the designs. Finally, during construction, a funding agreement will be signed and project bids are solicited and received for construction of the transit improvement. As of mid-year 2017, the South Shore Line's Double Track project was concluding the engineering phase with requests for ratings submitted in early February 2015. Based on the current schedule, construction is expected to be completed and the line in operation by the end of 2020.

Between these end stations there are 19 local station stops. It currently takes the average person one hour and 47 minutes to travel the route from beginning to end, but a project is underway to decrease that traveling time. The double-tracking of the South Shore Commuter Rail Line project includes double tracking 16 miles of rail line and improve the five station stops between the cities of Gary and Michigan City. The strategic business plan sets forth a vision that would build on the 30-year history of upgrades and would position the railroad to be competitive with vehicular commuting by enhancing safety, reducing travel time, increasing frequency, and improving reliability. With the new double track in place, ridership will also be able to increase and accommodate any population growth in the predominately residential area. (MC Real estate ppt)

The double-tracking project is scheduled to start with the environmental assessment, public hearings and a project rating in 2017. Then, in 2018, the property acquisition will begin with the completion of rail design and engineering. Construction will begin in 2019 with the commencement of construction operations in October of the next year, 2020.

Both 10th Street and 11th street will be improved with the addition of the double track. 10th Street will be turned into a two-way thoroughfare instead of one-way and will run alongside the track. Several properties will need to be acquired and there will be multiple street closings. 11th Street will run eastbound one-way and will include a new passenger terminal between Franklin Street and Cedar Street.

According to the Michigan City/NICTD Rail Realignment Study (2013 Final Study Report), there are a total of 31 public at-grade highway (street) crossings between

LEGEND

- E 10th and E 11th right of way
- New rail alignment
- At grade crossings
- Cul-de-sac road closure
- Road closure
- Road extension/modification
- Station platform

US-12
PHASE I
SHERIDAN
HAYES
GREELEY
HANCOCK
SEYMOUR
DOUGLAS
GRANT
W 8TH
CARLON
DONNELLY
WILLARD
W 9TH
CLAIRE
GREEN
CHICAGO
COOPER
GREEN
KENTUCKY
TENNESSEE
OHIO
WARREN
ELSTON
WILLIAM
RIPLEY
WALL
BARKER

WASHINGTON
FRANKLIN
W 8TH
MANHATTAN
ELSTON
OHIO
TENNESSEE
KENTUCKY
CHICAGO
W 9TH
W 10TH
START ONE WAY
W 11TH (ONE WAY EASTBOUND)
GREEN
WARREN
WILLIAM
BUFFALO
WABASH
PINE
SPRING
CEDAR
DETROIT
E 11TH (ONE WAY EASTBOUND)
LAFAYETTE
YORK
MAIN
PHILLIPS
END ONE WAY
PHASE I
E MICHIGAN BLVD
TREMONT
PEARL
DUPAGE
THURMAN
OAK
MAPLE
ELM
POPLAR

MOMENTUM: MICHIGAN CITY 2040

THE EXISTING CITY

TEC Map 7: NICTD Phase I Double Tracking Project

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Sheridan Avenue to the west and Carroll Avenue to the east, within a distance of approximately three miles (14,600 lin. ft.). According to the Federal Railroad Administration (FRA) Office of Safety Accident Prediction System for 2009, three of the five highest hazard indices for at-grade highway crossings throughout the State of Indiana (over 2,000 at-grade crossings) are within the 10th and 11th Street corridor through Michigan City. They are: Pine Street (No. 2), Wabash Street (No. 4), and Franklin Street (No. 5).

As depicted in TEC Map 7, *NICTD Phase I Double Tracking Project*, from west to east, the following streets will maintain at-grade crossings over the South Shore track:

- Sheridan Avenue
- Willard Avenue
- Chicago Street
- Wabash Street
- Washington Street
- Franklin Street
- School Street
- Woodland Avenue
- Pleasant Avenue

The following streets will be closed and terminate with a cul-de-sac on the south side of the rail right-of-way, along 10th Street:

- Carlon Court
- Donnelly Street
- Claire Street

The following streets will be closed and terminate with a cul-de-sac on the north side of the rail right-of-way, along 11th Street:

- Kentucky Street
- Tennessee Street
- Elston Street
- Manhattan Street
- Buffalo Street
- Pine Street
- Spring Street
- Cedar Street
- York Street
- Maple Street

The following streets will be closed and terminate with a cul-de-sac on the north side of the rail right-of-way, along Holliday Street:

- Grace Street
- Edward Street
- Helen Street

The following streets will be closed:

- Calumet Street
- Carroll Street

For more information, refer to TEC Map 20, *Traffic Count Locations* (page A.99-100).

Quality of Life

Quality of life in Michigan City is largely driven by its proximity to major commercial markets and employment centers, and access to significant natural amenities. With an appealing recreational lifestyle, growing number of cultural and entertainment offerings, and lower cost of living, Michigan City's economic profile as an industrial enclave is being supplemented by its role as a burgeoning tourist destination and market for second homes.

Lake Michigan's southern shore provides visitors with access to a range of water-related activities. The community's proximity to Dunes National Lakeshore has made it attractive to individuals throughout Indiana and adjoining states desiring an extensive system of hike and bike trails. Indiana Dunes is located along 15 miles of the southern shore of Lake Michigan and comprises 15,000 acres. It offers visitors opportunities to scout for rare species of birds, enjoy its sandy beach, hike more than 50 miles of trails, and experience a range of terrains from wetlands, to prairies, and rivers to forests.

Michigan City's Downtown is emerging as a cultural district anchored by the Lubeznik Center for the Arts, and supported by various venues for performing arts groups, festivals, and pop-up markets. Washington Park and Beach is accessible from downtown, and together with the Blue Chip Casino and Lighthouse Place Premium Outlets, attract a growing number of visitors. Between 2000 and 2011, the Leisure and Hospitality sector was the only one to experience positive growth in LaPorte County, increasing at a rate of 4.1 percent, with the majority of new jobs located in Michigan City. Nationally, during this same timeframe,

total employment in the Leisure and Hospitality sector increased by less than one percent. In 2016, employees in this industry segment represented approximately 18 percent of total Michigan City employees, compared to 13 percent of all County employees.

A summary of quality of life indicators in Michigan City compared to national averages are presented in TEC Table 11, *Quality of Life Indicators.*

JOBS AND HOUSING

Two of the top challenges facing cities engaged in fostering a favorable climate for growth and

TEC Table 11, Quality of Life Indicators

Indicators	Michigan City, IN	Nation
Cost of Living Below National Average	11.3%	NA
Average Commute	22 minutes	25 minutes
Crimes per 100,000 Residents	2,775	4,482
Net Migration	-160	NA
Average Days Above 90 Degrees Fahrenheit	17	37
Average Days Below 32 Degrees Fahrenheit	132	88

Source: Forbes and Ricker | Cunningham.

Living Wage Calculator

The living wage model is an alternative measure of basic needs. It is a market-based approach that draws upon geographically specific expenditure data related to a family's likely minimum food, childcare, health insurance, housing, transportation, and other basic necessities (e.g. clothing, personal care items, etc.) costs. The living wage draws on these cost elements and the rough effects of income and payroll taxes to determine the minimum employment earnings necessary to meet a family's basic needs while also maintaining self-sufficiency.

Source: Massachusetts Institute of Technology (MIT)

TEC Table 12, Michigan City Housing Indicators

	June			Year to Date		
Key Metrics	2,016	2,017	Percent Change	Through 6-2016	Through 6-2017	Percent Change
New Listings	1,619	1,569	-3.1%	8,391	8,109	-3.4%
Closed Sales	1,131	1,241	9.7%	5,029	5,250	4.4%
Median Sales Price	$154,000	$162,500	5.5%	$145,000	$154,500	6.6%
Percent of Original List Price Received	94.9%	96.2%	1.4%	94.0%	95.1%	1.2%
Months Supply of Inventory	6.0	4.6	-23.3%	--	--	--
Inventory of Homes for Sale	5,239	4,287	-16.6%	--	--	--

Source: Indiana Association of Realtors and Ricker | Cunningham.

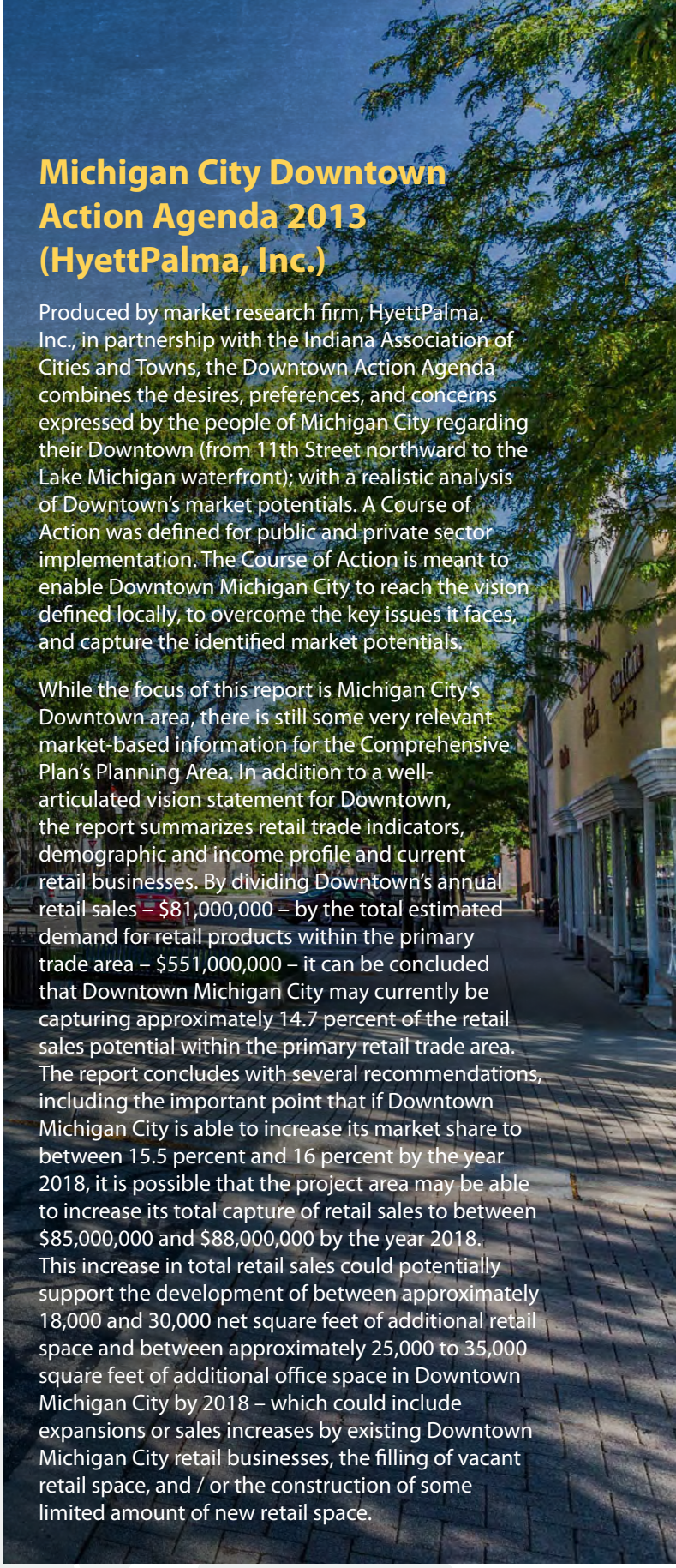
development are providing job opportunities with sustainable incomes for its residents (primary) and finding developers able to deliver a range of attainable housing options.

As will be discussed later in this report, providing a diversity of attainable housing options for a range of employers and employees of different income segments can be a significant challenge for communities, particularly when they have to rely on the experience and capacity of area home builders. Once the importance of this essential element of the economic development equation is understood, many communities actively engage in encouraging and even incentivizing housing development that aligns with its larger business and industry goals. In 2016, the median home price in Michigan City was approximately $130,200, an increase of 3.6 percent and a housing affordability rate of 274. TEC Table 11, *Michigan City Housing Indicators*, provides a snapshot of conditions in the existing Michigan City home market.

One measure of a community's ability to provide housing for employees is its jobs to housing ratio (total jobs / occupied households). Most experts believe that a ratio between 0.75 and 1.5 reflects a well-rounded local economy and be effective at "reducing vehicle miles traveled." The Michigan City jobs to housing ratio is 1.83, the MSA's ratio is 1.18, and the Expanded Trade Area within which businesses in the community compete, is 1.05. Based on these estimates, it appears that the City and MSA have been somewhat more effective at "closing the gap" between numbers of employees and households. What these figures do not show, however, is whether or not the type of units are meeting the lifestyle preferences of existing and potential residents. (See discussion about psychographic characteristics for a better understanding of this issue.)

CONCLUSION

Economic development initiatives should be designed to provide a bridge between an understanding of existing circumstances and desired outcomes. They should reflect a shared vision and goals and be implemented in the context of projects, programs and policies (near- and long-term). An illustration of a future framework for advancing economic development objectives in Michigan City is presented below. It will require ongoing refinement and specificity as their efforts proceed and progress is made.



Michigan City Downtown Action Agenda 2013 (HyettPalma, Inc.)

Produced by market research firm, HyettPalma, Inc., in partnership with the Indiana Association of Cities and Towns, the Downtown Action Agenda combines the desires, preferences, and concerns expressed by the people of Michigan City regarding their Downtown (from 11th Street northward to the Lake Michigan waterfront); with a realistic analysis of Downtown's market potentials. A Course of Action was defined for public and private sector implementation. The Course of Action is meant to enable Downtown Michigan City to reach the vision defined locally, to overcome the key issues it faces, and capture the identified market potentials.

While the focus of this report is Michigan City's Downtown area, there is still some very relevant market-based information for the Comprehensive Plan's Planning Area. In addition to a well-articulated vision statement for Downtown, the report summarizes retail trade indicators, demographic and income profile and current retail businesses. By dividing Downtown's annual retail sales – $81,000,000 – by the total estimated demand for retail products within the primary trade area – $551,000,000 – it can be concluded that Downtown Michigan City may currently be capturing approximately 14.7 percent of the retail sales potential within the primary retail trade area. The report concludes with several recommendations, including the important point that if Downtown Michigan City is able to increase its market share to between 15.5 percent and 16 percent by the year 2018, it is possible that the project area may be able to increase its total capture of retail sales to between $85,000,000 and $88,000,000 by the year 2018. This increase in total retail sales could potentially support the development of between approximately 18,000 and 30,000 net square feet of additional retail space and between approximately 25,000 to 35,000 square feet of additional office space in Downtown Michigan City by 2018 – which could include expansions or sales increases by existing Downtown Michigan City retail businesses, the filling of vacant retail space, and / or the construction of some limited amount of new retail space.

EDCMC SWOT

In April 2014, the Economic Development Corporation of Michigan City (EDCMC) published its Economic Development Action Initiative strategic planning program and report; which in part, summarized the results of a SWOT exercise undertaken by EDCMC Board members. Many of the specific items under the Strengths, Weaknesses, Opportunities, and Threats categories are elaborated upon in subsequent sections of this report.

STRENGTHS

Michigan City's strengths improve its competitive advantage and make it a desirable place within which to live and do business.

- Michigan City has an abundance of natural amenities, particularly its lakefront, beaches, and parks, that make it an attractive place for residents and visitors.
- Michigan City is within an hour and ten minute drive to Chicago, the nation's third largest metropolitan area. Advantages:
  - Michigan City residents can use several available transportation options to access Chicago's cultural, educational, and employment opportunities.
  - Chicago residents can take advantage of Michigan City's retail shopping, natural amenities, and low cost of doing business.
- Michigan City enjoys easy access to other major U.S. markets, as it is within a one day drive of 80 percent of the U.S. population.
- Michigan City benefits from excellent transportation connectivity and infrastructure. This includes many nearby Interstates and Highways (I-80, I-90, I-94, I-65, U.S. Highway 20, etc.), commuter and freight trains (South Shore Rail Line, AMTRAK, Norfolk Southern Railroad, etc.), and close proximity to the Port of Indiana Burns Harbor.
- Despite its proximity to major metropolitan markets and its natural amenities, the cost of doing business in Michigan City is very low. Corporate and personal tax rates continue to decline in Indiana, which currently boasts the best tax climate in the Midwest and 5th. best in the U.S.
- Indiana is a Right-to-Work State. Right-to-Work states often see greater private sector job growth and innovation than non-Right-to-Work states.
- Michigan City has strong expertise in manufacturing. The City benefits from a competitive advantage in manufacturing as a result of its proximity to natural resources and transportation infrastructure, clusters of manufacturing businesses, and a workforce experienced in manufacturing.
- Michigan City has a strong presence in the air compressor industry.

WEAKNESSES

Michigan City's weaknesses are those obstacles impeding economic development. These items make Michigan City less attractive to operate a business or reside in.

- Michigan City has a higher unemployment rate than most other Indiana metropolitan areas.
- It appears that communication efforts between community partners have been inadequate and fragmented. Although this initiative has improved the connectivity of community partners, there is still a need for concentrated and sustained community collaboration to identify programming needs and increase awareness of existing programming.
- Business attraction efforts are negatively affected by externalities associated with the Indiana State Prison and the Michigan City Area Schools (MCAS) system.
- The public school system (MCAS) suffers from negative perceptions as a result of poor past performance. Too many high school students have graduated lacking basic STEM and soft skills. This problem is intensified by a lack of parental involvement within some student segments.
- From its gateways to its downtown environment, Michigan City suffers from poor first impression as a result of overall image and aesthetics.
- Michigan City experiences a variety of homelessness issues, as do many cities in Northwest Indiana.
- Michigan City lacks a diverse stock of affordable and attractive housing.
- While Michigan City's retail sector performs well, stakeholders criticized the City's lack of options and diversity in retail amenities.

OPPORTUNITIES

Michigan City has many dimensions of untapped potential. These opportunities recognize possibilities to develop greater economic development competitive advantages.

- Michigan City is currently benefiting from a climate that is prime for redevelopment, including committed resources, leadership, and a positive attitude for change. This provides an exciting opportunity for stakeholders to continue to capitalize on the increased communication and collaboration between economic development, businesses, and community leaders/stakeholders.
- As businesses and education stakeholders increase collaboration, Michigan City has the opportunity to align high school, community college, and career and technical education programing more closely with each other and with businesses seeking to create a pipeline of well-trained employee candidates.
- Michigan City benefits from three focal points of its downtown environment: the Washington Park and Beach, the Blue Chip Casino, and the Lighthouse Place Premium Outlets. To better capitalize on these assets, Michigan City must improve connectivity and direct access between its Downtown and these three focal points. By improving Downtown connectivity and overall aesthetics, Michigan City and Downtown businesses will have the opportunity to experience spillover spending, as casino, beach, and outlet mall visitors spend time and money at other Downtown businesses.
- Michigan City's low cost of living, natural amenities, and proximity to major markets give it a great opportunity to take advantage of a blossoming arts community and other creative class amenities.
- Michigan City has a variety of brownfield sites and other properties available for the development of business/industrial parks.
- There is an increasing interest in living Downtown and Michigan City is in a good position to capitalize on this trend.

THREATS

Threats are unfavorable trends or developments that stakeholders believe will weaken Michigan City's economic position in the future.

- Michigan City currently has an aging workforce. The City's younger population appears to lack an interest in manufacturing career paths.
- Although the United States has seen a resurgence in manufacturing recently, the nation and cities with high employment concentrations in manufacturing continue to be threatened by overseas and Sunbelt location trends for low-skilled manufacturing.
- Michigan City's education and workforce development stakeholders suffer from inadequate funding to properly train the City's future employees and business leaders.
- Several community stakeholders believe that Michigan City is threatened by a "resort community mindset."
- Michigan City is threatened by businesses locating outside of City limits while using and benefiting from municipal services and limited space for new businesses if City limits are not expanded. The EDCMC should work with the City's Planning Department to explore the extension of City boundaries to ensure a strong, competitive and diverse local economy and tax base.
- The EDCMC Executive Director should work with the Redevelopment Commission to enhance usable industrial space or redeploy obsolete space for more productive uses.
- There are limited funds to support economic development initiatives and strategies. The EDCMC Executive Director needs to coordinate efforts with the Redevelopment Commission to strengthen the incentive potential of existing TIF districts (extend, sunset, and / or add additional districts).
- There needs to be a concerted effort to create an industry cluster sector partnership of employers within the air compressor industry. An industry cluster consists of firms operating in a single industry. The EDCMC has been advised to establish a sector partnership with Sullair, Dekker Industries and Sullivan Palatek. By bringing employers in the same industry together they have the ability to help these companies do networking that could result in the growth of existing cluster firms, the attraction of additional clusters and suppliers and increase job creation potential for Michigan City.
- CVB funding is very low in comparison to other lakefront communities which results in Michigan City not having an identity to attract new business/capital investment.

Environment

Environmental Resources, Programs and Plans

GEOMORPHOLOGY – LAKE MICHIGAN COAST

Much of Michigan City's shoreline consists of sandy beaches and dune grasses. The dunes developed from the 'glacial lakes' that formed between the Valparaiso Moraine and the receding glacier.

In the Planning Area, typically sand is the predominant surficial soil north of U.S. Highway 20 and silty clay is predominate south of U.S. Highway 20. The groundwater table is shallow; typically within five feet of the surface during the wet seasons.

The Indiana section of Lake Michigan's shoreline is 45 miles in length of which 2.75 miles of shoreline is along Michigan City. In brief, from the west corporate City limits the industrial section of the shoreline is approximately 0.75 miles in length along Northern Indiana Power Service Company's (NIPSCO) Michigan City Generating Station. Moving eastward is the entrance to the Marina at Trail Creek then begins a 0.75 mile stretch along Washington Park followed by 1.25 miles of sandy beaches and referred to as the "Esplanade," which is a section of low sandy dunes covered in green beach grass and is sandwiched between the lake shore and residential homes to the south. During the summer months, Washington Park and the beach are a major tourist attraction for the north end of the City.

THE MARQUETTE PLAN

MP Phase 1: The Lakeshore Reinvestment Strategy

The first phase of the Marquette Plan, entitled, *The Lakeshore Reinvestment Strategy* (January 2005), was a collaborative effort between the lakefront communities of East Chicago, Gary, Hammond, Portage and Whiting, the office of Congressman Pete Visclosky and the Indiana Department of Natural Resources. The goal of the Plan was to develop a comprehensive land use vision to guide reinvestment efforts to reclaim Indiana's lakefront – from the Indiana / Illinois state line to the Burns Harbor International Port in Portage, Indiana – as a livable

lakefront. As summarized in the Plan's Introduction, "the Plan highlights a changing landscape, where more compact viable industries co-exist with public parks, mixed-use neighborhoods and business oriented developments. It's a Plan about balance – between nature and industry, between public access and privacy, between old jobs and new economies, between redevelopment and restoration and between heritage and a new way of life."[1]

A key recommendation of Phase I was to extend the study east from the Burns Harbor International Port, Portage, Indiana to the Indiana / Michigan state line.

MP Phase 2: A Vision of Lakeshore Reinvestment

The second phase of the Marquette Plan was developed in 2008 and entitled, *A Vision of Lakeshore Reinvestment*. The Phase II study area includes 26 miles of ecologically

1 February 2008. The Marquette Plan: A Vision for Lakeshore Reinvestment. (http://nirpc.org/media/17678/phase_ii_introduction.pdf

diverse lakefront, comprised of beaches, vast natural resources and attractions, and a range of diverse habitats that co-exists with the built environment. The area includes two cities, eleven towns, two counties and serves as home to the Indiana Dunes National Lakeshore, Indiana Dunes State Park, and the Burns Harbor International Port in Portage, Indiana.

The key objectives of Phase II include:

- Re-emphasize that Lake Michigan is northwest Indiana's greatest resource;
- Increase public shoreline access from approximately 57 percent today (for both phases) to over 75 percent in the future and to provide generous minimum setbacks for new development to ensure this access;
- Establish physical, social and economic connections, including a continuous trail network linking people to the lake, features along it and to each other;
- Develop a cooperative lakeshore visitor management plan – to guide visitors to and from lakeshore destinations; while supporting a harmonious relationship between residents and visitors;
- Capitalize on the existing transportation infrastructure (roads, trails and trains) to promote a truly multi-modal region giving residents and visitors alike choices to reduce dependency on the automobile;
- Recognize the changing economy in the region and capitalize on new opportunities for remediation and re-use of industrial brownfield properties;
- Leverage available resources, including political resources that span town, city, county, and state boundaries to broaden the pool of funds and support needed to achieve the vision;
- Continue to promote public-private partnerships;
- Identify and fund an effective management structure to assist the region to
- realize the Marquette Vision – to Create a Livable Lakefront;
- Plant the seed so the Plan becomes a rallying cry for change and the process lives on.

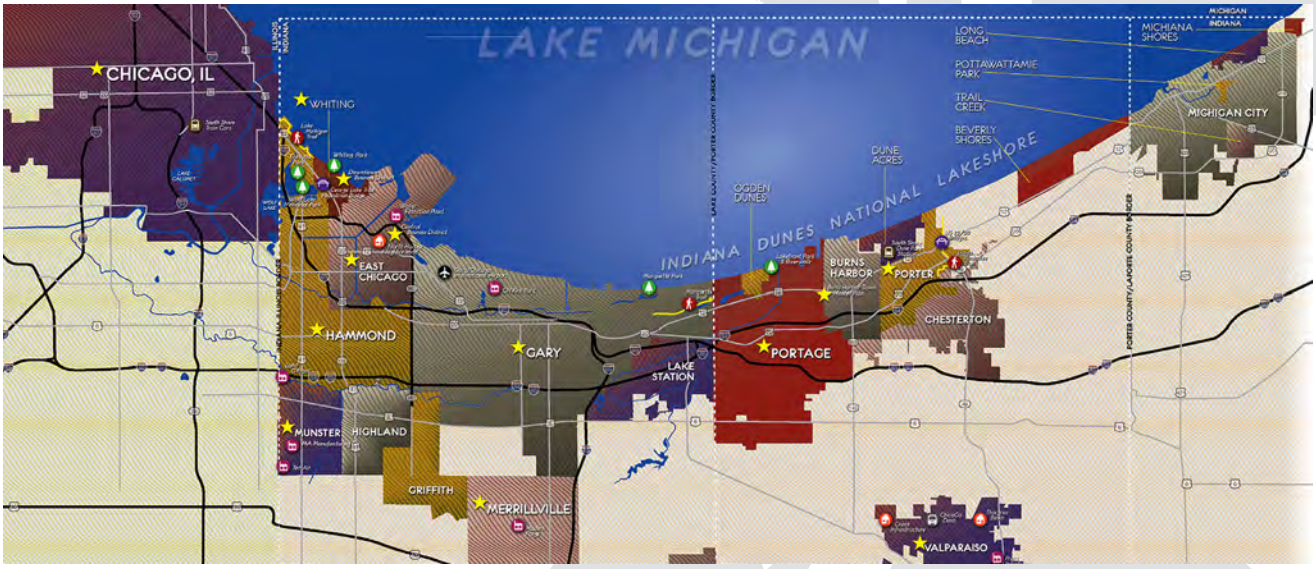
MP Phase 3: The Marquette Plan 2015: The Lake Shore Reinvestment Strategy

As summarized on the Northwest Indiana Regional Planning Commission website, the Marquette Plan 2015 serves to integrate the vision and strategies of the two earlier phases, by establishing more consistency amongst the plan's priorities and policy frameworks, across the entire region.[2] This update:

- celebrates successes achieved since the plan's inception;
- identifies challenges towards implementation;
- explores new opportunities; and
- reviews shifts in the economic development, environmental conservation, and neighborhood development goals across different sub areas of Northwest Indiana's lakefront.

The Marquette Plan 2015 builds on the vision and principles of the original phased plan. It continues to emphasize the importance of Lake Michigan as the greatest natural asset of our region, and the need

2 2015 NIRPC. The Marquette Plan 2015: The Lake Shore Reinvestment Strategy (http://www.nirpc.org/2040-plan/growth-conservation/marquette-plan/the-marquette-plan-2015-the-lake-shore-reinvestment-strategy/)



to increase public access to its shoreline. The plan prioritizes:

– improving the physical, social, and economic connections throughout Northwest Indiana's lakefront communities;
– expanding and improving the region's trail and transportation infrastructure; and
– protecting the long term health of Northern Indiana's environment and natural resources.

STRATEGIC CONSIDERATIONS

Guiding Principles:

The Marquette Plan's Guiding Principles include:

1. Showcase Our Heritage -
   - Industrial;
   - Natural;
   - Community and People;
   - Tourism.
2. Redefine the Edges -
   - Increased Recreation, Circulation & Population An Accessible Lakefront (Public / Multi-Modal);
   - Mixed-Use (including New Jobs / Investment Centers);
3. Preserve, Protect and Enhance Environmental Systems -
   - Lake Michigan Frontage, Stream and River Corridors;
   - Dune and Swale Complexes;
   - Remnant Natural Areas on Industrial Lands;
   - Watersheds and Viewsheds.
4. Protect and Cherish Our Waters -
   - Recognize the value of Lake Michigan as the region's drinking water source and the critical role adjacent lands and tributaries have in protecting it.

POLICY FRAMEWORKS

The following summarizes the Marquette Plan's planning frameworks. Key policy recommendations should guide the formulation of *Momentum: Michigan City 2040* Comprehensive Plan:

A. Access, Recreation and Tourism Development

This framework involves expanding and improving active transportation systems between the lakefront, communities, and regional transportation arteries of Northwest Indiana. This also involves improving the wayfinding systems and signage along all rights-of-way, to help guide tourists to lakefront amenities throughout the region. These strategies will significantly reduce the real and perceived barriers that limit the use of the lakefront by residents and visitors.

Policy Recommendations -

1. Encourage the development of open space and public places within new and existing lakefront neighborhoods.
2. Construct public amenities at the region's waterfront areas: restrooms, water fountains, bike racks, picnicking facilities, performance venues, and playground equipment.
3. Implement marina design standards for visual enhancement and public access along the waterfront, while maintaining dock security.
4. Enhance and expand opportunities for shoreline fishing.
5. Connect trails in the study area to the regional system of trails.

B. Transportation and Infrastructure Improvement

This framework assesses the existing road system, rail network, and transit system, with its various surface streets, bridges, train stations, bus stops, and bike paths, and proposes a series of improvements that ensure the ongoing strength and durability of the existing system, increases connectivity throughout the study area, and induces a shift towards more sustainable modes of transportation, like rail, bus, cycling, and walking.

Policy Recommendations -

1. Provide Complete Streets that are supportive of all forms of transportation.
2. Support and expand public transportation that connects the region's lakefront to neighborhoods, and Downtown areas.
3. Address existing functional deficiencies and safety issues along all major roads.
4. Reduce any negative visual impacts or physical barriers caused by the major transportation arteries

adjacent to neighborhoods and the lakefront, through suitable landscaping and urban design.

C. Environmental Protection and Restoration

The environmental protection framework is focused on the protection, preservation, and restoration of the Northwest Indiana's lakeshore ecosystem, namely its coastline, rivers, wetlands, ponds, streams, floodplains, dunes, swales, forestlands, and other existing green infrastructure. Strategies for achieving the goals of this framework include managing growth, protecting native plants and wildlife, particularly endangered species, rooting out invasive species, reducing flood risks, improving air and water quality, expanding green infrastructure, and remediating contaminated land.

Policy Recommendations

1. Recognize Lake Michigan and its associated environs (dune and swale, river systems, etc.) as great regional resources deserving protection, enhancement and sustenance.
2. Acquire and enhance waterfront and additional natural areas to form connections and corridors of biodiversity.
3. Honor regulations already in place when considering improvements in or around conservation easements, nature preserves and other regulated natural areas.
4. Provide buffers around natural areas to help protect them from degradation.
5. Improve floral and faunal communities including state and federally-protected species through the protection and preservation of key areas of habitat.
6. Protect coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values.
7. Implement Best Management Practices (BMPs) such as Green Infrastructure and Low Impact Development in the region for storm water treatment.
8. Implement Integrated Pest Management (IPM) in the study area to reduce inputs of fertilizers and pesticides, which can travel from lawn to lake.
9. Encourage balanced recreation, interpretation and educational opportunities related to natural systems and resource conservation.

D. Neighborhood Reinvestment and Redevelopment

This framework prioritizes the reinvestment and redevelopment of existing sites in Northwest Indiana's lakefront communities, as areas for new compact, sustainable neighborhood development. This can be achieved through strategies like mixed-use development, transit-oriented development, in-fill development, and the implementation of complete street standards.

Policy Recommendations

1. Promote Transit-Oriented Development at existing commuter rail stations, particularly with new connections to lakefront and neighborhood development.
2. Develop and pursue strategies and financial instruments for initiating infill development on vacant or under-utilized land within existing lakefront communities.
3. Specify appropriate density patterns for new lakefront and neighborhood development.
4. Incorporate mixed-use development, such as ground floor commercial, with residential and office uses, when new development fronts face commercial vehicular corridors.
5. Encourage ancillary environmental enhancements such as green buildings, recycling, energy efficiency, pollution reducing infrastructure improvements, etc.
6. Promote context sensitive design that meet the needs of the users, the communities and the environment.
7. Establish lakefront-sensitive development guidelines for land that is targeting redevelopment. 8. Diversify the tax base by attracting a mix of uses to relieve the tax burden faced by communities in the study area.

E. Brownfields and Industrial Development

This framework focuses on the remediation and revitalization of vacant and contaminated properties existing along the lakefront. These brownfield sites are typically left over from a former industrial use, with a perception of contamination that poses not only a risk to environmental health, but also a barrier towards reinvestment and redevelopment for new economic uses.

Policy Recommendations

1. Establish the Northwest Indiana Brownfield Revolving Loan Fund as a resource for local municipalities, developers, and private industry, to increase the financial feasibility of remediating and redeveloping vacant brownfield sites.
2. Promote the Northwest Indiana Regional Brownfield Coalition, as a technical resource for driving brownfield redevelopment projects on Northwest Indiana's lakefront.
3. Expand brownfield cleanup training programs, in collaboration with local industry and workforce development agencies.
4. Increase participation in Indiana's State Voluntary Remediation Program.

F. Community Coordination

As a shared regional vision, the Marquette Plan invariably requires a strong level of cross-jurisdictional coordination across the lakefront communities of all three counties of Northwest Indiana. Strategies for achieving this involve maintaining a coordinated, inclusive planning process, encouraging the involvement of municipalities in local and regional planning projects that transpire beyond their boundaries, and establish opportunities for joint ownership and management of shared assets.

Policy Recommendations

1. Encourage coordinated efforts for planning and plan implementation at local and regional level.
2. Create opportunities for each town and city to develop, maintain and enforce comprehensive plans that align with regional planning efforts.

G. Historic and Cultural Resource Preservation

This framework focuses on historic resources in the Marquette study area, and poses strategies for capitalizing on the opportunities that these assets can provide to the region, through their incorporation in planning, redevelopment, development, restoration, and rehabilitation efforts.

Policy Recommendations

1. Design standards and development review should not be viewed as stifling to creativity or to the construction of new or infill structures, but rather should strike a balance between modern structures and the existing landscape and architecture. With that in mind, standards for new construction and additions should be updated and developed, that emphasize building characteristics that are shared by new and old buildings (height, scale, massing, materials, colors and roof lines, etc.).
2. Develop and update comprehensive plans to include preservation principles. Utilize surveys and existing data to identify historic neighborhoods and districts, and maintain historic areas as livable centers.
3. Encourage creation of public-private partnerships that lead to stewardship of historic resources, while allowing them to be economically viable. Private entities, association, and not-for-profits can be effective at managing the long-term preservation of historic resources through fund development and maintenance. Public entities can be useful for maintaining ownership, which can allow projects to be eligible for funding not typically available to private entities.
4. Adhere to green building principles. Through pursuing LEED (Leadership in Energy and Environmental Design) principles, or other green building guidelines, historic buildings can exhibit greater levels of energy efficiency, and lower levels of environmental impact.

IMPLEMENTATION

As highlighted in Marquette Plan 2015 Introduction, funding, oversight, coordination, technical assistance, and revision of this document all fall under the responsibility of a tri-agency partnership between the NIRPC, the RDA, and the IDNR Lake Michigan Coastal Program. However, this initial partner agreement has expired, and in the future, a single lead organization could be beneficial for successfully implementing the plan.

Beyond plan updates and specific projects however, the primary oversight and implementation of lakefront redevelopment projects could fall under the responsibility of the Lake Michigan Marina & Shoreline Development Commission (LMMSDC). As outlined within the Management & Implementation section of the plan, the LMMSDC was created by the Indiana State Legislature and is composed of elected officials from lakefront municipalities, state elected officials, major lakefront property owners, and public agency officials. The LMMSDC is designed to coordinate regional redevelopment, receive grants and appropriations, acquire, hold, and dispose of real property, and administer a shoreline environmental

trust fund. It is believed that, due to the diverse and comprehensive make-up of this commission ensures that redevelopment and transformation of the lakefront will occur in a balanced fashion.[3]

The Sheridan Beach and The Esplanade: Public Access, Land Management, and Implementation Plan[4]

In 2014, the Michigan City Parks and Recreation department commissioned the development of an *Ecological Assessment, Restoration and Access Plan for Sheridan Beach and The Esplanade*. As outlined within the Plan's Introduction, the focus of the ecological assessment was to document base line ecological conditions, develop ecological restoration strategies, and provide recommendations for improving public beach access and wayfinding, and facilitating adjacent property owner beach access through sensitive dune areas.

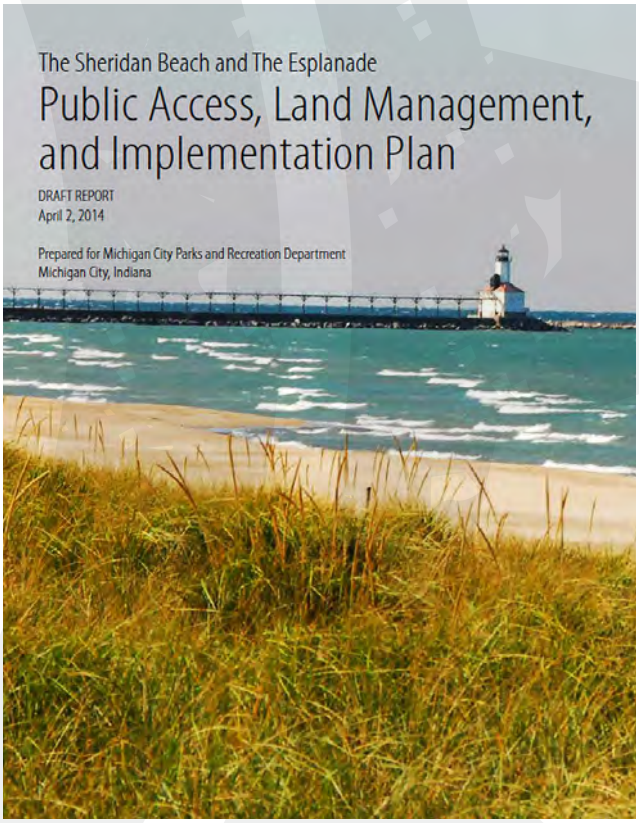
The project area consists of Sheridan Beach and The Esplanade, a 1.1 mile long, 66-acre stretch of sand beach and dune system along the southern side of Lake Michigan, generally bound by Lake Michigan to the north, the Dunescape development to the west, the Town of Long Beach to the east, and private residences to the south.

PUBLIC ACCESS PLAN

The primary goal for development along the Lake Michigan Shoreline included facilitating access to and from the beach for multiple user groups, in a way that minimizes damage to sensitive dune habitat, respects the privacy of neighbors, and helps the community appreciate the dunes, beach and lake.

The primary strategies involve improving wayfinding, consolidating paths, and providing hard surfaces to encourage users to stay off of sensitive dune plants.

1. Provide additional wayfinding signage to clearly designate every public access point.
2. Encourage the use of consolidated, universally accessible (ADA-compliant) beach access paths that avoid sensitive ecological communities.
3. Develop and enforce trail access standards and construction specifications.
4. Develop ecological interpretive paths which provide opportunities for nature lovers to quickly get into, navigate, and learn about sensitive ecological systems.
5. Reduce abundance of privet, oriental bittersweet, catalpa, and poison ivy by 90 percent.
6. Maintain a palette of 100 percent indigenous plants to be used for restoration and landscaping.
7. Develop and adopt a sand management plan to protect fore dune and most of the secondary dune communities and fulfill the following objectives.
8. Minimize the amount of exposed sand that can blow and aggregate in locations where it becomes a nuisance.
9. Facilitate the horizontal movement of dunes toward the lake.
10. Provide better access to the beach for people and emergency vehicles in a way that maximizes the preservation of dune-stabilizing vegetation.



3 The Marquette Plan 2015, New Projects & Opportunities (http://nirpc.org/media/55125/mp_2015_new_projects_implementation_acknowledgements_final.pdf).
4 2014, SGJJR, The Sheridan Beach and The Esplanade: Public Access, Land Management, and Implementation Plan.

ECOLOGICAL RESTORATION PLAN

The 2012 report's primary finding include the following:

- Open space within the project area consisted of a degraded remnant dune system that nonetheless maintained characteristic and even sensitive native species of fore dune, secondary dune and transitional ecological communities. Primary ecological stressors observed were encroachment by invasive weeds; the absence of fire; and large areas of bare sand caused by pedestrian and ATV traffic that contributed to dune instability and subsequent blowing sand.
- More than half (86) of the 164 species of flora observed were not indigenous. Nearly one-third (44) of the plants observed as invasive species.
- In general, dune health, as measured by the abundance of invasive plants, decreases moving landward. The most degraded areas occurred closest to homes and beach access areas, where soil disturbance and the diversity and abundance of invasive weeds were most evident.
- In general, the potential to restore diverse and stable ecological communities is high. The matrix of characteristic species persists, and plant diversity would increase dramatically with the management of shade-suppressing woody invasive species.

The ecological restoration plan recommends the following strategies and restoration activities:

- As public access improvements and sand management activities are implemented, bare sand areas should be restored immediately using native plant material.
- Prepare a fire management plan. Use prescribed fire to control invasive woody and herbaceous vegetation. Divide the project site into five fire units and burn one unit per year.
- Maintain and enhance healthy dune communities as a first priority; keeping weedy areas from spreading as a second priority; and restoring weedy areas as a third priority.
- Management Zones 6 and 9 have high restoration potential and would be good zones to begin remedial restoration work from an ecological and educational standpoint.
- Ecological restoration in the vicinity of new access points will help garner support and enthusiasm from the community.

SAND MANAGEMENT PLAN

The three primary factors at Sheridan Beach and The Esplanade that exacerbate aggregation of nuisance sand:

1. Multiple volunteer trails between public access points and private homes through the dunes kill soil stabilizing dune vegetation, which results in exposed sand that blows and forms nuisance dunes.
2. Beach grooming activities create a wider expanse of exposed sand than would naturally occur if the dunes were allowed to grow toward the lake and source of sand. This contributes to dunes growing vertically rather than horizontally.
3. Lack of weed and woody brush management on the dunes results in a proliferation of nuisance weeds and woody material that do not hold soils in place, as well as native dune, prairie, and savanna plant communities.

Through the use of sand management techniques, including the use of sand fences, restoration of dune grass, and sand blowout repair, the sand management plan intends to fulfill the following objectives:

- Minimize the amount of exposed sand that can blow and aggregate in locations where it becomes a nuisance.
- Facilitate the horizontal movement of dunes toward the lake.
- Use vegetation and mechanical structures such as sand fences to control blowing sand and facilitate dune formation in appropriate places.
- Provide better access to the beach for people and emergency vehicles in a way that maximizes the preservation of dune-stabilizing vegetation.

Surface Waters, Wetlands, and Floodplains

WETLANDS

In general, wetlands are areas where water covers the soil, or is present either at or near the surface of the soil for part or all of the year, including the growing season for plants. Wetlands are in-between places, which lie between deep water in lakes, ponds, and streams and dry upland.

Wetlands have soils which differ from soils in dry areas, exhibiting characteristics that show the soil developed in saturated conditions. Wetlands can be identified by these basic indicators: vegetation, hydrology and soils. All three characteristics must be present during some portion of the growing season for an area to be a jurisdictional wetland.

Wetland areas are protected by the Clean Water Act. The State of Indiana has adopted the Indiana Wetlands Conservation Plan (IWCP) as a guide for all wetlands conservation efforts in the state. The IWCP is designed to serve as a framework, and sets forth specific actions to be accomplished. The purpose is to achieve conservation in ways that are beneficial to all Hoosiers.

THE IMPORTANCE OF WETLANDS

Wetlands, like soils, trees, fields, rivers, hills, and other natural resources, are vital components of the Indiana landscape. Wetlands serve important functions, both in human benefits such as maintaining the quality of the water we drink and controlling flooding, and in environmental benefits such as providing habitat for endangered species of wildlife and plants. The fact that the majority of the wetland resources once present in Indiana have been lost or converted to other uses makes wetlands an especially critical resource for conservation.

Wetlands provide opportunities to filter storm drainage water before the water makes its way to tributaries, and rivers. Wetland plants and soils naturally store and filter nutrients and sediments. Calm wetland waters, with their flat surface and flow characteristics, allow these materials to settle out of the water column, where plants in the wetland take up certain nutrients from the water. As a result, our lakes, rivers and streams are cleaner and drinking water is safer. Wetlands also help to recharge our underground aquifers.

Wetlands protect homes from floods. Like sponges, wetlands soak up and slowly release floodwaters. This lowers flood heights and slows the flow of water down rivers and streams. Wetlands also help to control erosion. Shorelines along rivers, lakes, and streams are protected by wetlands, which hold soil in place, absorb the energy of waves, and buffer against strong currents.

Wetlands provide habitat for more than one-third of America's threatened and endangered species of animals and insects. Over 200 species of birds rely on wetlands for feeding, nesting, foraging, and roosting. Many of the plants and animals have adapted to life and are reliant on saturated or flooded conditions.

WETLANDS JURISDICTION

There are three governmental agencies that have jurisdiction over wetlands.

1. The US Army Corps of Engineers (USACE) has jurisdiction over all navigable Waters of the United States under the Rivers and Harbors Act of 1899. The USACE also regulates the placement of dredge or fill materials into the Waters of the United States under Section 404 of the Clean Water Act.

2. The Indiana Department of Environmental Management's (IDEM) Office of Water Quality is responsible for maintaining, protecting and improving the physical, chemical and biological integrity of Indiana's waters. IDEM administers the Section 401 Water Quality Certification (WQC) Program, and draws its authority from the Federal Clean Water Act and from Indiana's Water Quality Standards.

3. The Indiana Department of Natural Recourses (IDNR) IDNR is charged by the State of Indiana to serve as stewards of Indiana's surface and ground water resources for the benefit of present and future generations. In order to work within a wetland it must be permitted by one of the preceding agencies. The permit will mandate the mitigation requirements.

For example: If a developer plans to dredge, excavate, or fill within lakes, rivers, streams, ditches, wetlands, or other regulated waters, he or she must obtain a federal permit from the USACE prior to the commencement of work. Because the USACE permit would authorize a discharge to Waters of the State, the USACE will require state authorization from IDEM as part of the permitting process.

WETLANDS CONVERSION

Under certain circumstances, wetlands can be converted into drylands. However, IDEM will require an applicant to avoid impacting wetlands, streams, lakes, and rivers. Applicants must demonstrate to IDEM that the impacts and their applications are necessary. If impacts are unavoidable, an applicant must demonstrate how their proposed project and all unavoidable impacts to wetlands and Waters of the State have been minimized.

Applicants must provide compensatory mitigation for any remaining adverse impacts to wetlands and other Waters of the State. Compensatory mitigation is the last step in a three-step approach of (1) avoidance, (2) minimization, and (3) compensation or wetland mitigation. Wetland Mitigation is the practice of compensating for the destruction or degradation of wetlands in one location by creating or restoring wetlands in another location. Mitigation is required as a condition of most permits issued under state law and federal law. The goal of wetland mitigation is to replace wetland functions which provide public benefits, such as flood storage, water quality protection, fish and wildlife habitat, and ground water recharge

The IDEM will deny a permit or certification if the application is deficient, if the activities are unnecessary, or if the proposed compensatory mitigation is determined to be insufficient to offset the effects of the destruction or degradation of wetlands.

Often the requirements mandate that compensatory mitigation take place at a rate of two to three times the area of converted wetland. In other words, for every acre of disturbed wetland the governing agency will require that two to three acres of dryland are converted into wetland habitat. There are local wetland banks that can be purchased to suffice the mitigating requirements. There is a wetland bank in northwest Indiana called the Lake Station Wetland Mitigation Bank. The Bank is a 223 acre site in the Lake Michigan watershed containing 202 acres of wet prairie habitat.

There are other opportunities to enhance existing local wetlands to promote a better quality of wetland. These compensatory actions provide some form of substitute aquatic resource such as:

- restoration of areas that were previously wetland;
- stream restoration activities;
- enhancement of existing wetlands

WETLANDS UTILIZATION

Wetlands may provide opportunities to enhance areas for recreation, education, and aesthetics. More than 98 million Americans hunt, fish, bird watch, or photograph wildlife. Americans spend $59.5 billion annually on these activities.

Wetlands can also be utilized to filter storm drainage water, as well as, provide opportunities for recreation. For example, within Michigan City there is an area that has been enhanced along the Striebel Ditch, called Striebel Pond.

Striebel Pond is fed from Striebel Ditch; during heavy rain events water is diverted through a weir structure into Striebel Pond from Striebel Ditch where the entering waters have a chance to settle out debris and sediment before out letting back into Striebel Ditch. The Striebel Pond provides 250 acre-feet of storage which provides temporary relief from an inundated storm system during heavy rain events.

The site was also designed to serve as a multi-use nature themed park, with public amenities including more than a mile of paved multi-use pedestrian trail with park benches, picnic tables, trash cans, grills, two parking lots, a gazebo, two shelters, two pedestrian bridges (including the intake weir structure), and two restroom units to promote public use of the park. The end result is an aesthetically pleasing nature center, with recreational and educational opportunities, that also reduces flooding, improves water quality, and provides wildlife habitat.

As depicted in TEC Map 8, *Surface Waters, Wetlands and Floodplains*, of the lands within the City Limits and the Planning Area, there is approximately:

- 668.0 acres (2.2 percent) of water bodies;
- 465.3 acres (1.6 percent) acres of freshwater emergent wetlands;
- 3,759.6 acres (12.5 percent) of freshwater forest/shrub wetlands;
- 336.0 acres (1.1 percent) of freshwater ponds;
- 48.1 acres (0.2 percent) of riverine;
- 3,569.1 acres (11.9 percent) are technically within the 100-year floodplain.

LEGEND

- Comprehensive Plan Area
- City Limits
- Wetlands
- Floodway
- 100-Year Flood Zone

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Duneland Beach
Michiana Shores
Long Beach
Michigan Township
Springfield Township
Pottawattamie Park
Lake Michigan
Michigan City
Trail Creek
Town of Pines
Beverly Shores
PORTER COUNTY
LA PORTE COUNTY
Pine Township
Coolspring Township
Center Township

12 94 212 20 35 421

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

MOMENTUM: MICHIGAN CITY 2040

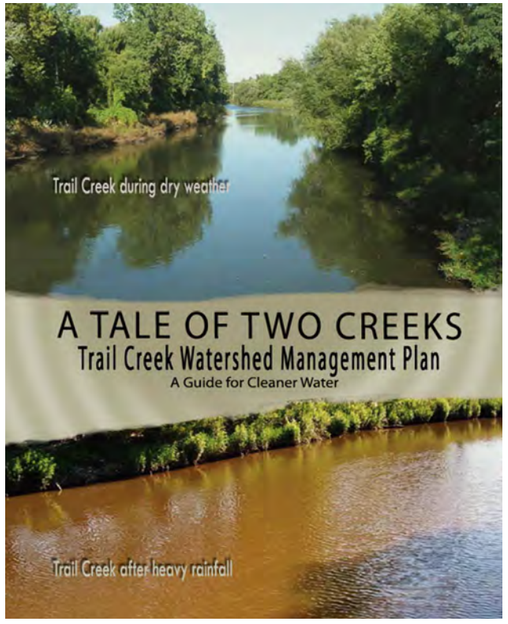
THE EXISTING CITY

TEC Map 8: Surface Water, Wetlands and Floodplains

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Trail Creek Watershed



The Trail Creek Watershed is located in northwestern Indiana, in LaPorte County, and drains into Lake Michigan at Michigan City, Indiana. The 37,800 acre watershed (59 square miles) lies almost entirely within Michigan, Center, Coolspring, and Springfield Townships, and is composed of three distinct branches: the East Branch (13,875 acres), West Branch (15,194 acres) and the Main Branch (8,595 acres), which form sub watersheds, as depicted in TEC Map 9, *Trail Creek Sub Watersheds.* Though the entirety of Michigan City is not included within the officially mapped watershed boundary for Trail Creek, storm sewers and urbanization within the City have altered the natural watershed boundary. Therefore, for the purposes of the 2007 Watershed Management Plan and future implementation, the entirety of Michigan City is included in the Trail Creek watershed.

Trail Creek is a designated trout and salmon stream supporting one of the few remaining cold water fisheries in Indiana. In the early 1970's the IDNR Division of Fish and Wildlife began stocking Trail Creek with Chinook salmon, Coho salmon, Skamania summer-run steelhead, and winter-run steelhead. Trail Creek has supported and continue to support a trout and salmon fishery along with other native game and non-game species.

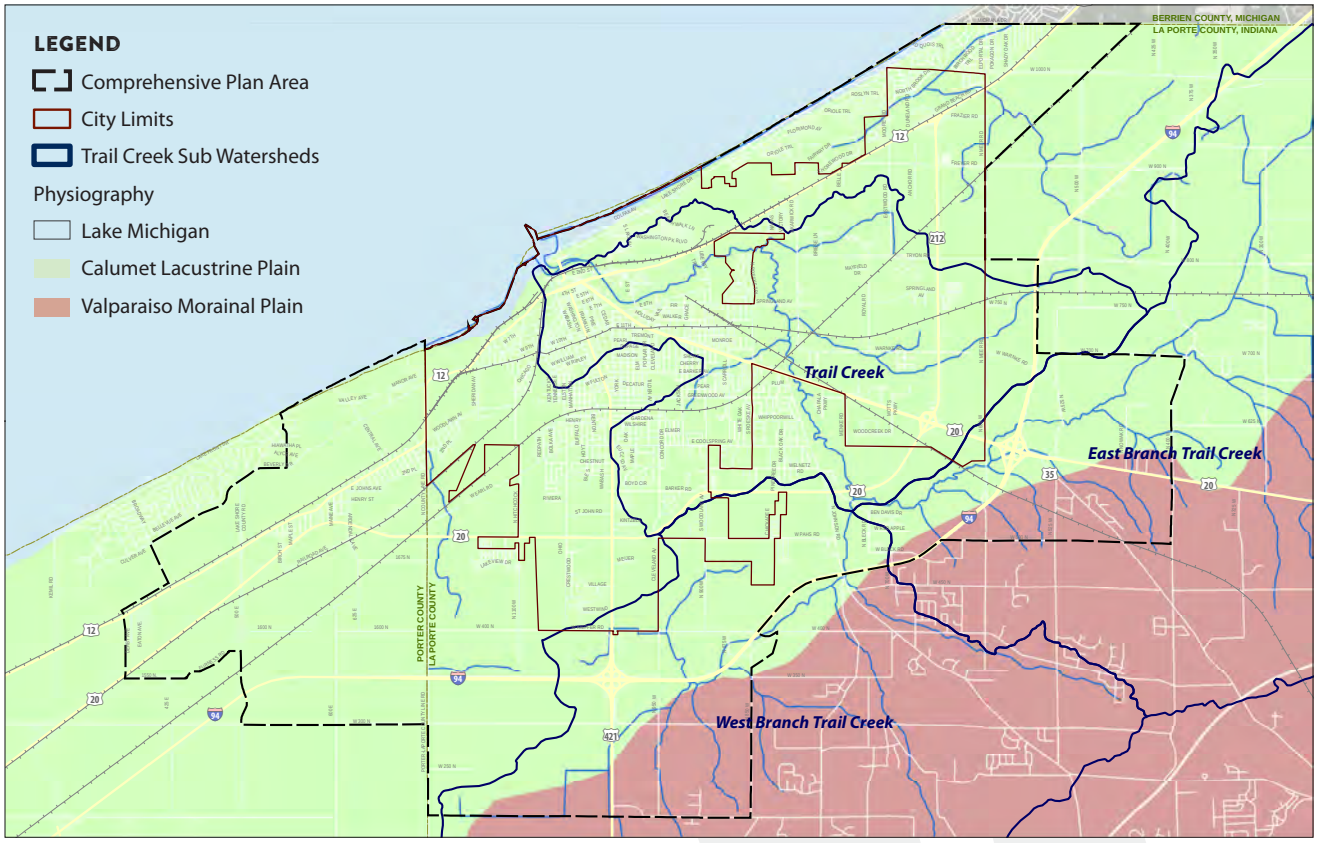
SOILS

Soil types and soil associations found within the Trail Creek Watershed are generally poorly suited to sanitary facilities and building site development. Slow permeability or moderately slow permeability, ponding and wetness, flooding, and pollution of groundwater due to poor filtering qualities of sandy soils are limitations within the watershed. These limitations can affect stormwater run-off quantity and quality potentially leading to increased pollutant loading to streams and tributaries in the watershed.

As discussed within the Trail Creek Watershed Management Plan (2007), "there are naturally occurring non-point sources of pollution along with man-made point and non-point sources of pollution. As the 2003 Trail Creek TMDL report indicates, the total elimination of all pollutant sources within the watershed is not realistic and not economically feasible. However, through the efforts of multiple entities and utilizing a variety of different approaches, it is possible to reduce the pollutant loading to a level which will not adversely affect either human health or water quality."

"Watersheds become degraded because there is no tradition of planning or management at the watershed level. Management is difficult because of the segmented property ownership where numerous decision makers, each pursuing different objectives, modify their land without considering the full impact of such modifications. In addition, there is lack of effective control by any single level of government over land use changes in watersheds as they affect water and adjacent land resources."

~ 1993 Trail Creek Watershed Management Plan



Source: A Tale of Two Creek Trail Creek Watershed Management
A Guide for Cleaner Water, Structurepoint

TEC Map 9, Trail Creek Sub Watersheds

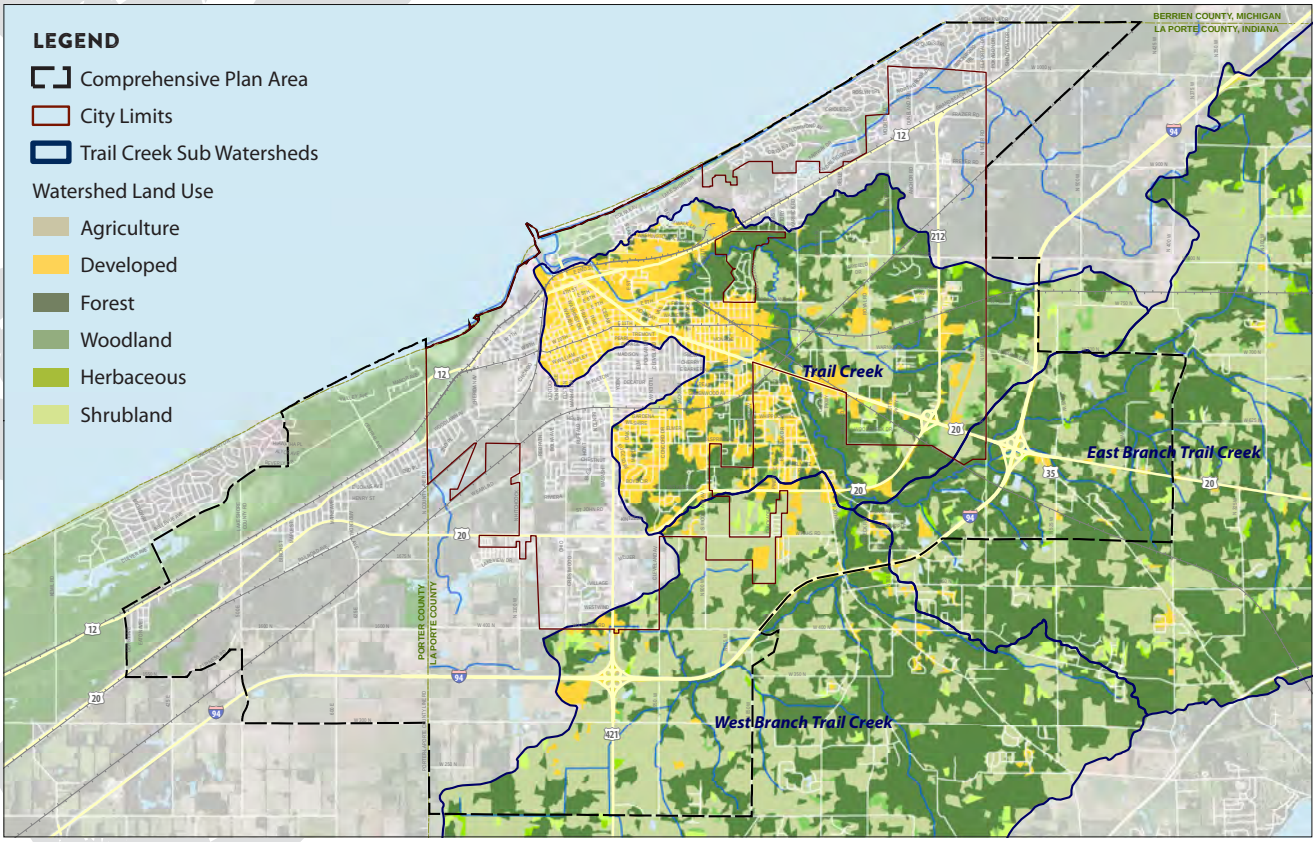
Watershed management plans must comply with a general framework sequence summarized within the Indiana Department of Environmental Management's (IDEM) "Watershed Management Plan Checklist," which:

- lists concerns gathered from extensive public engagement;
- establishes baseline water quality conditions;
- identifies problems in the watershed;
- identifies sources throughout the watershed that contribute to the identified problems;
- defines critical areas that can be prioritized for implementation;
- develops goals with specific, measurable reduction targets.

Over the years, multiple watershed management plans for Trail Creek have attempted to address problems associated with low dissolved oxygen levels, impairment of recreational uses due to E. coli bacteria levels, and substandard water clarity due to urban/rural runoff and stream bank erosion. In the "Horizon 2000 Michigan City Area Strategic Plan" issued on March 30, 1992, a plan that was prepared for and in conjunction with the citizens of Michigan City, a specific lakefront and Trail Creek water quality goal was identified: "Our goal is to have the highest quality of water for recreation and aquatic production in the area by eliminating debris, pollutants and sediment build-up in the creeks."

As outlined in previous management plans, some of the key problems remain, including poor aquatic life support due to low dissolved oxygen levels, impairment of recreational uses due to E. coli bacteria levels, and substandard water clarity due to urban/rural runoff and stream bank erosion.

A key goal emerging from the Horizon 2000 Michigan City Area Strategic Plan was to have "the highest quality of water for recreation and aquatic production in the area by eliminating debris, pollutants and sediment build-up in the creeks." The Horizon 2000 report also identified several action items: work with local, state and federal agencies to characterize sediments in all lake tributaries and identify sources of pollution;



Source: A Tale of Two Creek Trail Creek Watershed Management
A Guide for Cleaner Water, Structurepoint

TEC Map 10, Land Uses within the TC Watershed

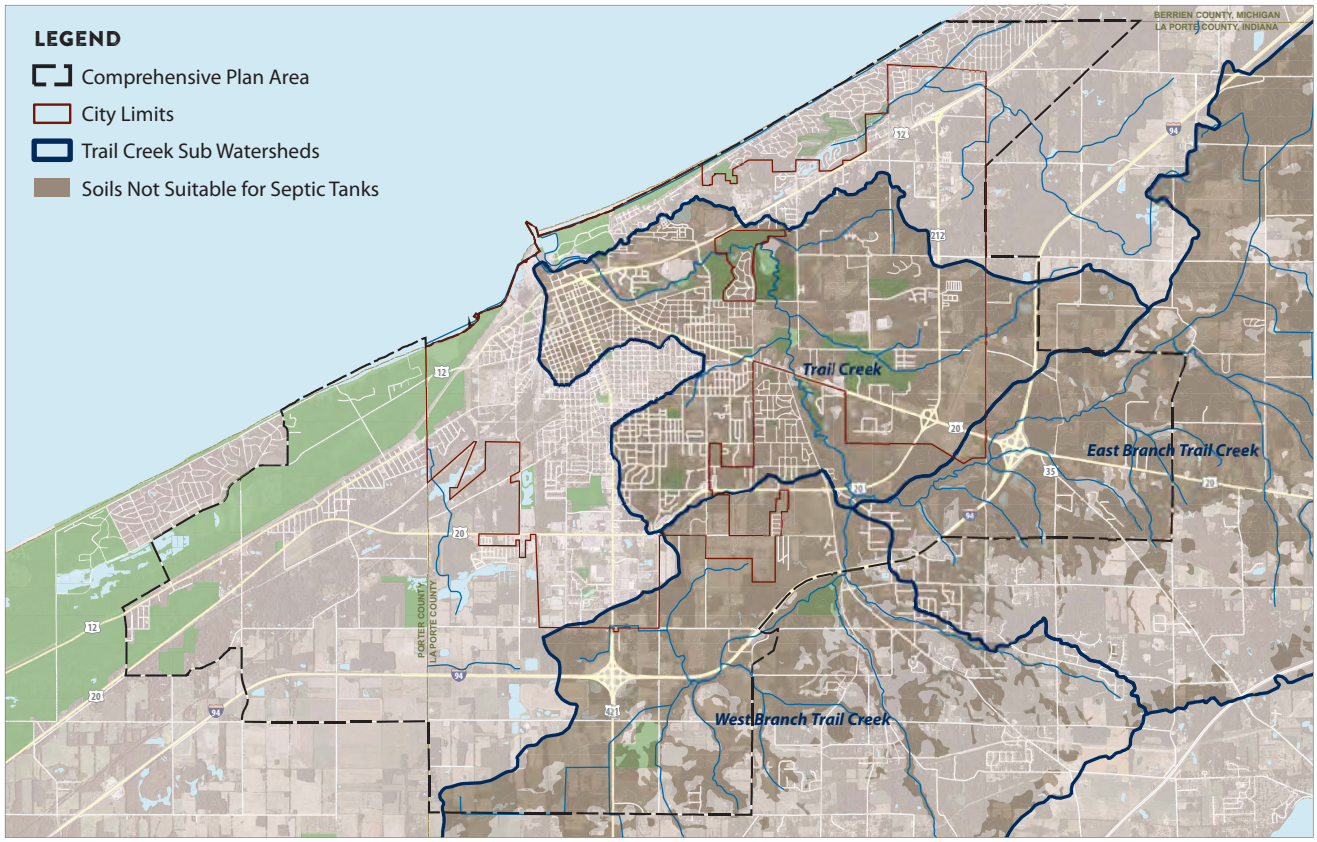
monitor sources of pollution after they are identified and encourage enforcement and compliance with regulations; clean up current sediments in all lake tributaries and prevent future sediment build-up; provide better aquatic reproduction; and, develop soil conservation and management regulations. An immediate product of these early efforts included the preparation and completion of the "Trail Creek Watershed Management Plan of 1993." This report offered a multi-faceted and substantive plan focused on nonpoint sources of pollution, with recommendations to reduce sedimentation and nutrient loading to the stream of Trail Creek.

Successes resulting from the 1993 Management include:

- the implementation of several agricultural best management practices in Springfield Township such as wildlife watering areas, grass waterways and filter strips;
- improvements in the ecological integrity of the stream in several locations (through the use of the use of lunkers and j-hooks);
- reduction in the levels of E. coli through storm sewer separation, sanitary sewer expansions and the disinfection of the J.B. Gifford Wastewater Treatment Plant's combined sewer overflow discharge

TEC Table 13, Land Uses within the Trail Creek Watershed (2007)

Trail Creek Branch	Percent Agricultural	Percent Developed	Percent Forested or Natural Areas	Percent Water or Unclassified
Main Branch	23	32	44	01
East Branch	47	03	49	01
West Branch	39	02	58	01
Total Watershed	39	09	51	01



Source: A Tale of Two Creek Trail Creek Watershed Management
A Guide for Cleaner Water, Structurepoint

TEC Map 11, Soils Not Suitable for Septic Tanks

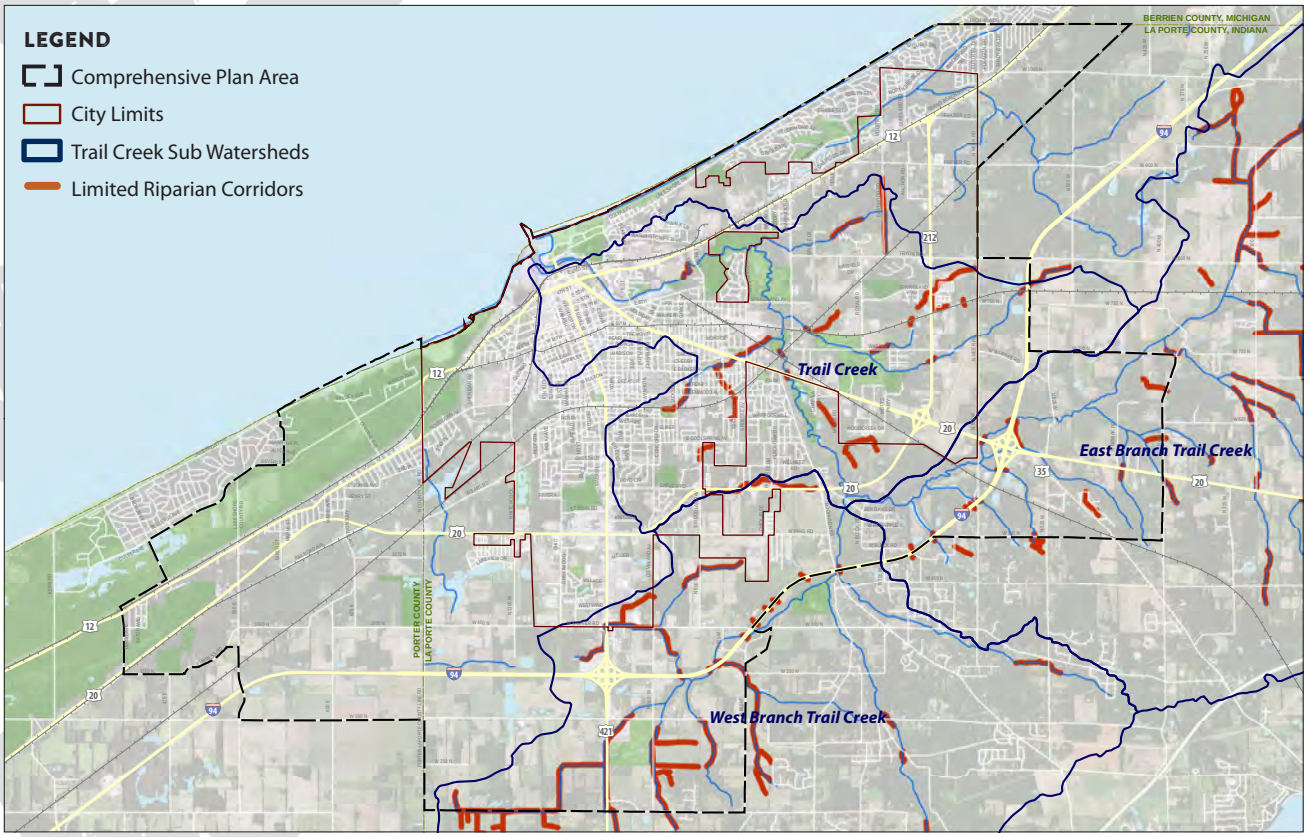
– expansion of public access along Trail Creek within Michigan City, including the opening of the Trail Creek Greenway, Winding Creek Cove, Karwick Nature Park and renovation of Hansen Park.

As a result of the 1993 Trail Creek Watershed Management Plan several best management practices have been implemented, including the construction of wildlife watering areas, grass waterways and filter strips in Springfield Township; restoration of the ecological integrity of the stream in some locations; reduction in levels of E. coli through storm sewer separation, sanitary sewer expansions and the disinfection of the J.B. Gifford Wastewater Treatment Plant's combined sewer overflow discharge; and public access along Trail Creek within Michigan City has been expanded significantly with the opening of the Trail Creek Greenway, Winding Creek Cove, Karwick Nature Park and the renovation of Hansen Park.

Trail Creek and its tributaries flow through 14.5 linear miles flow through various land uses including urban residential and industrial areas as well as rural agricultural and residential, as depicted within TEC Map 10, *Land Uses within the Trail Creek Watershed*. Trail Creek's east and a west branch which drain predominantly low density housing, farmland, and wooded tracts. The land that drains to the main stem of Trail Creek downstream from Johnson Road and U.S. Highway 20 is essentially totally developed and includes Michigan City, Pottawattamie Park, and the Town of Trail Creek (refer to TEC Table 13, *Land Uses within the Trail Creek Watershed (2007)*).

According to the National Wetlands Inventory there are approximately 3,850 acres of wetland present in the Trail Creek Watershed with 1,725 acres of wetland within the East Branch of Trail Creek watershed, 1,251 acres of wetland in the West Branch of Trail Creek watershed, and 870 acres of wetland in the Trail Creek and Otter Creek watershed.

Based on the expressed concerns, water quality data gathered to date, and anticipated resources, four



Source: A Tale of Two Creek Trail Creek Watershed Management
A Guide for Cleaner Water, Structurepoint

TEC Map 12, Areas with Limited Riparian Corridors

water quality problems were identified by the steering committee and stakeholders which will be the focus of the 2007 watershed management plan. These include E. coli, erosion and sedimentation, nutrient loading, and hydromodifications.

E. COLI

Stream water quality, aquatic health, fisheries populations, and public health were identified as concerns as part of this report. The presence of E.coli in water is a strong indication of the presence of sewage or animal waste contamination. Sources of E. coli can be, but are not limited to, runoff from animal pastures and livestock pens, poorly functioning septic systems (Refer to TEC Map 11, *Soils not Suitable for Septic Tanks*), runoff from areas with high concentrations of pet waste, combined sewer systems (a sewer receiving both intercepted surface runoff and municipal sewage), illicit discharges, and natural wildlife (2). Water quality data gathered for this report, as part of the TMDL study prepared for Trail Creek, and in preparation of the list of Impaired Waters of the State, indicate that E. coli levels within Trail Creek and its tributaries rarely meet the State Water Quality Standard for E. coli at any of the sample locations. Trail Creek has been listed as an "impaired waterway" with respect to the levels of E. coli by the State of Indiana. Impaired water quality from Trail Creek has closed beaches in Washington Park and has resulted in the expenditure of federal funds to continually dredge the navigable waterways of Trail Creek. The goal of the 2007 Watershed Management Plan was to meet the State Water Quality Standard for E. coli of 125 cfu/100 ml as a geometric mean on not less than five samples equally spaced over a 30-day period nor exceeding 235 cfu/100 ml in any one sample within that 30-day period.

EROSION AND SEDIMENTATION

Sedimentation within Trail Creek has necessitated frequent and repeated dredging of the navigable channel within Trail Creek located downstream of the E Street Bridge in Michigan City. Sedimentation within Trail Creek has been identified as a water quality problem due

to water clarity within the stream; nutrient and pollutant loading associated with sedimentation; and habitat degradation. Many sensitive aquatic species, including many of the salmonoid fisheries, cannot tolerate high sediment loads within a stream. Agricultural practices within the watershed, particularly methods of tillage can have an adverse effect on erosion and subsequent sedimentation in streams. Development of previously undeveloped land poses many threats to the watershed.

With development comes disturbance of the soils surface, extended exposure of soils, removal of significant ecological areas (wetlands, forests, and natural riparian buffers), increased impervious surfaces, and increased pollution runoff (refer to TEC Map 12, *Areas with Limited Riparian Buffers*). The effects of these actions include but are not limited to increased erosion, increased total suspended solids, increased runoff, greater flow variations, higher levels of pollutants in water, algal blooms, streambank erosion and channelization, loss of stream biodiversity, loss of stream canopy, and overall degradation of the water quality. According to the 2007 Watershed Management Plan, the West Branch of Trail Creek Watershed is the most rapidly developing of the three sub-watersheds. The 2007 Watershed Management Plan established a benchmark of 15 mg/l for Total Suspended Solids (TSS) / turbidity as a measurable water quality goal for sedimentation.

NUTRIENT LOADING

Stream water quality, aquatic health, fisheries populations, and public health were identified as concerns as part of this study. Nutrient loading is a signify cant contributor to eutrophication of lakes, nuisance algal blooms, and in-stream plant growth. According to the 2007 Watershed Management Plan, varied lawn and garden practices are sources of water quality issues in the Trail Creek Watershed. Unregulated application of fertilizers, pesticides, and herbicides to yards and public areas such as golf courses inevitably move into the local waterways. Over application of these products or the use of them in close proximity to a body of water increases the possibility and rate at which these end up in the water system. Many of these products contain animal waste, ammonia, nitrogen, and possibly bacteria, all of which are of concern in the Trail Creek Watershed. Agricultural tillage practices, and the lack of adequate riparian buffers also contribute to nutrient loading. As a measurable water quality goal for nutrient loading, the 2007 Watershed Management Plan established a benchmark of a meeting the following established target concentrations within 15 years:

- 0.25 to 0.1 mg/l for nitrogen ammonia
- 1.0 mg/l for TKN; and 10 mg/l for nitrate and nitrite
- 0.05 mg/l ortho-phosphorus and total phosphorus

HYDROMODIFICATIONS

Hydromodification includes channelization and channel modification, stream relocation, headwater stream and wetlands fills, straightening, levee and dam construction, bank erosion and armoring/bank stabilization, clearing and snagging, riparian encroachment, bridge and culvert construction, draining, filling, and urbanization. Hydromodification can result in both short and long term water quality degradation, accelerated erosion and sedimentation, destruction of aquatic habitat, and impairment or elimination of certain aquatic functions. The 2007 Watershed Management Plan adopted the goal to ensure the protection of waterbodies with the Trail Creek Watershed from further impacts of hydromodification and wetland loss to meet and maintain applicable water quality standards.

CRITICAL AREAS WITHIN THE TRAIL CREEK WATERSHED

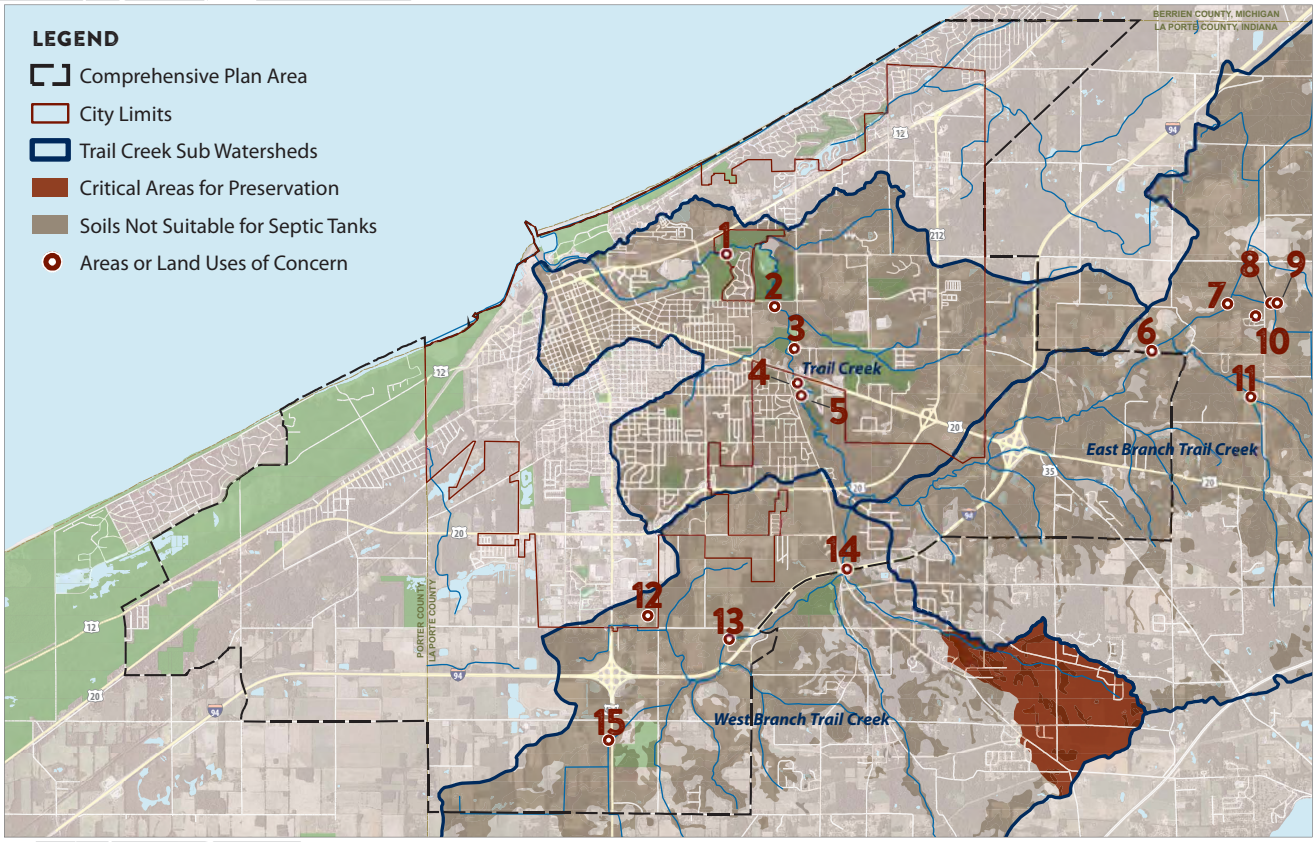
The 2007 Watershed Management Plan formulated three factors to determine critical areas within the watershed. These include:

- areas critical for preservation;
- areas with soils or land uses which may be sensitive for development and critical for implementation of best management and planning practices during that development;
- areas critical for implementation of conservation and restoration strategies or enhancement of existing water quality treatment and strategies.

Refer to TEC Map 13, *Critical Areas*.

PRESERVATION

Although the West Branch of Trail Creek was noted to include a predominance of forested and natural areas, it is the most rapidly developing of the three watersheds and each of the three sub-watersheds within the West Branch is anticipated to be subject to increasing development pressure in the future. As



Source: A Tale of Two Creek Trail Creek Watershed Management
A Guide for Cleaner Water, Structurepoint

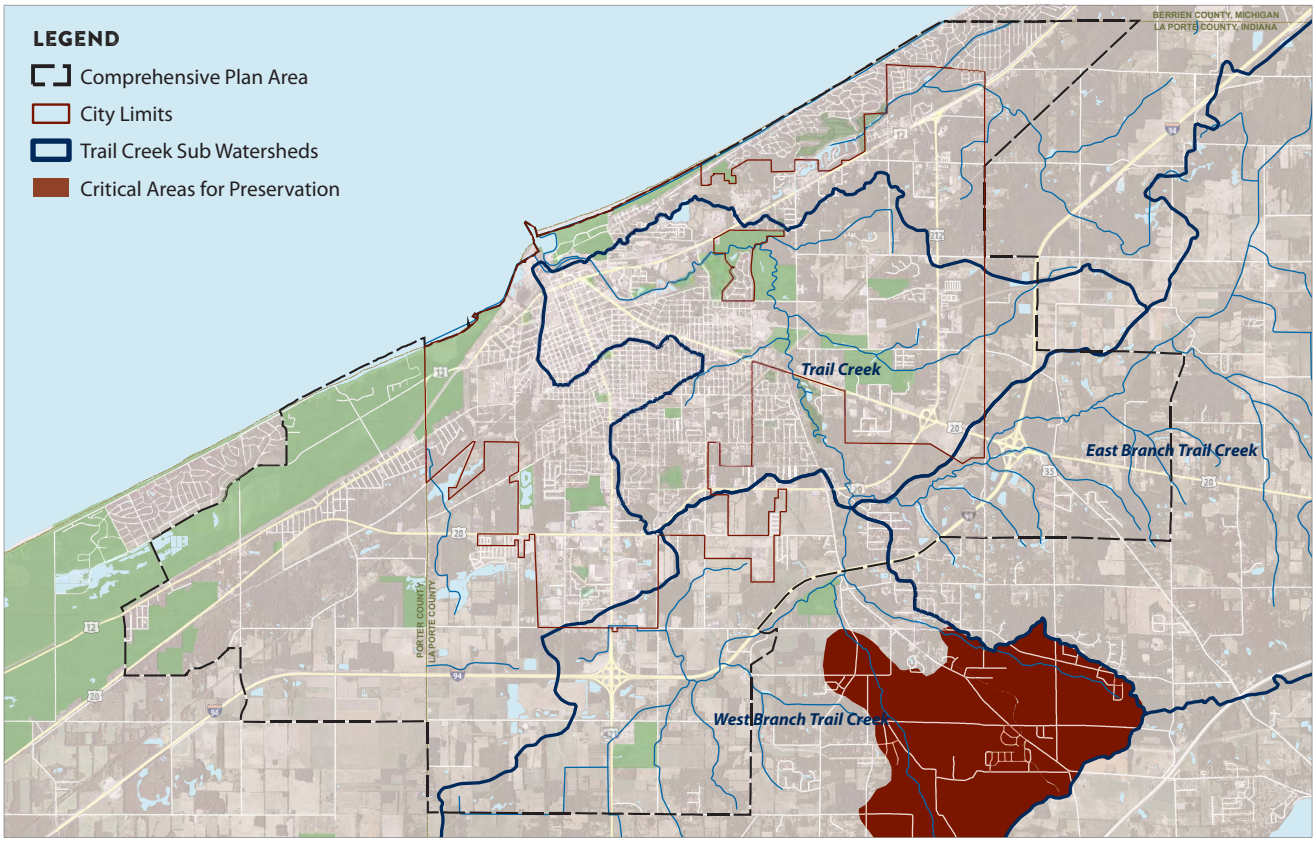
TEC Map 13, Critical Areas

TEC Map 14, Critical Areas	
Areas or Land Uses of Concern	
1	Bank erosion
2	Lamprey barrier
3	Old Landfill
4	Bank erosion
5	Bank erosion
6	Bank erosion
7	Livestock in stream
8	Livestock in stream
9	Livestock in stream
10	Septic tank or drainage issues
11	Livestock in stream
12	New commercial development
13	Livestock in stream
14	Bank erosion
15	Reported commercial non-point source pollution

such, two of the three sub-watersheds within the West Branch of Trail Creek were designated as critical areas for preservation in order to maintain or reduce the existing loading to the streams from these areas. The 2007 Watershed Management Plan calls for the preservation of existing natural areas and riparian buffers using smart growth and low impact development strategies, tools and techniques within these watersheds is critical to reducing pollutant loads and improving water quality (refer to TEC Map 14, *Areas Critical for Preservation*).

SENSITIVE AREAS

Areas with soils or land uses deemed sensitive areas include those privately owned lands which are currently being developed or which are proposed for future development, areas which are not currently serviced by municipal utilities, and areas which are not subject to development restrictions such as riparian setbacks. The majority of both the East and West Branches of Trail Creek as well as the towns of Trail Creek and Pottawattamie Park were determined to be critical areas for the installation of sanitary sewers and



Source: A Tale of Two Creek Trail Creek Watershed Management
A Guide for Cleaner Water, Structurepoint

TEC Map 14, Areas Critical for Preservation

implementation of best management practices outlined within the 2007 Watershed Management Plan. Other sensitive areas include Pinhook Bog and other publicly or privately owned natural areas such as Trail Creek Fen and areas with unique or rare habitat or species.

CONSERVATION AND RESTORATION AREAS

According to the IDNR Coastal Program, there are six categories of sensitive areas for preservation or restoration. These include:

- areas of unique, scarce, fragile or vulnerable natural habitats;
- areas of historical significance, cultural value, or substantial recreational value or opportunity;
- areas of high natural productivity or essential habitat for living resources, including fish, wildlife, endangered species, and the various trophic levels in the food web critical to their well-being;
- areas needed to protect, maintain, or replenish coastal lands or resources including coastal flood plains, aquifers and their recharge areas, sand dunes, and offshore sand deposits;
- areas where development and facilities are dependent upon the use of, or access to, coastal waters or areas of unique features for industrial or commercial uses or dredge spoil disposal;
- areas where if development were permitted, it might be subject to significant hazard due to storm, slides, floods, erosion, and settlement.

The 2007 Watershed Management Plan underscores that restoration of riparian buffers along Trail Creek and its tributaries was critical to implementation. An estimated 40 miles of streams within the Trail Creek Watershed, including:

- 7.4 miles located within the Main Branch of Trail Creek Watershed;
- 18.4 miles within the East Branch of Trail Creek Watershed;
- 14.2 miles within the West Branch of Trail Creek Watershed have inadequate riparian buffers.

PLAN IMPLEMENTATION GOALS AND ACTIONS

In summary, within the Trail Creek Watershed, E. coli, sedimentation and streambank erosion, nutrient loading, and hydromodification have been identified as areas of concern. The 2007 Watershed Management Plan identifies several goals and actions, many of which address more than one concern. The anticipated benefits focus on the four principal goals of the 2007 Watershed Management Plan and include:

1. Reductions in E. coli loading to stream;
2. Reductions in sediment loading to stream and streambank erosion;
3. Reductions in nutrient loading to stream;
4. Restoration of the natural hydrology of Trail Creek.

It is recognized that several goals and actions have been implemented and their benefits realized. Other implementation goals and actions remain ongoing. The following goals and actions remain relevant to the restoration and management of the Trail Creek Watershed and are recognized for their value within this Comprehensive Plan. Each recommended implementation goal/action identifies, with a number, i.e., (1) (2) (3) and (4), the principal goals of the 2007 Watershed Management Plan, described above.

Goal 1. Eliminate livestock access to streams. (1) (2) (3)

Action: Through observation and reporting, determine locations at which livestock have unlimited access to streams and tributaries. Potential sources include farms, boarding facilities, and small acreage farmsteads.

Action: Coordinate with property owners and educate them on the importance of eliminating livestock access to streams and tributaries. Encourage property owners to eliminate access to streams for livestock. Enroll farmers in appropriate conservation programs.

Goal 2: Eliminate non-point source E. coli and nutrient loading to streams from livestock and not allow pets access to streams. (1) (2)

Action: Through observation and reporting determine locations at which non-point sources of E. coli and nutrients are affecting the stream and tributaries. Potential sources include feedlots, boarding facilities, dog parks, nuisance birds, and small acreage farmsteads.

Action: Coordinate with property owners and educate them on the importance of eliminating E. coli and nutrient loading to streams from livestock. Encourage property owners to eliminate access to streams for livestock. Enroll farmers in appropriate conservation programs.

Action: Coordinate with parks and recreation facilities to ensure appropriate BMPs are installed at all parks including pet waste receptacles.

Goal 3: Encourage all farmers within watershed to implement Conservation Management Plans specific for each farm and farming practice. (1) (2) (3) (4)

Action: Through NRCS and IDNR identify all farms within the watershed and evaluate current practices being implemented. Encourage the implementation of a Conservation Management Plan for all farms which do not currently one in place.

Action: Implement appropriate BMPs on each farm including riparian buffers, conservation tillage, and nutrient management.

Goal 4: Reduce erosion and sediment loading from row crops and agricultural lands. (2) (3)

Action: Identify farms not currently enrolled NRCS conservation programs or without a Conservation Management Plan.

Action: Coordinate with property owners and encourage enrollment in appropriate conservation programs. Encourage Conservation Management Plan to be created for each farm. Potential conservation practices to be implemented may include riparian buffers, wetland restoration, nutrient management, fencing of streams.

Goal 5: Eliminate discharges from septic tanks. (1) (3)

Action: Coordinate with LaPorte County and other appropriate agencies to implement policies and procedures to eliminate the placement of new septic tanks in sensitive areas, including those areas adjacent to streams or with unsuitable soils.

Action: Coordinate with LaPorte County and other appropriate agencies to implement policies

and procedures to inspect existing septic tanks and ensure they are functioning appropriately. Coordinate with LaPorte County Health Department and NIRPC to promote educational program with regard to maintenance of septic systems. Identify potential incentives for property owners to have septic systems inspected and maintained.

Action: Prepare Sanitary Sewer Long Term Master Plan with the objective to provide sanitary sewer service to the majority of the Trail Creek Watershed. Plan shall recommend phased implementation plan. First phase of implementation plan is anticipated to include providing sanitary sewer service to Pottawattamie Park. Second phase of is anticipated to provide sanitary sewer service to the Town of Trail Creek.

Goal 6: Preserve existing riparian corridors and buffers

Action: Further refine critical area mapping and identify specific properties with existing riparian corridors and buffers for preservation.

Action: Coordinate with LaPorte County and other appropriate agencies to implement policies and procedures to preserve existing riparian corridors including mandatory setbacks and easements.

Action: Identify significant areas of streambank erosion and instability.

Action: Implement streambank stabilization projects at priority locations.

Goal 7: Increase recreational access for fishing and recreational use.

Action: Provide better access points through the acquisition of easements.

Action: Preservation and restoration of existing access points

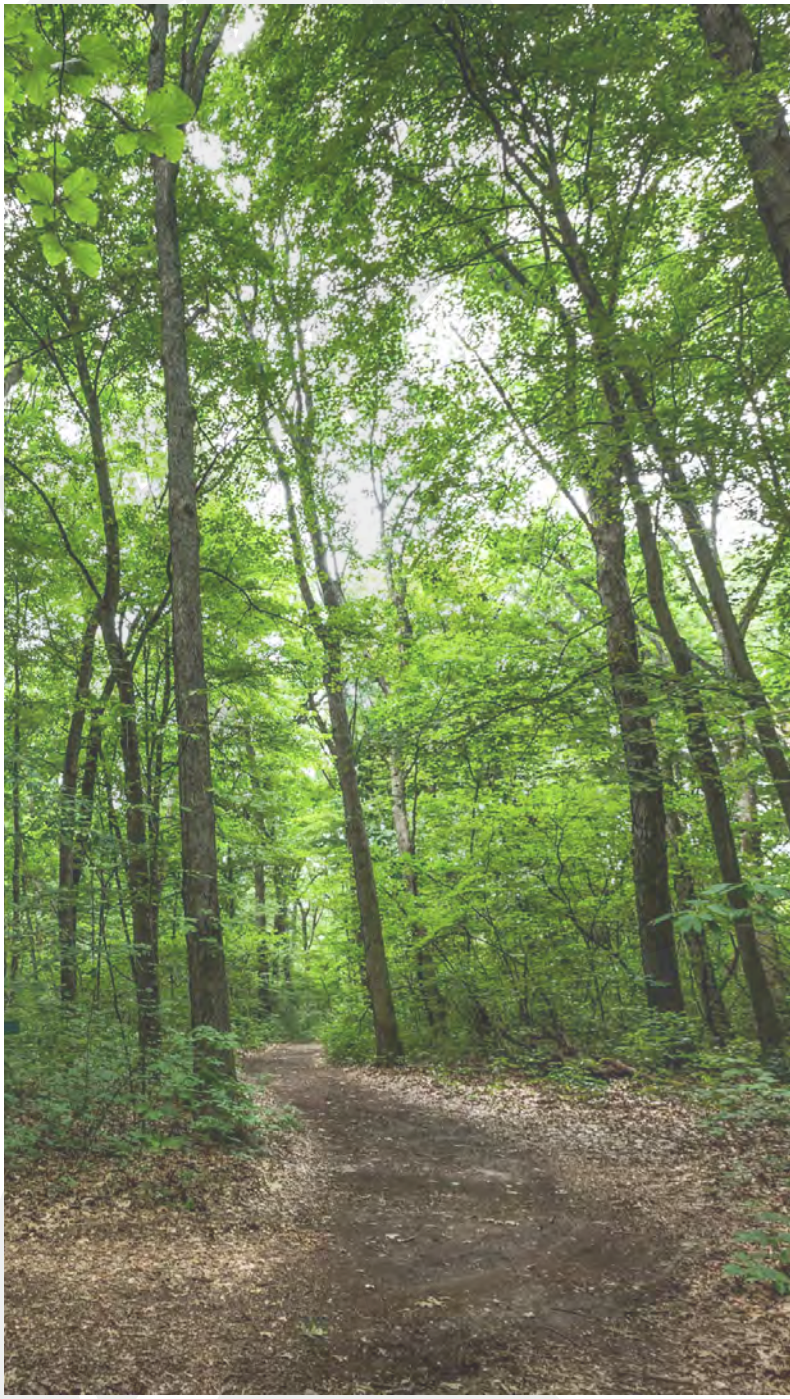
Action: Creation of greenways and blueways/canoe trails.

Goal 6: Encourage Low Impact Development

Action: Coordinate with LaPorte County Comprehensive Plan regarding inclusion of low impact development guidance and ordinances.

Goal 7: Coordinate Trail Creek Watershed Efforts with regional goals.

Action: Lead agency (presumably the Michigan City Sanitary District) shall coordinate with other local and regional watershed planners with regards to pollutant loads to Lake Michigan.



Transportation

Existing Road Use and Traffic Conditions

EXISTING FUNCTIONAL CLASSIFICATION

According to the Federal Highway Administration, "Fundamental classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. Basic to this process is the recognition that individual roads and streets do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads. It becomes necessary then to determine how this travel can be channelized within the network in a logical and efficient manner. Functional classification defines the nature of this channelization by defining the part that any particular road or street should play in serving the flow of trips through a highway network."

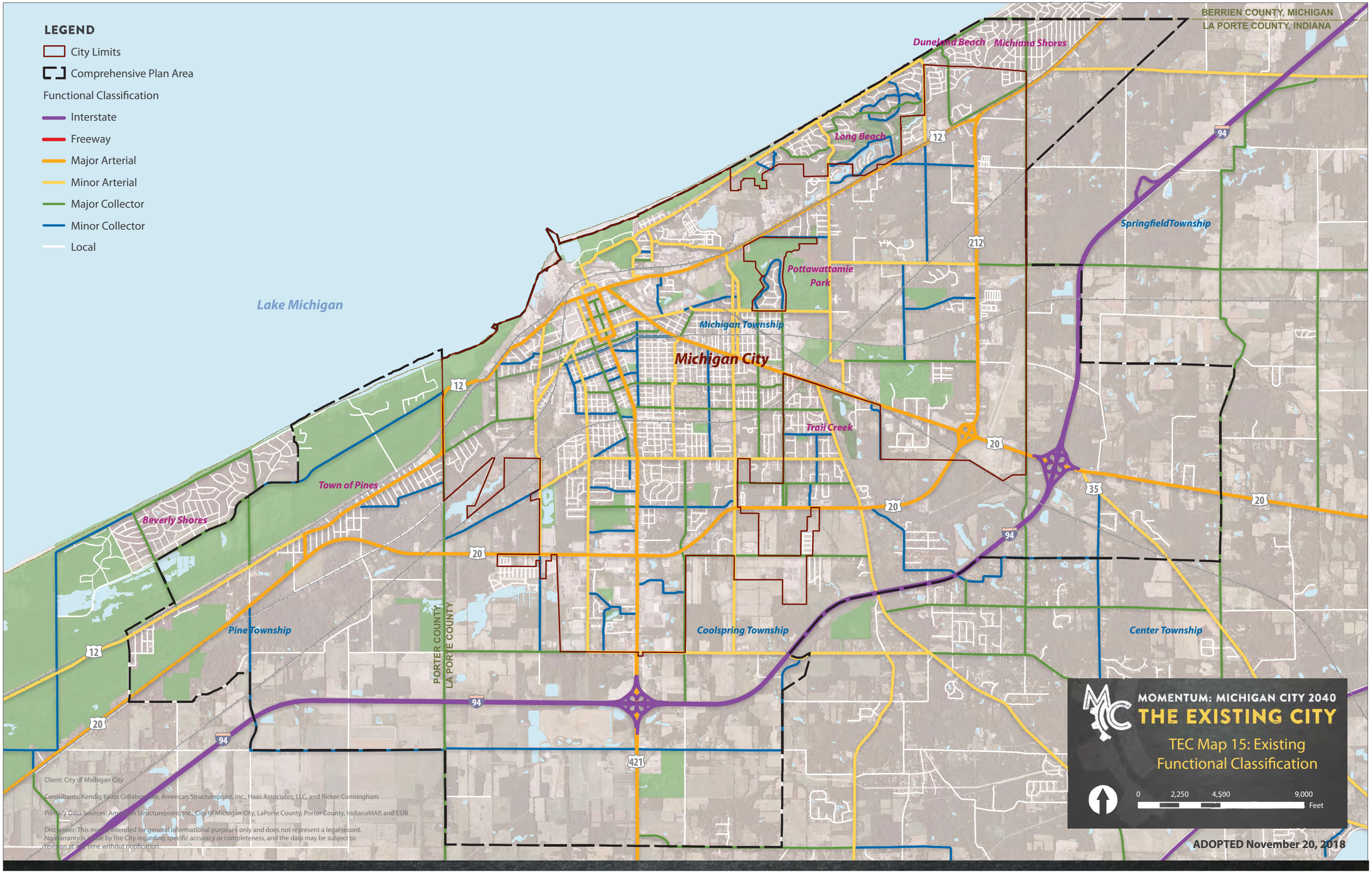
Data in TEC Map 15, *Existing Functional Classifications*, is provided via the Indiana Department of Transportation's GIS Database. The roadways classifications are broken down into seven functionalities; Interstate, Freeway, Major Arterial, Minor Arterial, Major Collector, Minor Collector and Local. Interstates and Freeways typically serve as a means for traffic to pass through or go around an area of interest such as Michigan City, or to continue on to another destination. Arterial Roads are high-capacity roadways that primarily deliver traffic from an Interstate or Freeway to a Collector Road. Collector Roads then serve as a means for traffic to continue from an Arterial Road to any desired Local Road or other destination.

Interstate 94 is the most significant of the roadways within the study area and provides a connection between the Chicagoland Area and the state of Michigan. There are two interchanges along Interstate 94 that provide access to Michigan City. These are the US Route 20 and US Route 421 interchanges.

US Route 20, US Route 421, US Route 12 and Michigan Boulevard are Major Arterials that provide access to and from the City. The most significant Major Collectors that provide traffic routes through the City are 10th Street, 11th Street, Wabash Street, Barker Street and Greenwood Avenue. Minor Collectors and Local Roads make up the majority of the remaining roadways.

Travel in the north or south direction within the City is facilitated by an ample amount of arterials and major collectors. Travel in the east or west direction within the City is hindered by a lack of arterials and major collectors. This lack of major roadways forces the majority of east-west traffic onto US Route 12, US Route 20, and the 10th St/ 11th Street corridor. This is likely due to Interstate 94 being located south of the City. All traffic coming from/going to east/west of the City are limited to routes utilizing US Route 12 or US Route 20.

Source: Bing Maps


LEGEND
City Limits
Comprehensive Plan Area
Functional Classification
Interstate
Freeway
Major Arterial
Minor Arterial
Major Collector
Minor Collector
Local
BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA
Dunelend Beach
Michiana Shores
Long Beach
Springfield Township
Pottawattamie Park
Lake Michigan
Michigan Township
Michigan City
Trail Creek
Town of Pines
Beverly Shores
Pine Township
PORTER COUNTY
LA PORTE COUNTY
Coolspring Township
Center Township
12
20
35
94
212
421
Client: City of Michigan City
Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham
Primary Data Sources: American Structurepoint, Inc., City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI
Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.
MOMENTUM: MICHIGAN CITY 2040
THE EXISTING CITY
TEC Map 15: Existing Functional Classification
0
2,250
4,500
9,000
Feet
ADOPTED November 20, 2018

EXISTING ANNUAL AVERAGE DAILY TRAFFIC VOLUMES

Annual Average Daily Traffic is a measurement of how much traffic a roadway carries on a typical day. This is calculated by dividing the total volume of vehicle traffic along a particular roadway for a year by 365.

Data in TEC Map 16, *Existing Annual Average Daily Traffic Volumes,* was provided via the Indiana Department of Transportation's Traffic Count Database System. The Legend in TEC Map 16 shows the values represented in the breakdown of the existing AADT volumes. There were many roadways in which INDOT traffic counts were not provided. These roadway are represented in TEC Map 16 as "No Data Available."

Interstate 94 has an AADT of 40,000 vehicles or greater for the extents of the study area. US Route 421 has the largest AADT of any Arterial Road between Interstate 94 and US Route 20, which carries 30,000 to 40,000 vehicles per day. This high concentration of AADT disperses relatively equally in all directions from the intersection of US Route 421 and US Route 20. US Route 20/Michigan Boulevard has an AADT volume of 15,000 to 20,000, which indicates it carries the second most traffic of any non-interstate route within the Planning Area.

Source: http://roads.billburmaster.com/

LEGEND

- City Limits
- Comprehensive Plan Area

Existing Annual Average Daily Traffic Volumes

- No Data Available
- < 1,000
- 1,001 - 5,000
- 5,001 - 10,000
- 10,001 - 15,000
- 15,001 - 20,000
- 20,001 - 30,000
- 30,001 - 40,000
- 40,001 - 50,000
- > 50,001

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Lake Michigan

Dunelend Beach
Michiana Shores
Long Beach
Pottawattamie Park
Michigan Township
Michigan City
Trail Creek
Springfield Township
Town of Pines
Beverly Shores
Pine Township
Coolspring Township
Center Township
PORTER COUNTY
LA PORTE COUNTY

12
94
212
20
35
421

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

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MOMENTUM: MICHIGAN CITY 2040

THE EXISTING CITY

TEC Map 16: Existing Annual Average Daily Traffic Volumes

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

EXISTING LEVEL OF SERVICE

Level of Service (LOS) is a qualitative measure that is used to analyze roadways by categorizing traffic flow and assigning quality levels of traffic based on specific performance measure. These levels are assigned by a letter system, LOS A through LOS F, with LOS A being the best rating and F being the worst.

Level of Service A represents free flow conditions. Traffic flows fluidly at or above the posted speed limit with motorists having a high level of physical and psychological comfort. Level of Service B represents reasonably free flow conditions. Posted speed limits are maintained and traffic flows with very little maneuverability issues. Level of Service C represents stable flow conditions. These conditions allow for most drivers to remain comfortable and maintain posted speed limits, but most become more aware of any maneuvering through lanes due to smaller average vehicle spacing. Level of Service D represents approaching unstable flow conditions. Speeds are slightly slower than posted speed limits as traffic volumes increase. Drivers begin to feel more uncomfortable as vehicle spacing decreases even more and maneuverability suffers. Level of Service E represents unstable flow conditions. Traffic flow becomes irregular and speeds vary due to virtually no vehicle gaps. Any disruption of traffic will create a drastic effect on the flow creating issues as well. Level of Service F represents forced or breakdown flow conditions where demand exceeds capacity and every vehicle travels slower than the posted speed limit due to congestion. Drivers have no vehicle gaps in which to maneuver between lanes. The roadway is essentially in a constant traffic jam.

In an urban area such as Michigan City, a level of service of LOS D or better is considered to be acceptable level of service.

The Level of Service ratings were calculated based on guidelines used by several state departments of transportation. Level of Service ratings are based on parameters such as posted speed limit, the number of lanes, and median type. Adjustments are also made if the road in question contained exclusive right or left turn lanes or was a one-way facility.

Data in TEC Map 17, *Existing Level of Service*, reflects the calculated Levels of Service for each roadway in which fundamental classification and AADT information was provided. It should be noted that these guidelines do not specify thresholds for LOS A or LOS B operations. Instead, all roadway operating at LOS C or better are classified as LOS C operations. LOS A and LOS B thresholds are not provided as LOS C is typically the minimum threshold for the operations of rural facility.

No roadways within the study limits received unacceptable LOS in the existing conditions. Roadways with LOS D are cause for concern with estimated growth in traffic volumes in the future. Franklin Street, East Michigan Boulevard and Coolspring Avenue should be monitored as each of these roadways currently operate at LOS D.

LEGEND

- City Limits
- Comprehensive Plan Area

Level of Service (LOS)

- LOS A
- LOS B
- LOS C
- LOS D
- LOS E
- LOS F
- No Data Available

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Dunelend Beach
Michiana Shores
Long Beach
Springfield Township
Pottawattamie Park
Lake Michigan
Michigan Township
Michigan City
Trail Creek
Town of Pines
Beverly Shores
Pine Township
PORTER COUNTY
LA PORTE COUNTY
Coolspring Township
Center Township

12 94 212 20 35 421

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

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MOMENTUM: MICHIGAN CITY 2040

THE EXISTING CITY

TEC Map 17: Existing Level of Service

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Crash Rate per Million Vehicle Miles Traveled

TEC Map 18, *Crash Rate per Million Vehicle Miles Traveled*, represents high density crash areas. This data was calculated based on the AADT and reported crashes over the last 3+ years. The reported crash data was provided by the Michigan City Police Department. The crash data contained nearly 5,500 reported crashes that occurred within the City limits from January 2014 through July 2017. A yearly comparison of crash types indicates the number of fatal crashes decreased significantly from 2014 to 2015 and remained at this level in 2016. The number of injury crashes and property damage crashes remained relatively constant in this time frame. This is illustrated in TEC Map 18.

The figure shows that Franklin Street, US Route 20, County Line Road and a portion of Michigan Boulevard have the highest crash rates with averages greater than 5 crashes per million vehicle miles traveled. This crash rate indicates a more detailed study of crashes along these corridors is needed.

US Route 20, County Line Road and the other sections of Michigan Boulevard have reported crash rates between 2 and 5 crashes per million vehicle miles traveled. All other roadways with sufficient available data had a crash rate lower than 2 crashes per million vehicle miles traveled.

LEGEND

- City Limits
- Comprehensive Plan Area

Crash Rate per Million Vehicle Miles Traveled

- < 2.0
- 2.0 - 5.0
- > 5.0
- No Data Available

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Dunelend Beach
Michiana Shores
Long Beach
Springfield Township
Pottawattamie Park
Lake Michigan
Michigan Township
Michigan City
Trail Creek
Town of Pines
Beverly Shores
Pine Township
PORTER COUNTY
LA PORTE COUNTY
Coolspring Township
Center Township

12 94 212 20 35 421

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

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MOMENTUM: MICHIGAN CITY 2040

THE EXISTING CITY

TEC Map 18: Crash Rate per Million Vehicle Miles Traveled

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Existing Hot Spots

Problematic locations were identified around the City in order to better understand some of the traffic issues and plan for future improvements. These locations have been identified as "Hot Spots". Their locations are depicted in TEC Map 19, *Existing Hot Spots*. A description of each "Hot Spot" is provided on the following pages in TEC Figure 13, *Existing Hot Spots Descriptions*.

TEC Map 19, Existing Hot Spots

#	Location
1	Garfield St. Extension
2	Karwick Rd. Railroad Underpass
3	Woodland Ave. and Pleasant Ave. one-way Couplets
4	Grace St. and Walker St.
5	Wabash St. and Green St. Intersection
6	2nd Street between Pine St. and Spring St.
7	Access Rd. between Pahs Rd. and US 20
8	11th St. between Kentucky St. and Michigan Blvd.
9	Roeske Ave. Railroad Crossings
10	Johnson Rd. Interchange
11	County Line Rd. Interchange
12	8th St. Alignment
13	Carroll Ave. Closure
14	10th St. between Wabash St. and Elston St., at Marquette High School
15	US Route 12 and State Route 212 interchange
16	Washington Park Traffic Circle
17	US Route 12 near Blue Chip Drive

LEGEND
City Limits
Comprehensive Plan Area
Hot Spots
Lake Michigan
Michigan City
Duneland Beach
Long Beach
Pottawattamie Park
Michigan Township
Trail Creek
Pine Township
Coolspring Township
PORTER COUNTY
LA PORTE COUNTY
12
15
212
20
94
10
11
421
MOMENTUM: MICHIGAN CITY 2040
THE EXISTING CITY
TEC Map 19:
Existing Hot Spots
0
2,250
4,500
9,000
Feet
Client: City of Michigan City
Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham
Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI
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ADOPTED November 20, 2018

TEC Figure 13, Existing Hot Spots Descriptions

1 GARFIELD STREET EXTENSION

Motorists accessing the City from the west side via US Route 12 and Woodlawn Avenue are not provided with a direct route into the downtown area or to areas south of downtown. An extension of Garfield Street to the intersection of Woodlawn Avenue & County Road 1100 W would provide a direct route to Ohio Street and Wabash Street, both of which provide direct routes to the aforementioned areas.

2 KARWICK ROAD RAILROAD UNDERPASS

Karwick Road is grade separated from the South Shore Railroad. The bridge that carries Karwick Road under the railroad allows for a single travel lane under the railroad. Motorists are directed to honk to alert motorists approaching from the opposite direction. This bridge is considered to be both a safety concern and a pinch point in terms of the capacity of Karwick Road.

3 WOODLAND AVENUE AND PLEASANT AVENUE ONE-WAY COUPLETS

Woodlawn Avenue and Pleasant Avenue function as a one-way pair of streets between Michigan Boulevard and the South Shore Railroad. This configuration causes motorists to travel additional distances to reach their destinations. One-way pairs are typically utilized in commercial areas to improve traffic flow. The Woodlawn Avenue and Pleasant Avenue one-way pairs pass through residential areas where traffic flow should not be the primary concern.

4 GRACE STREET AND WALKER STREET

High levels of crime have been experienced in the vicinity of the Grace Street and Walker Street intersection. This limits the attractiveness of this area of the City and should be addressed.

5 WABASH STREET AND GREEN STREET INTERSECTION

Safety concerns have been raised regarding the intersection of Wabash Street and Green Street. Eight reported crashes have occurred at this intersection in the previous three years.

6 2ND STREET BETWEEN PINE STREET AND SPRING STREET

An extension of 2nd Street to Spring Street would provide a more direct route between Franklin Street and Michigan Boulevard. This connection would shift traffic volumes from turning movements to through movements at the Pine Street and Spring Street intersections with U.S. Highway 12, which is expected to ease congestion in this area.

7 ACCESS ROAD BETWEEN PAHS ROAD AND US ROUTE 20

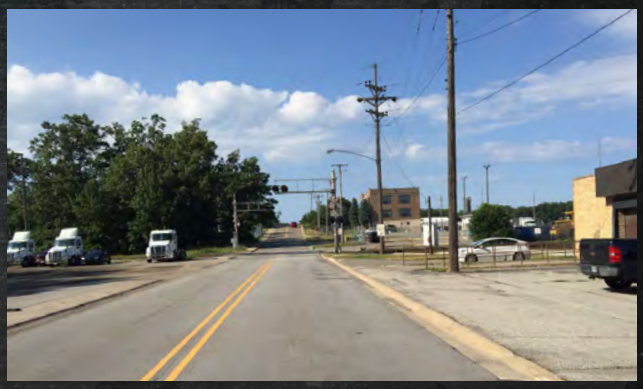
The need for a new connection between Pahs Road & US Route 20 has been recognized by the City. This north-south roadway would reduce traffic volumes along Woodlawn Avenue and would improve access to the Michigan City High School.

8 11TH STREET BETWEEN KENTUCKY STREET AND MICHIGAN BOULEVARD

The South Shore Railroad line currently travels along the center of 11th Street. The Northern Indiana Commuter Transportation District (NICTD) is currently developing plans to add a second track to the 11th Street corridor. This additional track will reduce 11th Street to a one-way eastbound facility and will sever connections for numerous minor roadways that cross the track. The proposed changes to 11th Street and the numerous severed connections will alter mobility in the vicinity of the track.

9 ROESKE AVENUE RAILROAD CROSSINGS

Roeske Avenue crosses two tracks owned and operated by the Chicago South Shore & South Bend Railroad. According to the Federal Railroad Administration (FRA), these tracks carry two trains per day, both of which traverse the rail line between 6pm and 6am. Safety at this crossing is currently enhanced through the use of overhead gantries and gates. Visibility of this at-grade crossing is limited for motorists traveling southbound due to the vertical crest curve of the Roeske Avenue overpass bridge, located approximately 650ft north of this crossing.



TEC Figure 13, Existing Hot Spots Descriptions

10 JOHNSON AVENUE INTERCHANGE

The City is currently accessible from two interchanges – U.S. Highway 421 and Michigan Blvd. Congestion levels at these intersections are expected to rise as the City continues to grow. Congestion at these existing interchanges can be alleviated by providing additional interchanges. Johnson Road is a likely candidate for a future interchange, as it is currently a minor arterial that currently serves as a major access point to the City.

11 COUNTY LINE ROAD INTERCHANGE

County Line Road is another logical location for an interchange with Interstate 94. This interchange can reduce congestion along US Route 421/ Franklin Street and the associated interchange by attracting traffic from the west seeking the downtown area or the Lighthouse Place Premium Outlets.

12 8TH STREET ALIGNMENT

8th Street is largely discontinuous between U.S. Highway 12 and Chicago Street which limits the ability of this roadway to carry traffic to/from downtown and the outlet mall. Realigning 8th Street to create a more attractive route to downtown is expected to reduce traffic volumes along 10th Street and U.S. Highway 12.

13 CARROLL AVENUE CLOSURE

The South Shore Line rail yards will be expanded as part of the double tracking project. This expansion will result in the closing of the Carroll Avenue at-grade railroad crossing. This closure will restrict mobility in the area.

14 10TH STREET BETWEEN WABASH STREET AND ELSTON STREET

The proposed NICTD Double Track Project will convert 11th Street to a one-way facility. This is expected to increase the traffic volume along 10th Street, which borders Marquette High School. This increase in vehicular traffic is expected to create additional conflicts between students/pedestrians and vehicles. This segment of 10th Street should be monitored to ensure that vehicular speeds remain at or below the posted school zone speed limit of 15 mph.

15 US ROUTE 12 AND STATE ROUTE 212 INTERCHANGE

The intersection of US Route 12 and State Route 212 is an unsignalized version of the "continuous green" or "Florida T" intersection. This configuration facilitates continuous flow of westbound traffic along US Route 12 and northbound to westbound traffic from State Route 212 to US Route 12. All other movements are stop controlled. This configuration creates confusion for motorists. The need to utilize a frontage road to accomplish a northbound to westbound turning movement is not intuitive for motorists and hinders mobility in the area.

16 WASHINGTON PARK TRAFFIC CIRCLE

The intersection of Franklin Street and Lake Shore Drive serves as the gateway to Washington Park, the beach, and the lighthouse museum. The current configuration of this intersection limits mobility to these destinations. The Washington Park Master Plan proposes this intersection be reconfigured as a modern traffic circle, centered about the existing Civil War Monument. This traffic circle will improve traffic flow in the area and will better emphasize the monument.

17 US ROUTE 12 NEAR BLUE CHIP DRIVE

US Route 12 is a 4-lane facility within the City. The exception to this statement is the 0.2 mile segment of US Route 12 located east of Blue Chip Drive were the roadway narrows from 4-lanes to 2-lanes. This 2-lane segment should be widened to 4-lanes to maintain consistency and to eliminate unnecessary lane drops.

Traffic Count Locations

The City is pursuing a railroad Quiet Zone designation for the 10th Street and 11th Street corridors. Trains traveling along this corridor must currently sound horns at each crossing. A Quiet Zone allows trains to traverse crossings without sounding horns as elements such as gates and median barriers prevent motorists from entering the path of an oncoming train. The Federal Railroad Administration (FRA) requires recent traffic counts at each crossing to support the Quiet Zone application. These counts were performed as part of the Comprehensive Plan and are summarized in the remainder of this section.

DAILY TRAFFIC COUNTS

Daily traffic counts are conducted to measure traffic volume on a given segment of roadway. These counts are performed during a period when traffic volumes and patterns are considered to be typical for the year. Such counts are typically performed over a 24-hour, 48-hour, 72-hour or seven-day period.

TEC Map 20, *Traffic Count Locations*, shows the locations where daily traffic counts that were collected in July 2017. These counts were collected on a typical at locations where the proposed NICTD tracks will cross a segment of roadway.

INTERSECTION TURNING MOVEMENT COUNTS

Turning Movement Counts (TMC) are conducted to measure the traffic volumes for each movement at any particular intersection. The proposed and existing NICTD tracks pass through numerous intersections within the 11th Street corridor. TMCs were collected at each of these intersections to support the Quiet Zone application. The locations of these counts are depicted in TEC Map 20, *Traffic Count Locations*.

TEC Map 20, Traffic Count Locations	
Bi-Directional Count (ATR) Locations	
1	Carlon Ct. south of 10th St.
2	Donnelly St. south of 10th St.
3	Chicago St. north of 11th St.
4	Kentucky St. between RR and Chicago St.
5	Vail St. between RR and Holiday St.
6	School St. south of RR
7	Grace St. north of RR
8	Woodland Ave. north of RR
9	Pleasant Ave. north of RR
10	Carroll Ave. north of RR
11	Michigan Blvd between RR and Vail St.
Intersection Turning Movement Count (TMC) Locations	
1	10th St. and Sheridan Ave.
2	10th St. and Hayes Ave.
3	10th St. and Greeley Ave.
4	10th St. and Hancock Ave.
5	10th St. and Seymour St.
6	10th St. and Douglas Ave.
7	10th St. and Grants Ave.
8	10th St. and Willard Ave.
9	10th St. and Claire St.
10	11th St. and Tennessee St.
11	11th St. and Ohio St.
12	11th St. and Elston St.
13	11th St. and Manhattan St.
14	11th St. and Buffalo St.
15	11th St. and Wabash St.
16	11th St. and Washington St.
17	11th St. and Franklin St.
18	11th St. and Pine St.
19	11th St. and Spring St.
20	11th St. and Cedar St.
21	11th St. and Lafayette St.
22	11th St. and York St.
23	11th St. and Oak St.
24	11th St. and Maple St.
25	11th St. and Phillips Ave.

LEGEND

- City Limits
- Bi-Directional Count (ATR)
- Intersection Turning Movement Count (TMC)
- Railroad

MOMENTUM: MICHIGAN CITY 2040
THE EXISTING CITY

TEC Map 20:
Traffic Count Locations

0 2,250 4,500 9,000 Feet

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

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ADOPTED November 20, 2018

Railroads

There are four primary railroads that traverse Michigan City, as shown on TEC Map 21, *Railroads*, and include:

CHICAGO, SOUTH SHORE AND SOUTH BEND

The Chicago, South Shore and South Bend (CSS) line provides high density freight and passenger services. It is not affiliated with the South Shore Line passenger train service. http://www.anacostia.com/railroads/css

There are two CSS lines in the Lake Michigan area. The first line runs in a southwest – northeast direction near the Lake Michigan shoreline primarily paralleling US 12 southwest of the City. Near Sheridan Avenue it veers into an east-west direction continuing through the City and eastward crossing I-94. As shown on TEC Map 21, *Railroads*, there are three stations along this line and includes Beverly Shores Flag Stop, 11th Street Station and Carroll Avenue Station. The second CSS line runs in a northwest-southeast direction beginning near the Carroll Avenue Station and continuing southeast through the City of La Porte.

AMTRAK

The Amtrak line runs southwest of Michigan City and is within the CSS right-of-way, on the south side of the CSS line. As it continues into Michigan City it goes in a northern direction. The Amtrak station is located where the rail line connects to Washington Street. From there it parallels U.S. Highway 12 as it continues east of the City. The Amtrak Wolverine line makes three stops per day at the Michigan City station on its way to Chicago, and twice per day on the way to Pontiac.

CSX RAILROAD

The CSX Railroad (formerly known as the Chessie Seaboard and the Seaboard System Railroad) is the southernmost railroad extending in a southwest-northeast direction. There are no stations along this line near or within Michigan City.

NICTD SOUTH SHORE LINE

The Northern Indiana Commuter Transportation District's (NICTD) South Shore line provides electric commuter rail service between Chicago and northern Indiana. The South Shore line is a 90 mile long, commuter railroad route that begins in South Bend, Indiana and ends at Millennium Station in Downtown Chicago. NICTD began an express service in 2015 between South Bend and Chicago and had two stops between them – Dune Park and East Chicago. Travel time is estimated at approximately two hours.

In Michigan City, the track runs down 11th Street from Michigan Boulevard to Tennessee Street, where it crosses over to 10th Street, and has an at-grade diamond with Amtrak's Michigan Services. The track then runs down 10th Street to Sheridan Avenue on the west side of Michigan City. Leaving Michigan City, the track travels through the Indiana Dunes State Park.

- Number of SS trains per day: 20 trains in each direction.

LEGEND

- City Limits
- Comprehensive Plan Area
- Northern Indiana Commuter Transportation District (NICTD) Stations
- Amtrak Station
- Railroad
- Rail Yard
- AMTRAK Line
- Chicago, South Shore and South Bend (CSS) Line

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

AMTRAK Station

NICTD 11th Street Station

NICTD Carroll Ave Station

NICTD Beverly Shores Flag Stop

Lake Michigan

Dunelend Beach

Michiana Shores

Long Beach

Michigan Township

Amtrak

CSX Railroad

Pottawattamie Park

Chicago South Shore and South Bend (CSS) Rail Yards

Michigan City

Springfield Township

CSS Railroad

Trail Creek

CSS Railroad

Town of Pines

Beverly Shores

CSS Railroad

Amtrak

CSX Railroad

Pine Township

PORTER COUNTY
LA PORTE COUNTY

Coolspring Township

Center Township

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

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MOMENTUM: MICHIGAN CITY 2040

THE EXISTING CITY

TEC Map 21: Railroads

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Public Transit

The Michigan City Transit (MCT) program is dedicated to providing viable transportation services that are essential to the growth and economic development of the City and the public's mobility needs. MCT service includes bus transportation along four fixed routes for use by the general public, see TEC Map 23, *Public Transit*. MCT buses are accessible for individuals with disabilities. Buses are equipped with lifts/ramps for easy boarding. Fixed-route fare is $1.00.

MCT PARATRANSIT

MCT also offers an ADA Paratransit service called "Dial-a-Ride" to service individuals with disabilities who are unable to ride accessible fixed-route service because of their disability. Michigan City's paratransit service is recognized as a special transportation service for people with disabilities; is provided as a supplement to the fixed-route bus service; and extends approximately three-quarters of one mile outside of the fixed-route service area. Paratransit fare is $2.00 one-way.

TRANSIT TRIANGLE

MCT, in conjunction with La Porte TransPorte, and Purdue Northwest University also provide the Transit Triangle commuter bus service, that provides three routes within LaPorte County:

- Michigan City to Purdue Northwest
- La Porte to Purdue Northwest
- Michigan City to La Porte

The Transit Triangle provides 18 round trips Monday through Friday. The Transit Triangle service is made possible by a federal Congestion Mitigation Air Quality (CMAQ)grant and matching contributions from the City of Michigan City, the City of La Porte, LaPorte County, and Purdue University Northwest. Additional assistance is provided by the Northwestern Indiana Regional Planning Commission (NIRPC). Michigan City Transit, the administrative grantee and lead operating agency on Transit Triangle, worked in close collaboration with Purdue Northwest and La Porte TransPorte, and received vital assistance from the LaPorte County Board of Commissioners, the Northwestern Indiana Regional Planning Commission and the LaPorte County Highway Department.

The annual ridership of Michigan City's fixed-route, paratransit and triangle service is approximately 190,000 riders; which includes 173,000 riders for the fixed-route and paratransit (at a cost of approximately $1,350,000; and 6,846 riders of the transit triangle service (at a cost of approximately $225,667).

The MCT annual operating budget is $1.3 - $1.5 million for fixed-route service and $200,000 for the Transit Triangle. 50 percent of the operating budget is subsidized by the Federal Transit Administration (FTA).

MCT 2015 STRATEGIC PLAN

The MCT's 2015 Strategic Plan lists four principal goals and several immediate, short-term, and long-range implementation strategies to achieve the goals:

GOAL 1: Deliver reliable public transportation while developing service that reduces dependency of the automobile.

Immediate Implementation Strategies:

1. Maintain compliance with Department of Transportation Driver Qualifications.
2. Maintain compliance with the FTA Preventative Maintenance requirements.
3. Maintain compliance with the ADA regulations regarding Transit Operations.
4. Maintain the repair and maintenance of all Wheelchair lifts and ramps.
5. Maintain required department policies and procedures.
6. Maintain 95% on-time service to key time points.
7. Increase ridership by 3%.
8. Conduct Service Survey.
9. Evaluate the possibility to changing system to a "Bus Stop Only" service.
10. Upgrade IT capabilities.
11. Upgrade communication capabilities.

Short-Term (2-3 Years) Implementation Strategies

- Continue to improve Fleet Safety.
- Continue to improve Customer Service.
- Reduction of complaints by 50% with a goal of no more than 5 per month.
- Continue creation of required Department policies

– Increase ridership on city routes by 3%.
– Implement "Bus Stop Only" Service.
– Evaluate Service needs.
– Explore the 212 corridor to Green Acres/Tall Timbers.
– Begin updates of Bus Stop Signage.
– Survey need for shelters at key points in the city.
– Develop Paratransit program efficiency and productivity standards.
– Explore Service needs for community special events.

Long-Term (3-5 Years) Implementation Strategies:

– Continue to improve Fleet Safety.
– Continue to improve Customer Service.
– Increase ridership by 3%.
– Implementation of service for community special events.
– Explore other types of new services.

GOAL 2: Maintain Michigan City's fiscal integrity.

Immediate Implementation Strategies:

1. Compliance with FTA Grant reporting.
2. Compliance with National Transit Database Reporting.
3. Creation of 5-year Revenue-vehicle Rolling Stock Plan.
4. Explore all federal and state funding options available.
5. Maintain compliance with NTB reporting for possible STIC funding.

Short-Term (2-3 Years) Implementation Strategies:

– Explore viability of a citizen/volunteer transit advisory committee.
– Explore partnerships with local agencies to promote transit.
– Conduct periodic city-wide market research surveys.

Long-Term (3-5 Years) Implementation Strategies:

– Develop knowledge of transit benefits through school education programs.
– Continue to conduct periodic city wide market research surveys.
– Continue to build partnerships with public agencies and community groups.

GOAL 3: Provide leadership for the City's transportation needs.

Immediate Implementation Strategies:

1. Make department more visible to community and City Council.
2. Create system for annual evaluations.
3. Strengthen relationship with NIRPC.

Short-Term (2-3 Years) Implementation Strategies:

– Explore viability of a citizen/volunteer transit advisory committee.
– Explore partnerships with local agencies to promote transit.
– Conduct periodic city-wide market research surveys.

Long-Term (3-5 Years) Implementation Strategies:

– Develop knowledge of transit benefits through school education programs.
– Continue to conduct periodic city wide market research surveys.
– Continue to build partnerships with public agencies and community groups.

GOAL 4: Develop a professional workplace environment that allows employees to succeed.

Immediate (2015) Implementation Strategies:

1. Maintain clear lines of responsibilities and authority.
2. Maintain and communicate clearly defined employee expectations or performance and professional conduct.
3. Instill a sense of flexibility in the way of thinking and operating with workforce.
4. Build workforce morale
5. Create a positive communications approach with operators.
6. Create a positive relationship with the ATU.

Short-term (2-3 Year) Implementation Strategies:

– Strengthen operator training and safety programs.
– Strengthen Safety First and Always philosophy.
– Continue to build operator morale.
– Continue to work with operators to improve operational flexibility.

– Continue to work on communication issues with operators and system.
– Continue to improve relationship with ATU.

Long-term (3-5 Years) Implementation Strategies:

– Continue to improve relationship with the ATU.
– Continue to improve the morale of operators.

ISSUES

There are several issues associated with the MCT geographic coverage and operating times:

1. After 6:30 pm public transit does not serve the Franciscan Hospital or the industrial businesses along Ohio Street, even though several shifts extend until 11:00 pm.
2. There is a gap in service is along SR 212, between U.S. Highway 12 and E. Michigan Blvd. This corridor is included within the paratransit program, but it is not a fixed route of service.

PROPOSED MICHIGAN CITY TROLLEY SERVICE

A trolley-style transit service is currently being planned which will cover the Uptown Arts District, see map TEC Map 22, *Proposed Trolley Service*. Proposed Stops would include:

1. 11th Street South Shore Station.
2. Franklin Street – at 10th Street, 8th Street, 6th Street and 4th Street.
3. Pine Street and Michigan Boulevard.
4. Washington Park Area – South side of bridge, North side of bridge, Senior Center, Washington Park Zoo and Amphitheater.
5. Blue Chip Casino.
6. Wabash Street – Light House Mall at 6th Street, 7th Street, and 8th Street.

The Michigan City *Gateway Implementation Strategy* report (page A.42) also identifies a proposed Trolley route alignment and locations of stops. The City has not determined a final route alignment or the location of particular trolley stops.

The trolley would return to 11th Street South Shore Station with a frequency of service every 30 minutes.

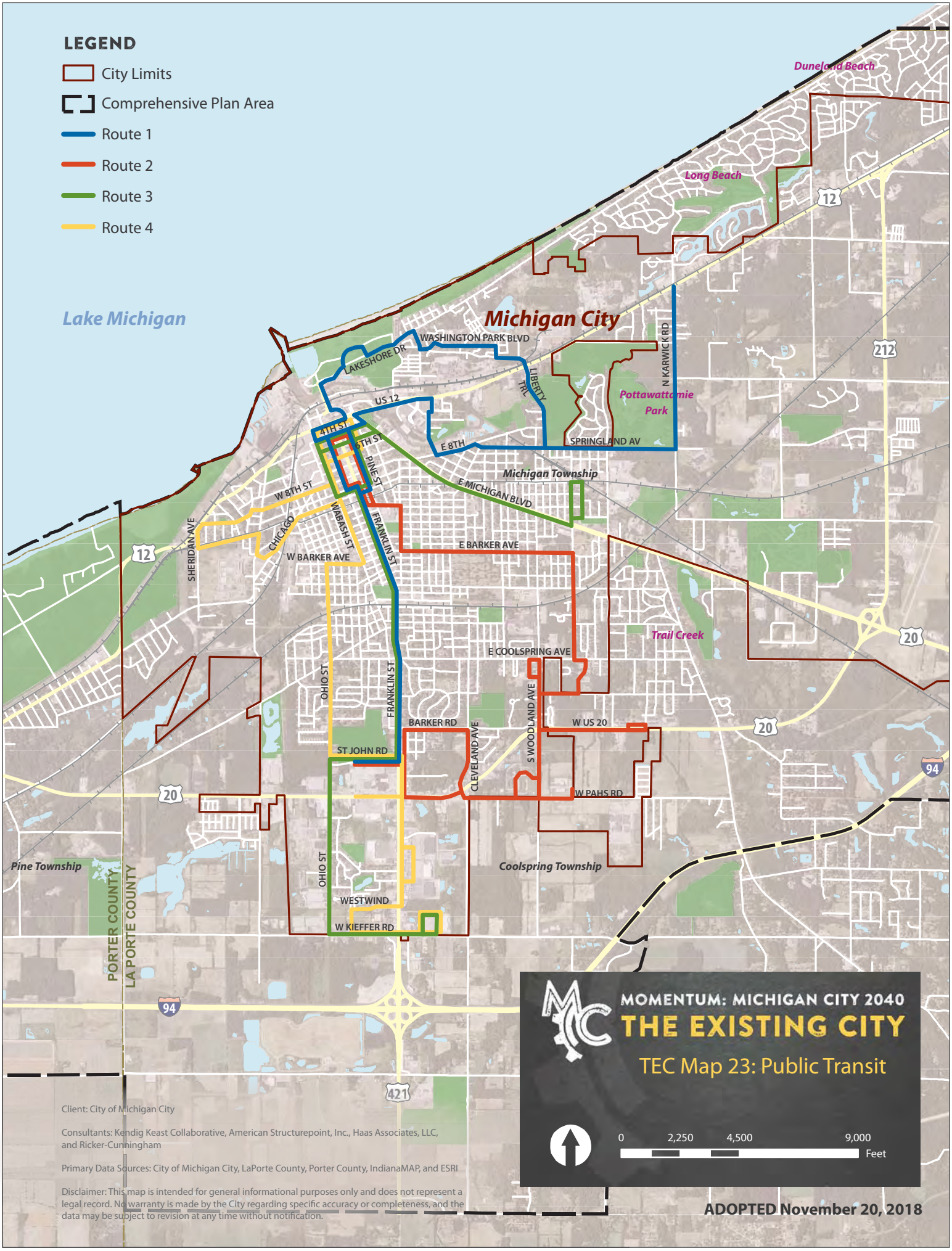
TEC Map 22, Proposed Trolley Service

The estimated annual cost of this additional fixed-route service, including drivers and operating supplies, is $142,000.00; with a $200,000.00 estimated equipment startup cost (trolley style bus).

In addition to the trolley-style transit service, the existing fixed-route service would be expanded (i.e., Service to the south end corridor, new retirement housing on East Michigan Blvd., SR 212 area and Tall Timbers Housing. However some service frequency may be reduced, which will require further studies.

Public transit is inadequate. Need to:

– extend hours
– offer transit service on Sunday
– more buses
– must wait up to an hour


LEGEND
City Limits
Comprehensive Plan Area
Route 1
Route 2
Route 3
Route 4
Lake Michigan
Michigan City
Dunelands Beach
Long Beach
Pottawattomie Park
Michigan Township
Trail Creek
Coolspring Township
Pine Township
WASHINGTON PARK BLVD
LAKESHORE DR
US 12
4TH ST
5TH ST
E 8TH
SPRINGLAND AV
LIBERTY TRL
N KARWICK RD
PINE ST
E MICHIGAN BLVD
W 8TH ST
CHICAGO
WABASH ST
FRANKLIN ST
SHERIDAN AVE
W BARKER AVE
E BARKER AVE
E COOLSPRING AVE
OHIO ST
BARKER RD
ST JOHN RD
CLEVELAND AVE
S WOODLAND AVE
W US 20
W PAHS RD
WESTWIND
W KIEFFER RD
PORTER COUNTY
LA PORTE COUNTY
12
20
94
421
212
MOMENTUM: MICHIGAN CITY 2040
THE EXISTING CITY
TEC Map 23: Public Transit
0
2,250
4,500
9,000
Feet
Client: City of Michigan City
Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham
Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI
Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.
ADOPTED November 20, 2018

Active Transportation

TEC Map 24, *Active Transportation*, depicts on-street bicycle lanes and off-street recreational trails.

MICHIGAN CITY GREENWAYS MASTER PLAN (2005)

The goal of the Michigan City Greenways Master Plan is to provide as many non-motorized trails as possible by utilizing the right of ways from the railroad and NIPSCO properties for crossings at thoroughfares, railroads and waterways. The Greenways Master Plan will help to establish connections to local community destinations as well as existing and future regional trail systems. The entire greenway system will connect throughout the community to existing bike routes known as The LaPorte County Shared Bikeways and The Michigan City Inner City Bike Loop. The Master Plan also provides design guidelines and standards for trail widths and surfaces, signage and other site furnishings, lighting, bridges, street and railroad crossings.

The Greenways Master Plan builds off of the 2003 Northwestern Indiana Regional Planning Commission (NIRPC) Priority Regional Trails and Corridors for Northwestern Indiana plan. Among the NIRPC plan's priority trails, two high priority and two medium priority trails are shown to pass through the corporate city limits of Michigan City. A portion of the Michigan City / La Porte Trail is within the 421 Corridor Study Area and runs from Gardena Park south to Coolspring, where it jogs one block to the east and continues south down Woodland Avenue to Pahs Road, where it again jogs eastward to the Michigan City High School. Another NIRPC priority trail, the Monon Trail runs just to the west of the 421 Corridor Study Area, and is aligned in part along the abandoned Monon Railroad, which is just to the west of Ohio Street. The Monon Trail terminates and CR 400 N although there are plans to extend and link the trail to a regional trail network that extends to Southern LaPorte County.

Source: Calumet Trail, traillink.com

The Greenways Master Plan also acknowledges an existing on-street bike lane that passes across U.S. Highway 421 and runs along Barker Street, south on S. Franklin Street to St. John's Road, where it flanks the Marquette Mall site to Ohio Street, where the bike lane is aligned along Ohio Street to Coolspring Avenue. The bike lane follows Coolspring eastward to Maple Street, where it jogs south to Edgewood Elementary School.

LEGEND

- City Limits
- Comprehensive Plan Area
- Michigan City Principal On-Street Bike Lanes
- LaPorte County Principal On-Street Bike Lanes
- Off-Street Recreational Trails

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Dunelend Beach
Michiana Shores
Long Beach
Michigan Township
Washington Park to Calumet Trail
Peanut Trail
Pottawattamie Park
Lake Michigan
Michigan City
Springfield Township
Trail Creek
Calumet Trail
Town of Pines
Beverly Shores
Striebel Pond Trail
PORTER COUNTY
LA PORTE COUNTY
Pine Township
Coolspring Township
Center Township

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

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MOMENTUM: MICHIGAN CITY 2040

THE EXISTING CITY

TEC Map 24:
Active Transportation

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Utility System Facilities, Service Areas, and Conditions

Potable Water Supply, Treatment, Distribution and Storage

The City, through the Department of Water Works, obtains all of its potable water supply from Lake Michigan. This began approximately 120 years ago and is expected to continue into the foreseeable future. The Department of Water Works is permitted to withdraw up to 30 million gallons per day (MGD) from Lake Michigan, provided the users of the water are located within the Lake Michigan watershed. The average daily water usage from the water distribution system was 5.37 MGD in 2016.

Michigan City is very fortunate to have Lake Michigan as a potable water supply, due to the lake's enormous capacity and excellent water quality. The Department's water intakes in Lake Michigan are located to assure this water quality under all weather conditions. Due to Lake Michigan's capacity, the potable water conservation plan of the Michigan City Department of Water Works does has not had to be implemented, even during severe drought. The Department does advise its water customers to make repairs to dripping faucets and "running" toilets to reduce water loss and cost.

The Department's potable water grid system, which is indicated on TEC Map 25, *Potable Water System*, serves the City of Michigan City and the following other communities:

To the west:

- Town of Pines, in Porter County, Indiana;
- Town of Beverly Shores, in Porter County, Indiana;

To the east:

- Supply water for Town of Long Beach water system, LaPorte County, Indiana;
- Supply water for Duneland Beach Homeowners Association water system, LaPorte County, Indiana;
- Supply water for Town of Michiana, Michigan water system, Berrien County, Michigan;
- Supply water for New Buffalo Township water system, Berrien County, Michigan;
- Recently acquired water grid system and customer base, Town of Michiana Shores, LaPorte County, Indiana;
- Recently acquired water grid system and existing customer base, Town of Pottawatomie Park, LaPorte County, Indiana;
- Department's water mains extended to some customers in Town of Trail Creek, LaPorte County, Indiana;
- Department's water mains extended to some customers in LaPorte County, Indiana.

The Department of Water Works updated their Master Plan in 2013, for a 25-year planning period. The Master Plan and Superintendent Randall E. Russell are the sources of the information provided herein.

WATER TREATMENT PLANT

The Lake Michigan water supply is treated by a water treatment plant, with a capacity of 20 MGD. The plant is located approximately 1/3 of a mile from the lake shore. The treatment plant processes include:

1. chemical coagulation and flocculation;
2. solids settling;
3. gravity filters with activated granular carbon filter media for filtration of solids and absorption of organic compounds which otherwise could cause taste and odor problems in the finished potable water; and
4. disinfection with chloramines. No softening of the water is required due to Lake Michigan's low water hardness concentration. Currently there is no corrosion control system in use, but testing is being conducted to determine if corrosion control is warranted, in the future.

The treatment plant processes include use of recycled water from the backwashing of the filters. The water is held and settled in a thickener tank, the decant water is then pumped back through the treatment process and the sludge is then discharged into the City's sanitary sewer system.

A finished clearwell tank at the treatment plant provides 1.75 million gallons of potable water storage. The high service pumps at the plant, which are new and have new electrical supply facilities, withdraw water from the clearwell and pump into the water distribution system at a pressure of 65 pounds per square inch (PSI). These pumps have a "firm" pumping capacity (with one of the largest and one of the smallest pumps out of service) of 32 MGD.

The average daily potable water treated at the plant in 2016 was 5.37 MGD and the maximum day amount was 11 MGD. These values are well below the 20 MGD treatment capacity and the 32 MGD high service pumping capacity at the water treatment plant. Obviously the Department's water treatment plant has considerable available capacity. Also, an electrical generator is permanently located at the treatment plant to operate the entire plant upon the loss of power from the electric utility.

POTABLE WATER DISTRIBUTION AND STORAGE

The Department's potable water distribution and storage system includes the following, as indicated on the TEC Map 25, *Potable Water System*.

1. There are three distribution system pressure zones: (1) Michigan City North, which currently operates from the main treatment plant pumps, and two elevated steel storage tanks which are all located north of U.S. Highway 20. (2) The South system is operated from the Pahs Road three million gallon ground storage tank and booster pump station which are located south of U.S. Highway 20. (3) The Town of Beverly Shores, Indiana, which is a stand-alone system, with a booster pump station but no storage.
2. There are three water storage tanks: two elevated storage tanks in the North pressure zone – a one million gallon tank on Carroll Avenue, a one million gallon tank on Hitchcock Road; and one ground storage tank in the Michigan City South pressure zone – three million gallon tank on Pahs Road.
3. There are two pressure booster pump stations: one at the Pahs Road water storage tank for the South system, with a pumping capacity of 8.5 million gallons per day; and one at the beginning of the Beverly Shores distribution system, with a pumping capacity of 5.0 million gallons per day. Both booster pump stations have a permanent electrical generator to fully operate the stations upon the loss of power from the electric utility.
4. Considerable larger size water mains on the perimeter of Michigan City were constructed for several reasons; (1) to serve as "reinforcement" to the existing grid system, (2) to be capable of providing additional services in those areas, and (3) to be capable of expanding further out into the service area.

Based on the preceding, the total potable water storage at the Michigan City water treatment plant and in the distribution system is 6.75 million gallons. This total potable water storage capacity exceeds the average daily potable water usage of 5.37 MGD based on 2016 information. The combination of the 6.75 million gallons of potable water storage and the ability to operate the 20 million gallon per day water treatment plant and the two pressure booster pump stations with permanent standby electrical generators all provide adequate potable water volume for a combination of maximum water usage and fire flow demand. The distribution systems have the ability to deliver the necessary combined usage and fire flow. However; there are some areas that may have deficiencies in fire flow. These fire flow-deficient areas are along U.S. Highway 35/20 near the Michigan City Municipal Airport and U.S. Highway 20 east from that area. The Department purchased a small tract of land in that area to construct a temporary standalone booster pump station to increase the pressures in that area. As proposed in the Master Plan, the area along U.S. Highway 20 will eventually be connected to the south booster pump station on Pahs Road, to be part of that higher pressure zone.

As the distribution system is extended to the east from the Airport and also south from the U.S. Highway 421/I-94 interchange area, the Department will be seeking to acquire additional property to construct additional elevated steel storage tanks or ground storage tanks with booster pump stations to provide those areas with adequate water volumes and pressures. The Department recently requested expansion of their service area and the Indiana Utility Regulatory Commission approved the following expanded service area boundaries: In Porter County – State Park/Kemil Road on the west and County Road 1500 N. on the south and in LaPorte County – County Line Road on the southwest, County Road 1200 N. alignment on the south, Indiana Toll Road or the Lake Michigan watershed boundary on the southeast, just west of State Route 39 on the east and County Road 1000 N. on the north.

Based on Michigan City Department of Water Works information, the average water loss in their system is 15 percent of the total potable water pumped into the system at the water treatment plant. This water loss is

attributed to the following: semi-annual fire hydrant flushing, fire hydrant flow for firefighting and Fire Department training, providing water for street cleaning equipment and leakage in water mains and water services.

The Department does not have an old water main replacement program. The Department has replaced and relocated water mains when needed, primarily due to ground conditions leading to numerous main breaks, or in the event the water main locations are disturbed by other underground construction. This procedure will continue into the future.

POTABLE WATER SYSTEM SUMMARY

As indicated in the preceding sections and on TEC Map 25, *Potable Water System*, the existing Michigan City Department of Water Works Potable Water System is very acceptable for the present and is well-planned for the future. The existing large water mains on the perimeter of the distribution system will accommodate the 20 future improvements that are proposed in the Water System Master Plan, as future development occurs. These future improvements consist of water main extensions on the west, south and east sides of the City and two new elevated water storage tanks, one south and one east of the City.

Wastewater Collection and Treatment System

The Michigan City Sanitary District was created to replace the City of Michigan City as the wastewater and storm drainage utilities for the City and the surrounding area. As such, the Sanitary District owns, operates, maintains and administers the wastewater facilities which serve the City of Michigan City and some of the surrounding area, as indicated on the TEC Map 26, *Wastewater Collection and Treatment System*.

The entire City of Michigan City is served by the sanitary sewer system. In addition, the following project areas outside of the Michigan City boundaries are served by the City's sanitary sewer system:

5. Within other municipalities; (a) a portion of the Town of Pottawattamie Park, served by the Pott Park lift station, (b) a few residents in the Town of Trail Creek, served by short sanitary sewer extensions and (c) residences in the south central portion of the Town of Long Beach, around Lake Henry, all served by Tinker's Dam lift station and some also served by Hidden Shores lift station.
6. West, in Porter County; Pine Elementary School, served by the Pine lift station.
7. South; businesses and medical facilities south of County Road (CR) 400 N., on both sides of U.S. Highway 421, served by sanitary sewers tributary to the South Side Sanitary Sewer on Cleveland Avenue.
8. East of Interstate 94; Indian Springs Subdivision, Serenity Springs Resort and Renaissance Academy, all served by the U.S. Highway 20/35 lift station.
9. At the northeast corner; the Shady Oaks Mobile Home Park at the intersection of U.S. Highway 12 and N. Meer Road, served by the Michiana Shores lift station.

WASTEWATER COLLECTION

Michigan City's wastewater collection system was initially installed approximately 120 years ago and consisted of combined sewers which received wastewater from building sewer laterals and stormwater from street drainage inlets and building roofs, if connected to the building sewer laterals. The Sanitary District began eliminating existing combined sewers and stopped constructing new combined sewers about 50 years ago, to reduce the amount of combined sewer overflow during wet weather into Lake Michigan, via Trail Creek. This combined sewer elimination was not mandated by State or Federal regulations. Combined sewer elimination typically consists of sewer separation

LEGEND

- City Limits
- Comprehensive Plan Area

Water Main Size

- 6″ Pipe
- 8″ Pipe
- 12″ Pipe
- 16″ Pipe
- 20″ Pipe
- 24″ Pipe
- 30″ Pipe
- BBV = Bleed Back Value between water system pressure zones
- CV = Check Valve between water system pressure zones
- Elevated Storage Tank
- Ground Storage Tank

Water Main System Not Shown for the Towns of Beverly Shores, Pines, Pottawattomie Park and Michiana Shores and the Duneland Beach Community. The Town of Trail Creek does not have a water main system.

Lake Michigan

WATER TREATMENT PLANT LOCATION

WTP

CARROLL AVENUE ELEVATED STORAGE TANK LOCATION

HITCHCOCK ROAD ELEVATED STORAGE TANK LOCATION

PAHS ROAD GROUND STORAGE TANK & BOOSTER PUMP STATION LOCATION

BEVERLY SHORES BOOSTER PUMP STATION LOCATION

12 94 212 20 35 421

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

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MOMENTUM: MICHIGAN CITY 2040

THE EXISTING CITY

TEC Map 25: Potable Water System

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

with the construction of new storm sewers to intercept the stormwater flow from existing street drainage inlets, with the continued use of the existing sewers for wastewater flow. Building roof drains, if connected to the existing building sewer laterals, either remained so or were disconnected and discharged onto the ground surface. As a result of these past efforts in Michigan City, approximately 70 percent of the combined sewer areas have been eliminated and the City's wastewater collection system presently consists of 15 percent remaining combined sewer areas, 45 percent separated combined sewer areas, and 35 percent sanitary sewer only areas.

A large area in Michigan City, bounded by 11th Street and Michigan Boulevard on the north, Woodland Avenue on the east, Barker Avenue on the south and Franklin Street on the west has been studied by the Sanitary District for sewer separation by the installation of new storm sewers. A portion of the storm trunk sewer for this Lafayette Barker Storm Sewer Improvements project has been constructed and the design of the project outfall storm sewer into Trail Creek is about to be authorized by the Sanitary District. When this total project is completed, the original combined sewer area in Michigan City will be reduced to only 5 percent of the total City wastewater collection system area. There are also four small unsewered residential locations within the City limits that the Sanitary District intends to serve via sanitary sewer extensions.

Approximately 30 years ago, as part of a State and Federal grant program, the entire existing sanitary sewer system in Michigan City was investigated for ground water infiltration and surface water inflow (I&I) entry that was "cost-effective" to remove. As a result, an extensive relief sewer to the City wastewater treatment plant and a large flow detention basin at the plant were both constructed to transport and retain high wet weather sewer flows, for treatment after the plant flow subsides. Additionally, approximately one million GPD of groundwater infiltration was removed from the sanitary sewer system by installing liner pipes inside the leaking sewers in numerous locations. Also, old leaking and structurally unsound sanitary sewers have been and are continuing to be replaced with new sanitary sewers in various locations in Michigan City, either when problems occur or in the event their locations are disturbed by other underground construction. The locations where this work is still needed are within the original remaining combined sewer areas or separated combined sewer areas, north of Coolspring Avenue.

As a result of the preceding sewer separation, wet weather flow storage and ground water infiltration removal efforts in Michigan City, all of the wastewater collection system overflow points into Trail Creek or into storm sewers tributary to Trail Creek have been eliminated except for one. The remaining overflow point is the chlorinated and dechlorinated overflow from the previously mentioned large aerated flow detention tank at the Michigan City wastewater treatment plant.

In 2012, the Michigan City Sanitary District authorized a Facilities Assessment Study and a Preliminary Engineering Report for State SRF financing that investigated all known sanitary sewer problems in the City, recommended solutions and estimated the costs. The majority of these sanitary sewer problems were local in extent and have since been corrected by the Sanitary District, including the installation of bar screens at the Michigan City State Prison discharge sewer, to remove the deleterious material before it enters the City's sanitary sewer system.

The Michigan City sanitary sewer system includes 41 wastewater lift stations, all of which are indicated on TEC Map 26, *Wastewater Collection and Treatment System*. Each of these lift stations was investigated by the previously mentioned Facilities Assessment Study. The Study determined that 10 of the lift stations required improvements and recommendations and estimated costs were presented. The Sanitary District has already improved four lift stations and has designed the improvements for two other lift stations.

WASTEWATER AND TREATMENT AND STORAGE

The Michigan City sanitary sewer system flow is treated at the Michigan City Sanitary District wastewater treatment plant located on Trail Creek, as indicated on TEC Map 26, *Wastewater Collection and Treatment System*. A previously mentioned, a 6.15 million gallon aerated wastewater flow detention tank is located at the east end of the plant to receive plant inlet flow that the plant cannot handle during high wet weather high flow periods. The detention basin wastewater is automatically returned to the wastewater treatment plant when it is able to receive and treat this wastewater. If the detention basin cannot store all of the wastewater received, it overflows into Trail Creek, via a chlorine contact tank where the overflow is disinfected with chlorine gas and then dechlorinated with sulfur dioxide gas. As mentioned previously, this is the only overflow point on

the entire Michigan City wastewater collection system. This overflow point activates very infrequently, typically less than once a year.

The Michigan City Sanitary District wastewater treatment plant was renovated and expanded 30 years ago with a design average flow capacity of 12.0 MGD and a design maximum flow capacity of 15.0 MGD. The present average daily flow to the plant is 7 MGD.

Based on the preceding, the Sanitary District believes that at least two MGD of wastewater treatment plant capacity is presently available for future customers. Possible future customers include the Town of Long Beach and the Town of Trail Creek, if and when these towns install sanitary sewer systems, which each has considered and discussed with the Sanitary District.

The Sanitary District wastewater treatment plant consists of:

1. Inlet flow bar screens, vertical turbine pumps and grit removal tanks;
2. Primary settling tanks;
3. Aeration tanks;
4. Secondary settling tanks;
5. Gravity sand filter and filter effluent pumps;
6. Chlorine contact tank with chlorine gas feed;
7. Dechlorination chambers with sulfur dioxide gas feed and post aeration tanks. Settled solids from the plant settling tanks are decomposed in anaerobic digestion tanks, dewatered by a belt filter press, stored in a sludge lagoon with a paved, drained bottom and removed, hauled away and land applied on agricultural land, by the land owners, with necessary permits obtained by the Sanitary District.

The Sanitary District recently made the following improvements to their wastewater treatment plant:

1. Installed a magnetic flow meter on the plant effluent pipe;
2. Raised the elevation of overflow weir wall in the sand filter influent chamber to prevent any of the filter influent flow from bypassing to the chlorine contact tank;
3. Replaced the fixed weirs in the aerated channels with adjustable weir gates, to control and if necessary, stop the overflow into each secondary settling tank;
4. Constructed an isolation room in the belt filter press building for the chlorine and sulfur dioxide gas feed facilities for the combined sewer flow detention basin chlorine contact tank;

5. Installed new slide gates for improved removal of sludge from the bottom of the flow detention basin chlorine contact tank;
6. Added non-potable water piping and water cannons, for improved washdown of the bottom of the flow detention basin; and
7. Installed a second potable water service line for the treatment plant for improved potable water supply capacity and pressure for plant functions.

The Sanitary District presently is in the process of the following plant improvements:

1. Replacement of two of the original fixed speed positive displacement blowers for the plant aeration system with two new variable speed centrifugal turbo blowers; and
2. Determination and implementation of the best corrective procedure for the safety problem regarding digester gas piping inside the digester control building.

Additional wastewater treatment plant improvements being considered by the Sanitary District include:

1. Replacement of the effluent sand filter computer control system and control valve hardware;
2. Replacement of the computer monitoring and alarm system for the plant; and
3. Improved anaerobic sludge digestion via additional tank capacity.

The Sanitary District has authorized a Building Needs Assessment Study which is nearing completion. The following building improvements have been selected for future implementation:

1. New City/Sanitary District I/T building at the southwest corner of 8th Street and Tryon Street;
2. New Plant Maintenance building at the west end of the wastewater treatment plant site; and
3. Expansions to the Administration building, Maintenance Garage, and Plant Operations building.

WASTEWATER SYSTEM SUMMARY

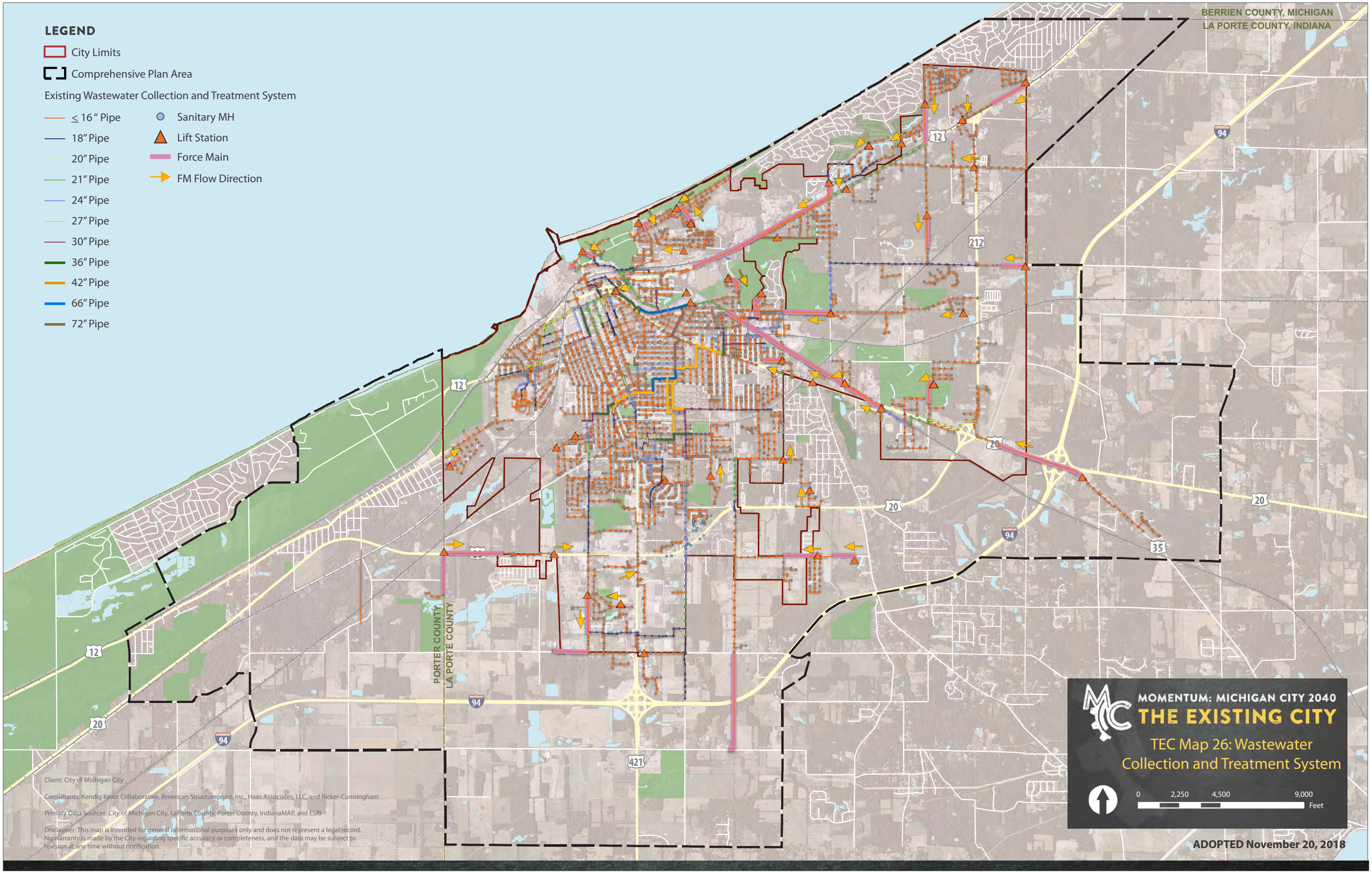
As indicated in the preceding sections and TEC Map 26, *Wastewater Collection and Treatment System*, the Michigan City Sanitary District's existing wastewater system is satisfactorily receiving, transporting, storing and treating the wastewater flows it receives. Furthermore, sewer separation which will result from the Sanitary District's planned Lafayette Barker Storm Sewer Improvements project will greatly reduce surface water flow to the wastewater treatment plant and create additional available wastewater treatment plant flow capacity for future development. This future development could occur both inside and outside the existing Michigan City municipal boundaries.

Regarding areas outside of Michigan City, the LaPorte County Regional Sewer District prepared a Master Plan in 2012 for possible future sanitary service in areas south and east of Michigan City. Section 3 of this Master Plan estimated the existing and future populations and wastewater flows in six presently unsewered areas outside of Michigan City. These six areas all extend well beyond the Planning Area of this Comprehensive Plan and are indicated on the Figure 6 map on page 10 of the Master Plan, along with the estimated locations of future trunk sanitary sewers and wastewater lift stations for these six areas. The resulting estimated totals from the six areas in Table 3 of the Master Plan are summarized as follows:

- Estimated Future Area Served: 37,078 areas
- Estimated Future EDUS (Equivalent Dwelling Units) Served: 17,782 EDUS
- Estimated Future Average Daily Wastewater Flow (at 310 GPD/EDU): 5.52 MGD
- Estimated Future Peak Daily Wastewater Flow (at Peaking Factor = 4): 22.08 MGD

Based on an estimate of 2.5 people per EDU, the future estimated population served in all six service areas is 44,455 people. The methodology for this future population estimate is explained on page 11 of the Master Plan and is available for review when projecting future population growth within the *Momentum: Michigan City 2040* Comprehensive Plan project area.

The preceding future estimated wastewater flows from the LaPorte County Regional Sewer District Master Plan service areas are extremely high and probably reflect an "ultimate" development situation which could eventually occur in the distant future. All of the estimated future flows that are projected for the Comprehensive Plan project area beyond the existing Sanitary District sanitary sewer system will require new lift stations and force mains to the existing sanitary sewers with adequate capacity for the additional future flows. The locations and details of these new lift stations and force mains will be determined and summarized within the Comprehensive Plan.


LEGEND
City Limits
Comprehensive Plan Area
Existing Wastewater Collection and Treatment System
≤ 16 " Pipe
18" Pipe
20" Pipe
21" Pipe
24" Pipe
27" Pipe
30" Pipe
36" Pipe
42" Pipe
66" Pipe
72" Pipe
Sanitary MH
Lift Station
Force Main
FM Flow Direction
BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA
PORTER COUNTY
LA PORTE COUNTY
12
94
212
20
35
421
Client: City of Michigan City
Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham
Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI
Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.
MOMENTUM: MICHIGAN CITY 2040
THE EXISTING CITY
TEC Map 26: Wastewater Collection and Treatment System
0
2,250
4,500
9,000
Feet
ADOPTED November 20, 2018

Storm Drainage System

The Michigan City storm drainage system is owned, operated, maintained and administered by the Michigan City Sanitary District. This storm drainage system is presented on TEC Map 27, *Storm Drainage* and includes the following facilities within the City limits and the surrounding area:

1. Storm sewers;
2. Drainage swales and ditches on public property;
3. Legal drains which were originally under the authority of the LaPorte County Drainage Board;
4. Stormwater detention basins on public property;
5. A stormwater pump station for discharge of the Forest Manor Subdivision storm sewer system into Striebel Arm Ditch; and
6. low impact development strategies, tools and techniques, such as rain gardens, drywells and perforated pipe trench drains for percolation of storm drainage into the ground, either with overflow into storm sewers or in isolated areas without storm sewers. In addition, stormwater detention basins on private property are presently being investigated and inventoried for the Sanitary District, for the District's future monitoring and future planning regarding storm drainage. These private stormwater detention basins are required by City Stormwater Management Ordinance, for new developments and redevelopments greater than 1 acre in area.

All of the preceding storm drainage facilities flow into tributaries of Lake Michigan, primarily Trail Creek. The northeast area of the Planning Area flows into Lake Michigan in Berrien County, Michigan via Kimball Ditch-White Ditch. The west side of the Planning Area flows into Lake Michigan via Striebel Arm Ditch-Kintzele Ditch. A small portion of the south central border of the Planning Area flows into Lake Michigan via Kemper Ditch and the East Fork of the Little Calumet River, in Porter County. All of these watercourses are indicated on TEC Map 27, *Storm Drainage*, along with the associated FEMA 100-Year Floodplains.

Trail Creek is a natural watercourse with a well-defined valley. The Trail Creek watershed extends well beyond the south and east boundaries of the project area and drains considerable agricultural land with some residential development. As a result, the storm drainage flow in Trail Creek, upstream of Michigan City, is significant and the Michigan City contribution to the Trail Creek total storm drainage flow is small in comparison.

In addition to providing storm drainage, Trail Creek is very important to Michigan City for the following reasons: (1) pleasure boat harboring, (2) salmon and trout fishery stocking, spawning runs, and fishing, (3) being the receiving stream for wastewater treatment plant effluent discharge, (4) scenic natural waterway and valley within the Planning Area. Trail Creek water quality tests in the past have indicated high suspended solids concentrations during heavy storm events and persistently high E- coli concentration, many times greater than the E. coli concentration limits for the wastewater treatment plant effluent. Upstream agricultural activities and local septic tank are probable sources of E. coli in Trail Creek. Runoff from agricultural land and city streets are probable sources of suspended solids in Trail Creek. The Sanitary District has recently provided solids removal devices at the discharges of four storm sewer systems, which will reduce solids discharged into Trail Creek. Regular street sweeping and stormwater detention basins are other ways to reduce solids from storm sewer discharges.

The slope of the groundplane in Michigan City is generally south to north, toward Lake Michigan. There are two valleys in the City which interrupt this drainage pattern; (A) the former Rummel Ditch, which has been completely filled-in and replaced by combined and some separation storm sewers; and (B) Cheney Run Ditch which is almost completely filled in and replaced by storm sewers. The location of the former Rummel Ditch is Garfield Street west of Franklin Street and then in a northeast direction across Michigan Boulevard to Trail Creek at Krueger Memorial Park. The location of the former Cheney Run ditch is from the intersection of Tilden and Gardena Streets east to Gardena Park and then northeast to the intersection of Barker and Woodland Avenues and then east-northeast across Michigan Boulevard to Trail Creek. The Sanitary District is presently pursuing improvements to the storm sewers and remaining ditches for both of these drainage ways, as follows:

– The previously mentioned proposed Lafayette Barker Storm Sewer Improvements project is intended to improve the drainage in the former Rummel Ditch area by (a) constructing a new large storm sewer outfall into Trail Creek and (b) construct new storm

sewers in the drainage area. A portion of the outfall sewer has been constructed and the remainder will soon be designed and then constructed. When the storm sewer outfall is completed, new storm sewers can be constructed in the drainage area to eliminate drainage problems and also eliminate existing combined sewers by removing street drainage inlet flow from these existing sewers.

- Improvements to Cheney Run Ditch include, (a) a Discharge Enhancement project which is intended to improve the discharge into Trail Creek with the construction of a large wetland to detain and treat the flow prior to entry into Trail Creek. The design of this wetland is pending financing and construction will eventually follow. Also, (b) a Cheney Run Area Drainage Plan which is intended to determine if flow detention facilities can be constructed along the Cheney Run storm sewer to provide control and treatment of the sewer flow. This study has been authorized by the Sanitary District.

The south end of Michigan City is drained primarily by Striebel Arm Ditch, which is a constructed legal drain on the west side of Michigan City. Approximately 15 years ago the Sanitary District studied Striebel Arm Ditch, to determine how to increase its capacity and alleviate flooding problems in its drainage area. As a result, the Striebel Arm Pond was constructed on the west side of the Ditch as indicated on TEC Map 27, *Storm Drainage*. The Pond receives and stores high ditch flows and releases the water back into Striebel Arm Ditch when the ditch flows subside. Striebel Arm Pond is multi-purpose as it is also a natural recreational area.

One of the tributaries to Striebel Arm Ditch is the storm sewer on Ohio Street. This storm sewer is presently being redesigned for greater capacity, as part of the Ohio Street Reconstruction project.

Storm water improvements in Michigan City are presently financed with local property taxes. The Sanitary District is presently attempting to create a stormwater drainage fee, to increase the funds available for storm water improvements in Michigan City.

STORM DRAINAGE SYSTEM SUMMARY

As indicated in the preceding sections and TEC Map 27, *Storm Drainage*, the Michigan City Sanitary District's existing storm drainage system consists of various facilities, all tributary to Lake Michigan, primarily via Trail Creek and its branches. Trail Creek should continue to be the primary receiver of stormwater runoff from future development in the *Momentum: Michigan City 2040* Comprehensive Plan project area. This continued use of Trail Creek is possible because of the existing City Stormwater Management Ordinance, which requires new developments and redevelopments with greater than one acre of area to have stormwater detention to limit their runoff release rates to an allowable pre-existing area runoff rate from a two-year, 24-hour rainfall event and to store the new development runoff volume from a 100-year, 24-hour rainfall event less the allowable release rate. The west side of the Comprehensive Plan Planning Area is in Porter County and drains via legal ditches to the west. As a result, the runoff from any future development in this area will have to be coordinated with the Porter County Drainage Board. Also, the south and northeast sides of the Comprehensive Plan Planning Area are also drained by legal ditches which are controlled by LaPorte County on the south and the Michigan City Sanitary District on the northeast. As these areas develop, the Sanitary District will certainly take control of all of the legal ditches and will improve them or replace them with storm sewers, as required.

LEGEND

- City Limits
- Comprehensive Plan Area

Existing Storm Main

- 8′ x 10′
- 12′ x 6′
- 15″
- 21″
- 24″
- 33″
- 36″
- 42″
- 48″
- 54″
- 66″
- 84″
- 96″
- 108″
- Open Channel
- Storm Sewers
- Tributaries
- Location Pernnial Street Flooding

Lake Michigan

Storm Sewer discharges onto Esplanade in Sand Dunes

Lake Kai (DETENTION)

Trail Creek

Otter Creek

North Arm Beck Ditch

White Ditch

Lubke Arm

Brown Ditch

South Arm Beck Ditch

Beck Ditch

Bull Ditch

Striebel Arm Ditch

Kintzele Ditch

Brown Ditch

Monon Storm Lift Station

STREIBEL POND (DETENTION)

Kintzele Ditch

Natural Wet Lands (DETENTION)

Lake Henry (DETENTION)

Carver Ditch

Kiefer Gruenke Ditch

West Branch Trail Creek

Trail Creek

East Branch Trail Creek

East Branch Trail Creek

Bosserman Creek

West Branch Trail Creek

Waterford Creek

12 20 94 212 35 421

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

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MOMENTUM: MICHIGAN CITY 2040

THE EXISTING CITY

TEC Map 27: Storm Drainage

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Communications - Fiber Optic

As depicted in TEC Map 28, *Fiber Optic*, the City is in the process of installing its own fiber optic cable, beginning with a looped network within the Downtown and Waterfront area, and extending southward. In 2018, approximately 50,000 linear feet Corning Altos fiber will be installed. This first phase will cost of around $100-110,000 dollars. Subsequent phases will cost $50-75,000 per year. The City's plan is enable full fiber optic coverage within 10 years. The Sanitation Department estimates a 34-month return on investment (ROI). The City's Sanitation Department is working on becoming a certified fiber optic integrator, enabling it to install, maintain, and repair its own fiber optic, under the requirements of the Corning brand's 20-year warranty.

Michigan City is currently the first municipality in North America (fourth in the World) that is installing its fiber optic cable using micro-trenching. Micro-trenching is a construction technique involving saw-cutting a very narrow trench (1-11/2 inch width, 12 inch depth) in a roadway or sidewalk, within which the fiber optic conduit is placed, and then backfilled with a cementitious concrete. To ensure coverage and accessibility to the individual homeowner, junction boxes are being installed every 400 linear feet (block width).

The City will be installing 48 strands of fiber. Fiber optic communications will enable the City's Sanitation Department to control remotely 42 pumping stations using real-time telemetry. The City is also partnering with the Northern Indiana Commuter Transit District (NICTD) and will be pulling two strands of NICTD-owned fiber.

Beyond the Downtown and Waterfront area, the Sanitation Department is running fiber optic to the Michigan City Municipal Airport. The Sanitation Department is also considering taking advantage of the reconstruction of Ohio Street (2018) to run fiber optic cable to reach the existing Franciscan Hospital but also the new Franciscan Regional Hospital currently being constructed at U.S. Highway 421 and Interstate 94.

Micro-trenching in Toronto
Source: The Fiber Optic Association

Micro-trenching in Toronto
Source: The Fiber Optic Association

LEGEND
City Limits
Comprehensive Plan Area
Vaults
Fiber
Full Fiber Route
Michigan City Fiber Project
Lake Michigan
Michigan City
Duneland Beach
Long Beach
Pottawattamie Park
Michigan Township
Trail Creek
Pine Township
Coolspring Township
PORTER COUNTY
LA PORTE COUNTY
12
20
94
421
212
MOMENTUM: MICHIGAN CITY 2040
THE EXISTING CITY
TEC Map 28: Fiber Optic
0
2,250
4,500
9,000
Feet
Client: City of Michigan City
Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham
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ADOPTED November 20, 2018

Municipal Services

Public Facilities

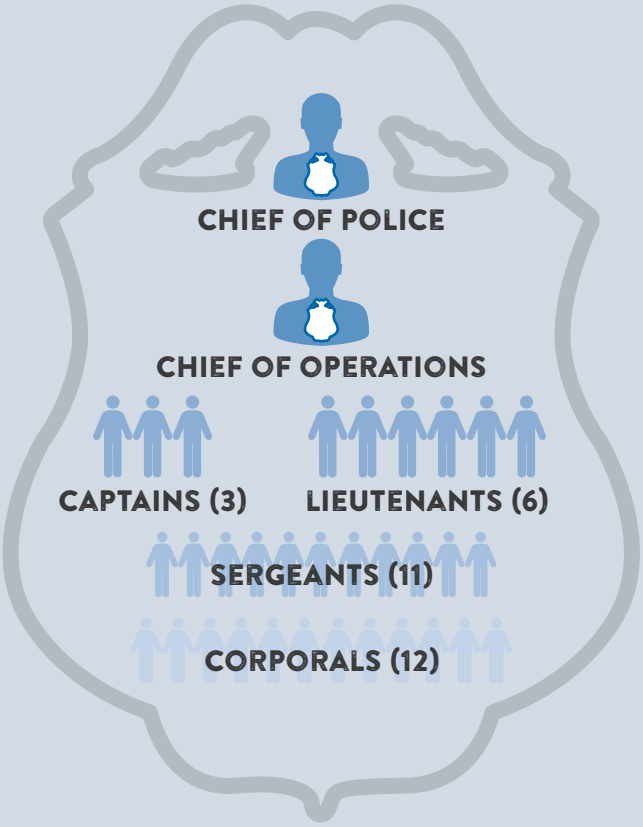
Michigan City's Police and Fire Departments, along with the LaPorte County Emergency Medical Services (EMS) exist to protect the health, safety, and public welfare of the community. The effectiveness of each department is dependent on the staffing of well-trained police officers, firefighters, and emergency medical personnel; equipment such as vehicles, apparatus, and firearms; training and continuing education; and adequate building facilities. The locations of the fire stations is a critical factor regarding response time for emergency calls, which correlates to life safety and also impacts the City's insurance rating. The capacity of these essential functions is necessary to evaluate the impacts and needs warranted by community growth.

POLICE PROTECTION

The Michigan City Police Department (MCPD) is committed to the protection of life and the prevention of crime and disorder. The mission of the MCPD is "for every member of this agency is to consistently seek and find ways to affirmatively promote, preserve, and deliver a feeling of security, safety, and quality services to members of our community". MCPD builds partnerships and seeks proactive approaches and innovative solutions to address crime and other safety issues in Michigan City that adversely affects the daily lives of its citizens. Through prompt, efficient, and courteous service, MCPD strives towards its ultimate goal of creating a better quality of life for Michigan City's citizens and visitors.

The Michigan City Police Department (MCPD) has an Memorandum of Understanding (MOU) with Michigan Area Schools, up to two police officers are assigned to the high school and middle schools. In addition, the MCPD has a MOU with High Intensity Drug Trafficking Areas (HIDTA) in order for officers to devote time to drug enforcement. In addition, the neighboring Towns of Beverly Shores, Trail Creek, and Long Beach have small police departments that offer police protection.

LaPorte County Emergency Medical Services (EMS) provides 911 service support. LaPorte County EMS also coordinates 911 services for the Sheriff's Department,



La Porte City Police and Fire, and events at Washington Park, Stone Lake, the County Fair, and several high school sporting events. The lead dispatch agency is LaPorte County Radio Dispatch Center (RDC).

The Department has 83 sworn officers including one Chief of Police, one Chief of Operations, 3 Captains, 6 Lieutenants, 11 Sergeants, and 12 Corporals. The MCPD has a wide range of positions through a variety of different divisions, including: Patrol Division, Traffic Division, Special Operation Group, K-9 Division, Detective Division, Narcotics Investigators, Special Crimes Unit (SCU), Warrants Team, Fugitive Apprehension Street Team (FAST), Training Division, Beach Patrol, and Animal Control. There is also Community Oriented Policing, School Liaison Officers, Public Relations, and Administration. In addition, MCPD offers the following specialized units: Special Weapons and Tactics (SWAT) Team, Certified Instructors, Police Scuba Divers, and Field Training Officers.

Training

Officers receive training and certification at MCPD, Indiana Law Enforcement Academy, the South Bend Police Department and other areas outside of Indiana. Areas of training and certification include:

- Weapons Certification
- Firearms training
- Taser training
- Physical tactics / use of force training
- Emergency Vehicle Operation (EVO) training
- High Risks Missing Persons
- Human Trafficking
- Domestic Intimate Partner Violence
- Cardiopulmonary Resuscitation (CPR) training
- Bloodborne Pathogen training
- Hazardous Materials (HAZMAT) training
- National Incident Management System (NIMS) response to natural disasters and/or terrorist attacks training
- Awareness, training and education for successful interactions with people with Autism and mental illness, and also people suffering from Alzheimer's, Dementia, and other endangered adults.

Headquarters

All administration and divisions are headquartered at 1201 E. Michigan Boulevard, TEC Map 30, *Public Facilities*. The headquarters houses the following offices: Commander, FAST, Traffic, Prosecutor, Police Commissioner, Training, Department of Public Safety (DPS), and the LaPorte County Drug Task Force. The MCPD headquarters has conference rooms, community/

training rooms, a K-9 holding area, information technology (IT) rooms, maintenance, and storage. There are briefing rooms, interview rooms, evidence room, report writing room, and a booking area / jail. For the officers there are locker rooms, a fitness center and outdoor park, and weapon simulator range.

Equipment / Vehicles

MCPD currently has 708 patrol vehicles, 4 police motorcycles, 2 segways, one electric car, 2 SWAT humvees, one SWAT Mine-Resistant Ambush Protected (MRAP) vehicle, 4 beach all terrain vehicles (ATV), 2 all terrain four wheelers, and 4 bicycles. Also, there are15 service vehicles for administration, detectives and for training purposes.

Service Area

The MCPD's primary service area includes the City's municipal boundaries, which is approximately 19.7 square miles. When there is a question as to whether or not an incident is within the municipal limits the MCPD will provide service. The department coordinates with other police and public safety agencies when necessary including the LaPorte County Sheriff's Department, the Beverly Shores and Long Beach Police, and HIDTA.

Programs / Activities

The MCPD sponsors, co-sponsors and actively participates in a large number of community programs for purpose of connecting to the community, data collection, and employee training. Included below are current departmental programs or programs that the department actively coordinates with:

- Citizen's Police Academy
- Youth Leadership Academy
- Explorers Program
- Emergency Management Volunteer Group
- Pill Drop Program
- LaPorte County Fair
- Several Neighborhood Group Meetings
- Shop with our Cops Program
- Easter Egg Hunt
- Boo at the Zoo
- MCPD School Tours
- Various Speaking Engagements

FIRE PROTECTION

The Michigan City Fire Department (MCFD) responds to medical emergencies and perform fire inspections on all businesses. The public information department of the MCFD visits schools and community gatherings to promote fire prevention and education. The MCFD also assists other agencies at seasonal special events to ensure public safety. The mission of MCFD is "to ensure that citizens and visitors are protected from fire, medical emergencies and hazardous conditions that threaten to harm our community. This mission will be accomplished through a commitment to rigorous training, continuing education, and diligent enforcement of fire prevention measures. As professional firefighters, our community focus will concentrate on being role models for younger generations, while preserving the traditions of Courage, Pride, Honor, and Respect."

The MCFD has mutual aid agreements with all fire departments in LaPorte County, and one in Porter County (Pine Township Volunteer Fire Department. There are several Volunteer Fire Departments adjacent to Michigan City and within the Planning Area, these include:

- Beverly Shores Volunteer Fire Department (20 members)
- Pine Township Volunteer Fire Department (28 members)
- Coolspring Township Volunteer Fire Department (42 members)
- Long Beach Volunteer Fire Department (35 members)
- Michiana Shores Volunteer Fire Department (18 members)
- Springfield Township Volunteer Fire Department (19 members)

The MCFD consists of four Divisions with 81 sworn personnel. The Divisions include; the Emergency Operations Division, Training/Safety Division, Fire Investigation/Inspection Division and the Public Education/Information Division.

The **Emergency Operations Division** is the largest division and is responsible for fire suppression and providing non-transport basic life support services. It is comprised of three Battalions and four Districts, staffing four Fire Stations. MCFD firefighters perform carbon monoxide checks, building inspections, pre-plans, safety programs at area schools and offer blood pressure testing at each station.

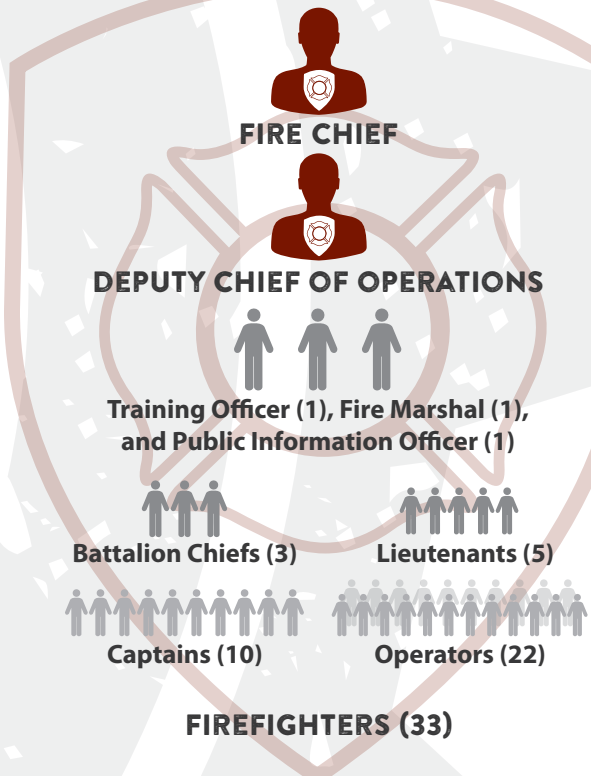
Training / Safety Division. Along with responding to emergencies, MCFD firefighters do continuing training to maintain certifications and skills as Firefighters, First Responders and Emergency Medical Technicians. MCFD currently has two facilities to train; 2510 E. Michigan Boulevard. which is also our current administrative office. The second facility is located at 1021 Hitchcock Street and is home to two burn buildings, training classroom, and flashover chamber.

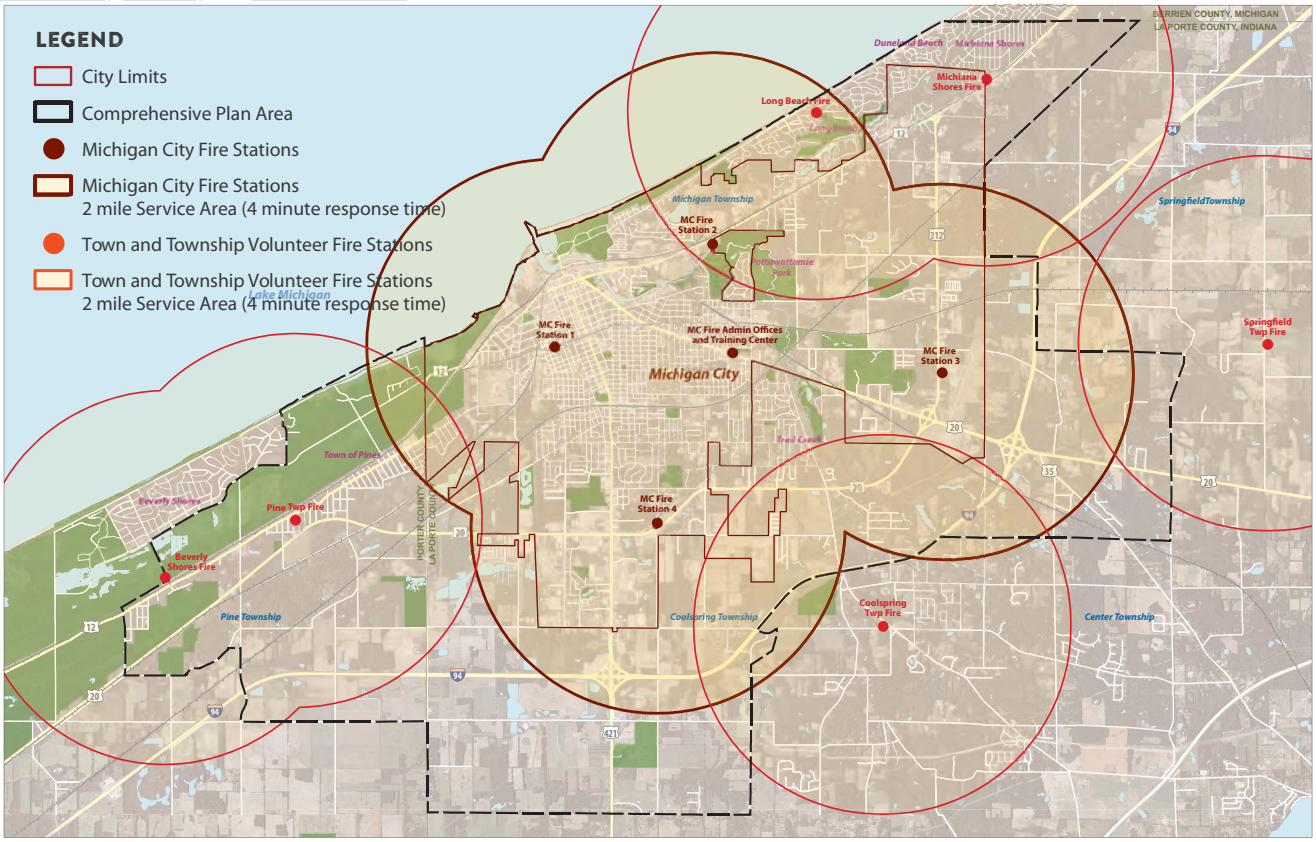
The **Fire Prevention Division** has a number of responsibilities:

- Enforces the provisions of the Fire Prevention code and the laws and regulations of Michigan City pertaining to fire prevention and fire protection;
- Responsible for the inspection of all buildings and premises in Michigan City in accordance with the provisions of the Fire Prevention Code;
- Reviews building and fire sprinkler plans to assure fire code requirements are met;
- Investigates complaints received by the Fire Prevention Division as well as establishes and maintains comprehensive records of all business transacted such as complaints, inspections, investigations, notices served and permits written.
- Investigates all fires to determine the origin and cause and makes reports to the Fire Chief;
- Supervises the training and activities of the Michigan City Fire Investigation Team; and
- Provides information to the business community and the public, as well as attends all off-duty fires.

The Public Information Officer (PIO) of the **Public Education/Information Division** is responsible for all dissemination of news and information to the media and the public. The duties of the Public Information Officer include:

- Coordinates information for news personnel at the scene of incidents;
- Assist victims of incidents;
- Relays information to the news media on an on-call basis;
- Prepares and distribute news releases;
- Educate Citizens in public safety and prevention through multi-media sources;
- Visit schools and public venues to provide information and teach safety and prevention; and
- Assisting in the Fire Marshal Office and the Training Office.





TEC Map 29, MCFD Service Area

Fire Service Area

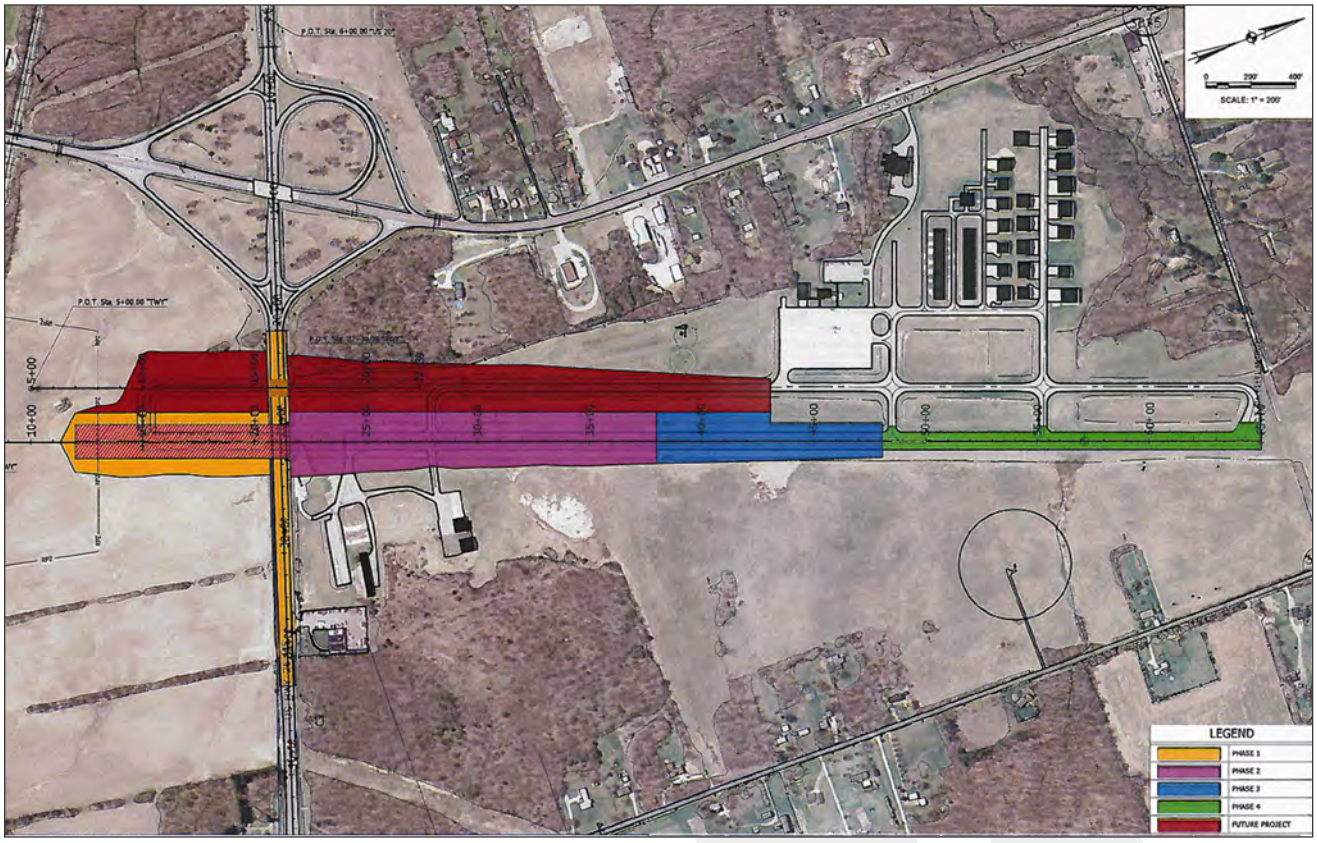
Currently, the MCFD serves 22 square miles and the fire stations and equipment are strategically placed around the City to allow for the quickest response possible for any emergency situation. The station locations are mapped in TEC Map 29, *MCFD Service Areas* and TEC Map 30, *Public Facilities* and include:

- Station 1, 1012 Ohio Street
- Station 2, 2005 East US Highway 12
- Station 3, 1310 Highway 212
- Station 4, 5000 Cleveland Avenue
- Fire Administration Offices and Training Center, 2510 Michigan Boulevard

Each station houses one Command Vehicle, four Engine Companies, one Ladder Company and a Technical Rescue Unit. There are three, 24 hour, Shifts that are supervised by a Battalion Chief and four Station Captains.

SERVICE INDICATORS

In evaluating a community's public fire protection, the Insurance Services Office (ISO) considers the distribution of fire companies. As of 2015, the MCFD has helped the City achieve an overall Insurance Services Office (ISO) rating of 3. Generally, ISO's criteria state that a built-upon area of a community should have a first-due engine company within 1.5 road miles of the protected properties and a ladder-service company within 2.5 road miles. Those benchmark criteria produce an expected response time of 3.2 minutes for an engine company and 4.9 minutes for a ladder-service company, based on a formula developed by the RAND Corporation. RAND conducted extensive studies of fire department response times. They concluded that the average speed for a fire apparatus responding with emergency lights and siren is 35 mph. That speed considers average terrain, average traffic, weather, and slowing down for intersections. Furthermore, NFPA 1710 states its requirements in terms of time, specifically, a requirement that 90% of responses by the initial arriving company shall be within 4 minutes, which works out to approximately a two mile radius response area, see TEC Map 29, *MCFD Service Area*.



TEC Figure 14, MCMA RPZ Improvements

MICHIGAN CITY MUNICIPAL AIRPORT

In order to address the Runway Protection Zone (RPZ) safety conflict between the approach end of Runway 2 and U.S. Highway 20 at the Michigan City Municipal Airport (MCMA), a plan is being developed to lower U.S. Highway 20 along the existing alignment while raising and extend Runway 2-20 along the existing alignment, thus creating an overpass for Runway 2-20 over U.S. Highway 20. A runway extension removes U.S. Highway 20 from the RPZ and puts it beneath the Runway Safety Area (RSA), resulting in the two-fold benefit of a corrected RPZ and smaller bridge section over US Highway 20 (refer to TEC Figure 14, *MCMA RPZ Improvements*).

As summarized in the *Michigan City Municipal Airport Runway Protection Zone Alternative Analysis Runway 2* report (Butler, Fairman, and Seufert, Inc.; revised April 2016), the MCMA is planning for the rehabilitation of Runway 2-20, based on a series of "triggering events," including:

- the MCMA's interest in eliminating the displaced threshold on Runway 2;
- the MCMA's interest in improving the GPS instrument approach (approach visibility one mile and ceiling 500 feet) to Runway 2; and
- the Indiana Department of Transportation's (INDOT) proposed 2018 roadway and interchange improvements to US Highway 20/35, which currently traverses the Runway 2 Runway Protection Zone (RPZ).

As per AC 150-5300-13A, Section 310, Runway Protection Zones, Item d. For RPZ land, the following land uses are permissible without further evaluation:

1. farming that meets airport design standards;
2. irrigation channels that meet the requirements of AC 150/5200-33 and FAA/USDA manual, Wildlife Hazard Management Act at Airports;
3. airport service roads, as long as they are not public roads and are directly controlled by the airport operator;
4. underground facilities, as long as they meet other design criteria, such as RSA requirements, as applicable; and

5. unstaffed NAVAIDs and facilities, such as equipment for airport facilities that are considered fixed-by-function in regard to the RPZ.

Additionally, FAA Memorandum, *Interim Guidance on Land Uses Within a Runway Protection Zone* (September 2012), further identifies non-compatible land uses specific to the issue at the MCMA Transportation facilities; examples of which include, but are not limited to: rail facilities – light or heavy, passenger or freight; public roads / highways; and vehicular parking facilities.

The existing Runway 2-20 is 4,100 feet long by 75 feet wide; with a 342 foot displaced threshold on Runway 2 and a 183 foot displaced threshold on Runway 20. The current Airport Layout Plan (ALP) which was conditionally approved in 2007 indicates a phased runway development with an ultimate length of 5,001 feet by 100 feet wide; which amounts to a 901 foot extension of the runway. The Federal Aviation Administration (FAA) Advisory Circular (AC) 150-5325-4B, *Runway Requirements for Airport Design*, provides direction for the minimum safe runway dimensions required for "critical aircraft," which in this case is the Cessna Citation 550. The Cessna Citation 550 jet is the most demanding aircraft operating regularly at the MCMA with more than 500 annual operations. In addition to the FAA AC, the aircraft insurance companies generally require a minimum runway length of 5,000 feet for the operation of the Cessna Citation 550.

Four alternatives were developed and analyzed with the primary consideration of protecting people and property on the ground; and secondary consideration given to feasibility of implementation:

- A1 – Do Nothing;
- A2 – Runway and Highway Grade Separation;
- A3 – Shift Runway North;
- A4 – Relocate Highway South.

Of these alternatives, A2 – Runway and Highway Grade Separation recommends physically separating Runway 2-20 and US Highway 20/35 by lowering the grade of the highway and moving the RPZ further south. Approximately 1,850 feet of US Highway 20 will be lowered between SR 212 and Interstate 94 to allow vertical clearance for the extended Runway 2-20.

The estimated cost of the runway expansion and grade separation project is $9,850,000. The project is entering in to justification phase (for FAA funding participation) in August, 2017.

FRANCISCAN ST. ANTHONY HEALTH - REGIONAL HOSPITAL

The Franciscan Health Michigan City Hospital is located on Wabash Street in Midtown Michigan City. Franciscan Health provides state-of-the-art healthcare and its centers of excellence – diabetes care, heart and vascular, orthopedics, rehabilitation services, stroke care, and surgical services - are known throughout the region. The Hospital complex is approximately 600,000 square feet amidst a five-acre parcel of land flanking Wabash Street. In addition to the Hospital there is a 400-space structured parking garage and several surface parking lots on the property. The Franciscan-St. Anthony organization has recently decided to close the Hospital and is currently constructing a new, regional hospital at the Interstate 94 – U.S. 421 interchange. The Franciscan-St. Anthony organization is currently preparing a redevelopment program for the existing Hospital. The organization is very interested in using the facility to advance the objectives and plans of the City. Although the redevelopment program remains tentative, its principal trajectory will remain health-oriented, focused on out-patient care, and will likely include the following programmatic elements:

- the third floor behavioral health unit will remain;
- the hospice on the fifth floor will likely remain;
- some of the 1926 era sections of the building are in disrepair and will be demolished;
- there will be an outpatient daycare component, and will be consistent with the PACE program (Program for All-inclusive Care for the Elderly);
- the in-patient adult rehabilitation unit will remain;
- part of the building, including one bay for an ambulance, will be re-purposed for the LaPorte County EMS and will include living quarters;
- there will be space assigned for doctors' offices;
- the cafeteria will remain;
- two of the surface parking lots may be subject to redevelopment; and
- an urgent care / primary care ("express care") facility will be part of the program.

Redevelopment of the remainder of the hospital facility remains to be determined.

Public / Institutional Land Use Designation

Institutional uses, such as governmental buildings, schools, libraries, and places of public assembly (e.g., churches) can be part of the neighborhood environment. Refer to TEC Map 30, *Public Facilities*. Churches can be found in many Michigan City neighborhoods. The Comprehensive Plan identifies large churches as an institutional land use; while smaller, perhaps more transient churches are categorized as a residential use.

For the purposes of the *Future Land Use Map*, uses that might otherwise be considered "special uses," such as water towers, wastewater treatment plants, solid waste landfills, airports, and electric transmission substations, will be classified as Public / Institutional.

TEC Map 30, Public Facilities

Name	Acres
Michigan City Public Service Facilities	253.6
Michigan City Public Library	2.9
Fire Stations – Four Michigan City Stations ▪ Fire Station #1 ▪ Fire Station #2 ▪ Fire Station #3 ▪ Fire Station #4 ▪ Administrative Offices and Training Center – Beverly Shores Fire – Pine Township Fire – Coolspring Township Fire – Long Beach Fire – Michiana Shores Fire – Springfield Township Fire	14.2
Police – Michigan City Police – Beverly Shores Police – Trail Creek Police – Long Beach Police	9.7
Michigan City Municipal Airport	165.4
Franciscan St Anthony Health Hospital	84.5
Indiana State Prison	100.6

LEGEND

- City Limits
- Comprehensive Plan Area
- Michigan City Public Service Facilities
- Michigan City Public Library
- Michigan City Fire Stations
- Michigan City Police Department
- Michigan City Municipal Airport - Phillips Field
- Michigan City Owned Property
- Franciscan St. Anthony Health (New Campus)
- Indiana State Prison

City Limits
516.5 acres, 4.1%
Land within Planning Area, outside the City Limits
110.1 acres, 0.6%
Planning Area
626.6 acres, 2.0%

Lake Michigan

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Michiana Shores Fire
Long Beach Fire
Long Beach Police
Post Office
MC Fire Station 2
MC Wastewater Treatment Facility
Port Authority
City Hall
MC Sanitation
Post Office
MC Public Library
MC Police Department
MC Fire Station 1
MC Fire Admin Offices and Training Center
Indiana State Prison
Greenwood Cemetery
Trail Creek Police
MC Central Maintenance Facility
MC Sanitation
Michigan City Muncipal Airport
MC Fire Station 3
Swan Lake Memorial Gardens
Springfield Twp Fire
Pine Twp Fire
Post Office
MC Fire Station 4
Beverly Shores Fire
Post Office
Beverly Shores Police
Coolspring Twp Fire
Franciscan St. Anthony Heath
PORTER COUNTY
LA PORTE COUNTY

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

MOMENTUM: MICHIGAN CITY 2040
THE EXISTING CITY
TEC Map 30: Public Facilities

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Schools and Educational Institutions

As depicted in TEC Map 31, *Schools and Institutions*, and as summarized on the Michigan City Area Schools website (https://www.mcas.k12.in.us/Page/109), the Michigan City Area School system's jurisdiction covers approximately 120 square miles in La Porte and Porter Counties, and is entirely within the Comprehensive Plan's Planning Area. Buildings include 12 schools (listed below), an administrative office, a transportation/service building, and a plant planning facility. The Michigan City Area Schools system consists of eight elementary schools:

- Coolspring Elementary School;
- Edgewood Elementary School;
- Joy Elementary School (Gifted and Talented Center);
- Knapp Elementary School (Gifted and Talented Center);
- Lake Hills STEM Magnet Elementary School;
- Marsh Elementary School;
- Pine Fine Arts Magnet Elementary School; and
- Springfield Elementary School (Gifted and Talented Center);

Two middle schools, which are theme-based, and offer a solid foundation in core subjects through a special curricular focus:

- Barker Middle School (STEM); and
- Krueger Middle School (Environmental Science).

The Michigan City High School (MCHS) is accredited by the AdvancEd and offers dual-credit and AP courses as part of an Honors College program. An Early College program serves middle tier/first generation students; and a Freshman Academy assists students in need of extra support. Diverse course options include: Project Lead the Way Engineering, a robust music and visual Arts program, and four Foreign Languages.

The LaPorte County Career and Technical Education program is housed at the A. K. Smith Center, and serves students from six high schools in the region. Areas of study include automotive technology, health careers, early childhood education, welding, culinary science, cosmetology, construction, advanced manufacturing, electronics/computer repair, criminal justice, and fire science.

MCAS Mission Statement

The mission of the Michigan City Area Schools, the unifying force of our diverse community, is to ensure that each student will be able to achieve any goal to which he or she aspires and contribute positively to society through a system characterized by:

- learning as a continuous experience of excitement, opportunity, and achievement,
- clear goals and high expectations for student's success,
- supportive families and community,
- staff with pride and purpose leading by positive example, and
- a student prepared for and enthusiastic about his or her future.

Numerous school and community events are held at the Elston Performing Arts Center and the MCHS auditorium. MCAS also offers outstanding athletic facilities, including a football stadium (Ames Field), a swimming pool, and a 7,000-capacity high school gymnasium, the Wolves Den.

Some of the key strategies outlined within the MCAS Strategic Plan include:

1. Emplace processes and learning opportunities to ensure that each student progressively creates and achieves his or her personal learning plan (PLP).
2. Provide all necessary support for each student to achieve his or her educational and personal goals.
3. Ensure that 100 percent of children will succeed in early childhood experiences.
4. Ensure for each student a seamless transition from school to career regardless of vocational or educational goals.
5. Create professional learning communities dedicated to the success of each student.
6. Engage parents in all aspects of their child's education.
7. Create an open exchange of information and ideas, both internally and externally, to accomplish the mission and objectives of the Michigan City Area Schools.
8. Our community is an integral part of the Michigan City Area Schools.

TEC Table 15, MCAS Facility Utilization						
Schools	Optimum Capacity	Maximum Capacity	2014-15 Enrollment	2016-17 Enrollment	2017-18 Enrollment	Utilization
Elementary Schools						
Coolspring ES	415	605	247	319	299	72.04%
Edgewood ES	383	513	247	308	333	86.94%
Joy ES	548	705	403	425	394	71.89%
Knapp ES	555	775	330	366	395	71.17%
Marsh ES	395	534	246	313	303	76.70%
Niemann ES	549	640	290	-- (2)	35 (2)	NA
Springfield ES	545	742	238	385	366	67.15%
Pine ES	655	933	338	416	439	67.02%
Lake Hills ES	625	909	405	493	499	79.84%
Subtotal:	4670	6,356	2,744	3,025	3,063	48.19%
Middle Schools						
Barker MS	598	621	479	391	399	80.10%
Krueger MS	571	699	445	363	340	77.93%
Subtotal:	1,169	1,320	924	754	739	63.21%
High Schools						
Michigan City HS				1,781	1,686	
A.K. Smith C.C.					158	
Subtotal:						

(1) Utilization percentage is based upon 2017-18 Enrollment figures divided by Optimum Capacity.
(2) Niemann E.S. is now used for Special Needs students (two classrooms) and the Michigan City HeadStart program, which utilizes the majority of classrooms in the school.

Source: Michigan City Area Schools

SCHOOL CAPACITY ANALYSIS

Based on the State of Indiana Department of Education's optimum capacity specifications for schools:

- Kindergarten through third grade: 25 students per class;
- Fourth through sixth grade: 28 students per class;
- Special education programs: 10 to 15 students per class;
- Maximum capacity specifications is 30 square feet per student.

As depicted in TEC Table 15, *MCAS Facility Utilization*, while MCAS schools' enrollment is experiencing a modest increase in students, MCAS schools across the board maintain significant capacity for an expanded student population. That said, however, as depicted in TEC Table 16, *MCAS Demographic Projections*, MCAS Administration estimates that school enrollment will likely continue to decline over the next several years. The projections in TEC Table 16 do not reflect likely population increases resulting from infrastructure projects such as the double tracking of the South Shore Line.

TEC Table 16, MCAS Demographic Projection

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
K	403	397	422	467	499	469	444	419	421	404	397	370	354	347	351
1	421	402	417	411	500	511	480	454	429	431	413	406	379	362	355
2	433	405	387	373	431	483	494	464	439	415	417	399	393	366	350
3	506	408	408	403	409	440	494	504	474	449	424	426	408	401	374
4	429	486	406	375	412	398	429	481	491	462	437	413	415	398	391
5	450	434	495	402	408	423	409	441	494	505	474	449	424	426	408
6	414	428	437	486	419	406	421	407	439	492	503	472	447	422	424
7	448	391	434	425	502	415	403	417	404	435	488	498	468	443	418
8	419	446	384	432	452	507	419	406	421	407	439	492	503	472	447
9	529	560	611	557	555	615	689	570	553	573	554	597	670	684	643
10	577	541	469	494	484	491	544	610	504	489	507	490	528	592	605
11	424	419	469	428	404	402	408	452	506	419	406	421	407	439	492
12	389	363	360	412	359	347	345	350	388	435	359	348	361	350	376
Total	5,842	5,680	5,699	5,665	5,834	5,908	5,979	5,976	5,964	5,914	5,818	5,783	5,756	5,701	5,634
Change		-162	19	-34	169	74	71	-2	-13	-49	-97	-35	-27	-54	-67
Percent		-2.8%	0.3%	-0.6%	3.0%	1.3%	1.2%	0.0%	-0.2%	-0.8%	-1.6%	-0.6%	-0.5%	-0.9%	-1.2%

LEGEND

- City Limits
- Comprehensive Plan Area
- Michigan City Area Schools
- Private Schools and Other Institutions
- Michigan City School District Boundary
- Middle School Boundaries
- Elementary School Boundaries

City Limits
274.9 acres, 2.2%
Land within Planning Area, outside the City Limits
73.6 acres, 0.4%
Planning Area
348.5 acres, 1.1%

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Lake Michigan
Dunelend Beach
Michiana Shores
LaPorte County YMCA Long Beach Branch
Notre Dame Elementary School
Long Beach
Lake Hills Elementary School
Pottawattamie Park
Martin T Krueger Middle School
St. Paul Lutheran School
Michigan Township
Elston Performing Arts Center
A.K. Smith Career Center
Marquette High School
LaPorte County Family YMCA
Gill Field
Saint Stanislaus Kostka School
Marsh Elementary School
MCAS Administration
Queen Of All Saints School
Joy Elementary School
Knapp Elementary School
Ames Field
Imagination Station Early Childhood Center
Edgewood Elementary School
Trail Creek
Jack and Jill Day Care Center
Barker Middle School
Ivy Tech Community College
Michigan City High School and Auditorium
SpringfieldTownship
Springfield Elementary School
Renaissance Academy Charter School
Center Township
Town of Pines
Beverly Shores
Pine Elementary School
Pine Township
Coolspring Township
Coolspring Elementary School
PORTER COUNTY
LA PORTE COUNTY
12
20
94
212
35
421

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

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MOMENTUM: MICHIGAN CITY 2040
THE EXISTING CITY
TEC Map 31: Schools and Institutions

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Parks, Facilities, Trails and Open Space

MICHIGAN CITY PARKS AND RECREATION DEPARTMENT

The geographic scope of the Planning Area coincides with the Parks and Recreation Department's service area, which includes the City of Michigan City; the Towns of Long Beach, Michiana Shores, Pottawatomie Park, The Pines, and Trail Creek; and the Townships of Coolspring, Michigan, Pine, and Springfield.

As summarized in TEC Table 16, *Inventory of Existing Parks and Open Space*, within their jurisdiction, the Parks Department is responsible for the operation and maintenance of over 700 acres of park land, including 17 neighborhood parks, which range in size from one to 17 acres; Washington Park, a 144-acre regional park located on the shores of Lake Michigan; the Washington Park Zoo; Patriot Park sports complex; the Michigan City municipal golf courses; the Michigan City Skate Park; and the Michigan City Senior Center.

The Parks Department is also responsible for over 162 acres of undeveloped natural areas, including Bismark Hill; Karwick Nature Park; Krueger Memorial Park (forest preserve); Mott's Woods (forest preserve); Sheridan Beach Esplanade (natural dune); and Winding Creek Cove (refer to Table 16, *Inventory of Existing Parks, Trails, and Open Space Areas*).

The Parks Superintendent and Parks Department are governed by the Michigan City Park Board, which is responsible for setting departmental policy direction. The Park Board consists of four members appointed by the Mayor of Michigan City and serve a four-year term. Parks department staff includes 25 full-time staff members; two part time, non-seasonal staff members; and 110 seasonal staff positions.

PARTNERSHIPS

As a result of LaPorte County tax shortfalls and City budget reductions, the Parks Department has been forced to eliminate 10 full-time staff positions, or 30 percent of its workforce. Consequently, the Parks Department has developed, and relies upon a strong volunteer base to assist with maintenance and operations of its park programs and facilities. In 2015,

Mission Statement:

The Michigan City Parks and Recreation Department strives to preserve, protect and manage, natural, historical and recreational facilities in order to offer professionally managed leisure activities and programming in which ALL citizens can participate.

Our Park Board and Staff are dedicated to fiscal responsibility and efficiency through proper planning. We will pursue cooperation and partnerships with fellow City Departments, groups and agencies in our community to achieve these philosophies.

Our combined efforts will enhance and ENRICH the quality of life of our citizens, visitors and future generations to come.

over 11,500 volunteer hours were logged. Volunteer opportunities include:

- Adopt-a-Beach events;
- Festival of Holiday Lights;
- LaPorte County Clean It Up Day;
- Senior Center reception, program instructors, Advisory Board members;
- Michigan City Youth Baseball League (coaches and officials);
- Washington Park Zoo (curators, animal care, event staff, internships)

Additionally, the Parks Department has had a long-standing Memorandum of Understanding (MOU) with Michigan City Area Schools (MCAS) for the use of school gyms for recreational programs. In 2016, the Parks Department and MCAS executed another MOU to begin an outdoor learning service program for approximately 100 college bound juniors and seniors engaged in an environmental science-based curriculum. Students are tasked with developing restoration and management plans for several of the City's open space areas.

In order to expand the City's youth baseball and softball programs, the Parks Department executed a MOU with the Town of Trail Creek to use four of the Town's baseball diamonds.

TEC Table 17, Inventory of Existing Parks and Open Space

		USAGE TYPE			
Park Name	Acres	Active	Passive	Conservation	Open Space
Indiana Dunes National Lakeshore	1,978.7 acres*	x	x	x	x
REGIONAL PARKS					
Creek Ridge County Park	112.0 acres*	x	x	x	x
Washington Park – Includes Lighthouse, Museum, W.P.A. Historic structures, Beach, Oasis Splash Park, North Pointe Pavilion, Amphitheater, and Memorials and Monuments – Millennium Plaza (0.5 acres) – Canada Park (1.0 acres) – Washington Park Zoo (6.0 acres) – Michigan City Marina (30.0 acres) – Bismarck Hill Open Space (31.2 acres)	167.7 acres	x	x		x
Subtotal:	**279.7 Acres**				
COMMUNITY PARKS					
Charles R. Wescott Park	4.0 acres		x		
Subtotal:	**4.0 Acres**				
NEIGHBORHOOD PARKS					
Adams Park	12.0 acres	x			
Cleveland Park	6.0 acres	x	x		x
Congdon Park	5.0 acres	x			
Gardena Park	12.0 acres	x			
Hansen Park	17.5 acres	x	x		x
Joe Hawkins Memorial Park	1.0 acres	x			
Oak Hills Park	5.0 acres	x			
Pines Park	5.2 acres	x			
Pullman Park	8.0 acres	x			
Nelson Park	4.5 acres	x			
Ridgeland Park	1.0 acres	x			
Tall Timbers Park	30.0 acres	x			
Walker Street Park	1.0 acres	x			
Water Tower Park	5.5 acres	x			
Zilla Park (Marsh Elementary School)	2.0 acres	x			
Subtotal:	**115.7 Acres**				

* Note: Federal and LaPorte County parks were not included within the City's 'Parks and Open Space' total acreage.

TEC Table 17, Inventory of Existing Parks and Open Space

		Usage Type			
Park Name	Acres	Active	Passive	Conservation	Open Space
SPECIAL USE FACILITIES					
Ames Field	9.0 acres	x			
Brincka Crossgardens	68.7 acres		x	x	x
Friendship Botanic Gardens	106.0 acres		x	x	x
Gill Field	6.8 acres	x			
Maintenance Facility	N/A				
Michigan City Fish and Game Club	24.0 acres	x	x		x
Michigan City Municipal Golf Course	156.0 acres	x			
Michigan City Senior Center	N/A	x			
Krueger Memorial Hall	N/A	x			
Patriot Park	120.0 acres	x			
Striebel Pond	40.0	x	x		x
Subtotal:	**530.5 Acres**				
LINEAR PARKS / GREENWAYS					
Calumet Trail	9.0 miles	x			
Trail Creek Greenway Trail	0.6 miles	x			
Washington Park to Calumet Trail	0.75 miles	x			
Subtotal:					
NATURE PRESERVES					
Barker Woods Nature Preserve	30.0 acres		x	x	x
Father Basil Moreau Nature Preserve	96.3 acres		x	x	x
Karwick Nature Park	23.5 acres		x	x	x
Krueger Memorial Park	37.0 acres	x	x	x	x
Mott's Woods	20.0 acres		x	x	x
Ruby Woods	35.0 acres		x	x	x
Sheridan Beach Esplanade	66.0 acres		x	x	x
Winding Creek Cove	6.7 acres		x	x	x
Subtotal:	**314.5 Acres**				
UNDEVELOPED PARCELS					
Henry Lake Area	6.0 acres				
Jernegan's Hill	1.0 acres				
Michigan Boulevard Parcel	0.078 acres				
Stockwell Woods	17.9 acres				
Trail Creek Area (near Fish and Game)	33.5 acres				
Subtotal:	**58.5 Acres**				
TOTAL SYSTEM:	**1,190.9 ACRES (3.9% OF THE PLANNING AREA)**				

PARKS PROGRAMS

The Michigan City Parks Department has traditionally provided a variety of recreational opportunities. Adult and youth activities have ranged from organized leagues to camps and classes. As discussed within the Parks and Recreation Master Plan, as a result of budget reductions and the loss of the Department's full-time Recreation Director position, many recreational programs have been suspended. The Parks department still offers Youth baseball, Adult Volleyball, and Adult Softball. The goal of the Parks Department is to increase the Department's budget and hire a Recreation director to increase and provide conventional recreation-oriented programming for the community. Toward this end, a five-year financial plan is being developed, the recommendations of which include:

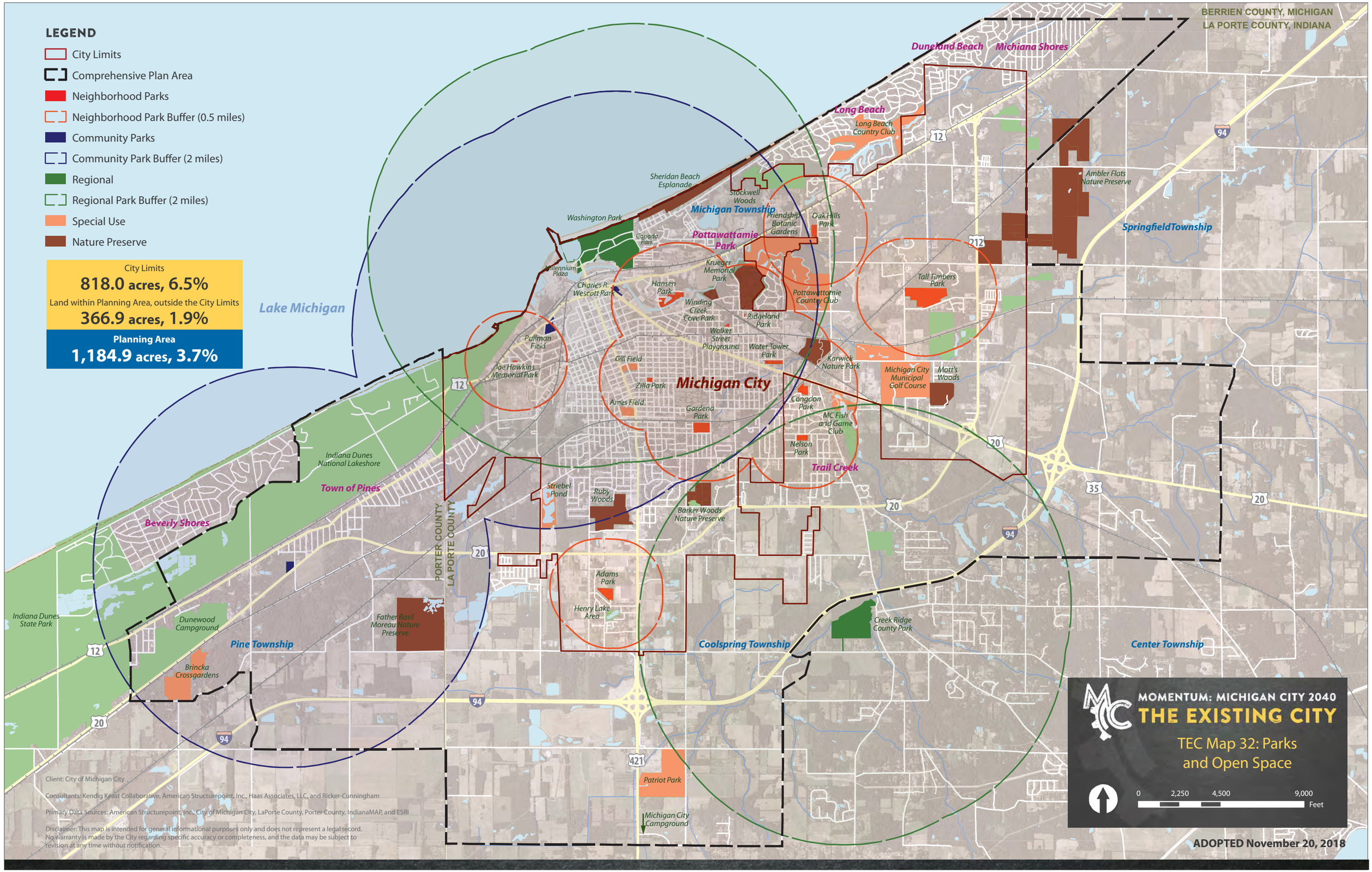
1. Require many recreational programs to be self-supporting.
2. Re-evaluate all rental and user fee schedules annually to ensure that fees cover costs.
3. Consider and evaluate public/private partnership when possible.
4. Evaluate leasing opportunities.
5. Pursue sponsorships (corporate / private).
6. Pursue grants where applicable and appropriate.
7. Investigate the possibility of general obligation bonds for large capital projects when other methods of financing are not available.

Parks / Open Space Land Use Designation

Adequate provision of parkland and open space for a growing population is critical and should be factored-in to all new development as so much necessary infrastructure. The Parks / Open Space land use designation has been utilized to identify existing parks and open space areas. As indicated on TEC Map 32, *Parks and Recreation*, recreational trails and on-street bike lanes have also been identified. As identified in TEC Table 18, *National Recreation and Parks Association (NRPA) Parkland Classification Standards*, for planning purposes, the type and size of a park will assume a particular "service area," of coverage. A neighborhood park's service area is a 0.25 - 0.5 mile radius, meaning that it is programmed to provide park amenities and facilities for those living within a quarter to half-mile radius. A community park, being significantly larger than a neighborhood park, and endowed with a greater number and diversity of facilities, will appeal to a larger audience and therefore will have a service area of a one to two mile radius around the park. Likewise, pocket parks have a smaller service area and regional parks have a much larger service area and may provide for the recreation needs of several communities.

TEC Table 18, National Recreation and Parks Association (NRPA) Parkland Classification Standards

Type	Service Area	Desirable Size	Acres per 1,000 Residents	Desirable Site Characteristics and Facilities
Neighborhood Parks	0.25 - 0.5 miles	5 - 15 acres	1 - 2 acres	Serve the surrounding neighborhoods with open space and facilities such as basketball courts, children's play equipment and picnic tables.
Community Parks	1 - 2 miles	25+ acres	5 - 8 acres	May include areas suited for intense recreation facilities such as athletic complexes and large swimming pools; easily accessible to nearby neighborhoods and other neighborhoods.
Regional Parks	Several communities	200+ acres	5 - 10 acres	Contiguous with or encompassing natural resources.
Special Use Areas	No applicable standards	Variable depending on use	Variable	Area for specialized or single purpose recreation activities such as campgrounds, golf courses, etc.


LEGEND
City Limits
Comprehensive Plan Area
Neighborhood Parks
Neighborhood Park Buffer (0.5 miles)
Community Parks
Community Park Buffer (2 miles)
Regional
Regional Park Buffer (2 miles)
Special Use
Nature Preserve
City Limits
818.0 acres, 6.5%
Land within Planning Area, outside the City Limits
366.9 acres, 1.9%
Planning Area
1,184.9 acres, 3.7%
BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA
Lake Michigan
Dunelund Beach
Michiana Shores
Long Beach
Long Beach Country Club
Sheridan Beach Esplanade
Stockwell Woods
Michigan Township
Washington Park
Friendship Botanic Gardens
Oak Hills Park
Canada Park
Pottawattamie Park
Millennium Plaza
Krueger Memorial Park
Charles R. Wescott Park
Hansen Park
Pottawattomie Country Club
Tall Timbers Park
Winding Creek Cove Park
Ridgeland Park
Walker Street Playground
Water Tower Park
Pullman Field
Joe Hawkins Memorial Park
Gill Field
Karwick Nature Park
Michigan City Municipal Golf Course
Mott's Woods
Zilla Park
Michigan City
Ames Field
Gardena Park
Congdon Park
MC Fish and Game Club
Nelson Park
Trail Creek
Striebel Pond
Ruby Woods
Barker Woods Nature Preserve
Ambler Flats Nature Preserve
SpringfieldTownship
Indiana Dunes National Lakeshore
Town of Pines
Beverly Shores
PORTER COUNTY
LA PORTE COUNTY
Adams Park
Henry Lake Area
Indiana Dunes State Park
Dunewood Campground
Father Basil Moreau Nature Preserve
Creek Ridge County Park
Pine Township
Coolspring Township
Center Township
Brincka Crossgardens
Patriot Park
Michigan City Campground
12
20
94
212
35
421
Client: City of Michigan City
Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham
Primary Data Sources: American Structurepoint, Inc., City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI
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MOMENTUM: MICHIGAN CITY 2040
THE EXISTING CITY
TEC Map 32: Parks and Open Space
0
2,250
4,500
9,000
Feet
ADOPTED November 20, 2018

Residential Land Use

HOUSING TYPOLOGY

As depicted in TEC Table19, *Housing Types*, Michigan City's housing stock consists of approximately 14,830 dwelling units; 61 percent of which are single family detached units. 12.7 percent of housing units are multi-family complexes, consisting of 10 or more units. These percentages generally reflect the median quantities of single family detached and multi-family household composition within the comparison communities; although the percentages are somewhat lower than the State of Indiana composition.

AGE OF HOUSING STOCK

Michigan City's marginal to declining growth rate over recent decades is reflected in the age of its housing stock, much of which is old and in need of maintenance or rehabilitation. Typically, housing begins to require significant repairs after 20 years or so. As depicted in TEC Table 20, *Age of Housing Stock (2015)*, 78 percent of the homes were built in 1979 or earlier. According to the 2011-2015 American Community Survey 5-Year Estimates, approximately 50 percent were built in 1959 or earlier, and 28 percent were built between 1960-1979. The age of homes in Michigan City, however, is relatively new compared to the comparison communities.

Approximately 11 percent of homes in Michigan City were built in 2000 or later, which is considerably more than the other communities. Even though there was more new construction in Michigan City than its peer communities, there has been very little new housing constructed in the last 35 years or so.

HOUSING TENURE

As depicted in TEC Table 21, *Housing Tenure*, of the 14,830 dwelling units in Michigan City, 2,472 units, or 16.6 percent, are vacant. This percentage is significantly higher than the vacancy rate in LaPorte County (13.4 percent), the State of Indiana (10.7 percent) or any of the comparison communities. Vacancy is often viewed as a negative trait, but a healthy vacancy rate of between five and six percent helps ensure home buyers and renters can find housing when needed while also serving as a filter to remove and replace the lowest quality housing from the market. In the case of Michigan City, the high vacancy rate is likely symptomatic of the age, generally poor condition and size of the housing stock.

Of the occupied homes, 50.2 percent are owner-occupied, which is generally the median percentage with regard to the comparison communities; and 33.2 percent are renter occupied, which is lower than all of the comparison communities except the City of Bay City, Michigan.

TEC Table 19, Housing Types (2015)

	Total Housing Units	1-unit, Detached	Percent of Total	1-unit, Attached	Percent of Total	2 Units	Percent of Total
Michigan City, IN	14,830	9,058	61.10%	510	3.4%	1,067	7.2%
LaPorte County, IN *	48,682	36,635	75.3%	1,178	2.4%	2,021	4.2%
Indiana, State of *	2,820,251	2,046,107	72.6%	104,952	3.7%	73,254	2.6%
Bay City, MI	16,135	12,143	75.3%	370	2.3%	920	5.7%
Holland, MI	12,148	6,948	57%	1,124	9.2%	921	7.6%
Marquette, MI	8,724	4,700	53.9%	150	1.7%	803	9.2%
Muskegon, MI	16,042	10,657	66.4%	508	3.2%	1,183	7.4%
Duluth, MN	38,146	23,610	61.9%	1,108	2.9%	2,787	7.3%
Sheboygan, WI	21,994	12,163	55.3%	665	3.0%	3,914	17.8%
Lorain, OH	29,561	19,651	66.5%	1,972	6.3%	2,008	6.8%

Sources:
U.S. Census Bureau, 2011-2015 American Community Survey 5-year estimates.
U.S. Census Bureau, Census 2010 Summary File 1 Esri forecasts for 2016 and 2021 Esri converted Census 2000 data into 2010 geography and *Esri forecasts for 2017 and 2022 Esri converted Census 2000 into 2010 geography.

TEC Table 19, Housing Types (2015)

3 - 4 Units	Percent of Total	5 - 9 Units	Percent of Total	10 - 19 Units	Percent of Total	20 or More Units	Percent of Total	Manuf. Home	Percent of Total
996	6.7%	907	6.1%	985	6.6%	893	6.0%	414	2.8%
1,861	3.8%	1,437	3.0%	1,622	3.3%	1,798	3.7%	2,130	4.4%
101,626	3.6%	129,640	4.6%	108,038	3.8%	114,611	4.1%	141,290	5.0%
981	6.1%	443	2.7%	87	0.5%	948	5.9%	243	1.5%
547	4.5%	544	4.5%	614	5.0%	1,164	9.6%	322	2.6%
550	6.3%	751	8.6%	736	8.4%	866	9.9%	159	1.8%
709	4.4%	494	3.1%	652	4.1%	1,798	11.2%	41	0.3%
1,908	5.0%	1,197	3.1%	1,137	3.0%	5,436	14.3%	963	2.5%
1,195	5.4%	976	4.4%	968	4.4%	1,636	7.4%	477	2.2%
965	3.3%	974	3.3%	1,877	6.3%	1,736	5.9%	464	1.6%

Sources:
U.S. Census Bureau, 2011-2015 American Community Survey 5-year estimates.
U.S. Census Bureau, Census 2010 Summary File 1 Esri forecasts for 2016 and 2021 Esri converted Census 2000 data into 2010 geography and *Esri forecasts for 2017 and 2022 Esri converted Census 2000 into 2010 geography.

TEC Table 20, Age of Housing Stock (2015)

	2000 to Present	1980 - 1999	1960 - 1979	1959 or earlier
Michigan City, IN	10.7%	13.1%	26.3%	49.9%
LaPorte County, IN	11.6%	19.8%	25.3%	43.3%
Indiana, State of	14.6%	24.7%	25.6%	35.2%
Bay City, MI	1.8%	4.8%	16.5%	76.7%
Holland, MI	7.0%	28.8%	21.0%	43.0%
Marquette, MI	6.7%	14.8%	29.5%	49.0%
Muskegon, MI	6.3%	7.6%	20.2%	66.0%
Duluth, MN	7.8%	9.4%	18.6%	64.2%
Sheboygan, WI	3.8%	13.9%	25.0%	57.3%
Lorain, OH	7.3%	9.4%	30.4%	52.9%

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year estimates

TEC Table 21, Housing Tenure (2016/17)

	Population	Total Housing Units	Occupied Units	Owner-Occupied	Renter-Occupied	Total Vacant	Vacancy Rate
Michigan City, IN	31,791	14,891	12,419	50.2%	33.2%	2,472	16.6%
LaPorte County, IN *	112,650	49,642	42,990	61.8%	24.8%	6,652	13.4%
Indiana, State of *	6,746,689	2,908,219	2,597,040	60.4%	28.9%	311,179	10.7%
Bay City, MI	34,532	16,116	14,343	59.2%	29.8%	1,773	11.0%
Holland, MI	33,717	13,718	12,374	55.9%	34.3%	1,344	9.8%
Marquette, MI	21,382	9,037	8,513	44.0%	50.2%	524	5.8%
Muskegon, MI	39,151	16,551	14,217	43.6%	42.3%	2,334	14.1%
Duluth, MN	87,190	39,144	36,012	54.5%	37.5%	3,092	7.9%
Sheboygan, WI	48,827	22,480	20,254	53.5%	36.6%	2,248	10.0%
Lorain, OH	63,428	29,607	25,669	47.2%	39.5%	3,938	13.3%

Sources: U.S. Census Bureau, 2011-2015 American Community Survey 5-year estimates.

U.S. Census Bureau, Census 2010 Summary File 1 Esri forecasts for 2016 and 2021 Esri converted Census 2000 data into 2010 geography and *Esri forecasts for 2017 and 2022 Esri converted Census 2000 into 2010 geography.

HOUSING AFFORDABILITY

A traditional metric to evaluating whether a home is affordable to a homebuyer is by comparing their household income to the value of the home. This metric can be adapted to evaluate the affordability of housing markets in different cities. An affordable, self-sustaining housing market, with adequate value and revenues to support market-rate new construction, typically exhibits a value to income ratio between 2.5 to 3.0. Ratios above 3.0 present significant affordability issues while ratios below 2.0 are significantly undervalued relative to income.

As indicated in TEC Table 22, *Income to Value Comparisons and Rental Costs (2015)*, the median value of a home in Michigan City is $98,594, which is lower than the State value, as well as lower than median home values within the comparison communities. Additionally, the percent of rent compared to income is 22.3 percent, which is the second highest of the comparison communities.

TEC Table 22, Income to Value Comparisons and Rental Costs (2015)

	Median Household Income	Median Home Value	Value / Income Ratio	Median Gross Rent	Rent as % of Income
Michigan City, IN	$37,618	$98,594	2.62	$698	22.3%
LaPorte County, IN *	$49,301	$138,125	2.80	$702	17.1%
Indiana, State of *	$51,204	$138,578	2.71	$745	17.5%
Bay City, MI	$35,535	$73,913	2.08	$575	19.4%
Holland, MI	$43,906	$129,363	2.95	$766	20.9%
Marquette, MI	$38,319	$162,428	4.24	$655	20.5%
Muskegon, MI	$28,659	$71,238	2.49	$638	26.7%
Duluth, MN	$44,466	$146,740	3.30	$728	19.6%
Sheboygan, WI	$43,289	$116,846	2.70	$623	17.3%
Lorain, OH	$36,124	$94,572	2.62	$656	21.8%

Sources: U.S. Census Bureau, 2011-2015 American Community Survey 5-year estimates.

U.S. Census Bureau, Census 2010 Summary File 1 Esri forecasts for 2016 and 2021 Esri converted Census 2000 data into 2010 geography and *Esri forecasts for 2017 and 2022 Esri converted Census 2000 into 2010 geography.

MEDIAN INCOME

The 2016 median household income for Michigan City is anticipated to be $37,618. This is compared to seven peer cities/communities in the nearby area where the average median household income for all of these communities is $38,490 which puts Michigan City close to the average. TEC Table 23, *Affordable Home Ownership (2016/17)*, shows the anticipated 2016 median household income.

HOUSE BURDENED RESIDENTS

An important metric in housing affordability is the percent of income that residents spend on their housing needs. According to the U.S. Department of Housing and Urban Development (HUD), "families who pay more than 30 percent of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation, and medical care." TEC Table 24, *Monthly Rent / Mortgage Payment (2015)* (following page) shows the monthly rents/mortgage payments of Michigan City and its comparison communities.

Approximately 44 percent of homeowners spend more than 30 percent of their household's annual income on their house, including those with and without a mortgage. This is a high percentage of the population which makes owning a home very challenging. The comparison communities also have a high percentage spending more than 30 percent of their income.

Approximately 57 percent of the renters in Michigan City spend more than 30 percent of their household's annual income on their rent plus utilities which is comparable to the comparison communities. Often these households are single-income, working in the service industry jobs.

TEC Table 23, Affordable Home Ownership (2016/17)

	Median Houshold Income	Maximum Home Price Affordable to Median HH Income	Median Home Value	Minimum HH Income to Afford Median Price Single Family Home
Michigan City, IN	$37,618	$112,854	$98,594	$32,865
LaPorte County, IN *	$49,301	$147,903	$138,125	$46,042
Indiana, State of *	$51,204	$153,612	$138,578	$46,193
Bay City, MI	$35,535	$106,605	$73,913	$24,638
Holland, MI	$43,906	$131,718	$129,363	$43,121
Marquette, MI	$38,319	$114,957	$162,428	$54,143
Muskegon, MI	$28,659	$85,977	$71,238	$23,746
Duluth, MN	$44,466	$133,398	$146,740	$48,913
Sheboygan, WI	$43,289	$129,867	$116,846	$38,949
Lorain, OH	$36,124	$108,372	$94,572	$31,524

Methodology: "Affordable Home Price for the Median HH Income" is three times the "Median Household Income." The household (HH) income to afford each type of ownership housing is one–third of the median value for each type of housing.

Source: U.S. Census Bureau, Census 2010 Summary File 1 Esri forecasts for 2016 and 2021 *Esri converted Census 2000 data into 2010 geography and *Esri forecasts for 2017 and 2022 Esri converted Census 2000 data into 2010 geography.

TEC Table 24, Monthly Rent / Mortgage Payment (2015)

	Median Monthly Housing Costs (for owners and renters)	Median Monthly Owner Costs with Mortgage	Median Gross Rent	Median Household Income	30% of Monthly Median Household Income	Percent Paying 30% or more of Owner Costs (w/ or w/out Mortgage	Percent Paying 30% or More on Gross Rent
Michigan City, IN	$712	$926	$698	$37,618	$940	43.7%	56.5%
LaPorte County, IN	$758	$1,068	$702	$49,301	$1,233	36.9%	51.0%
Indiana, State of	$805	$1,102	$745	$51,204	$1,280	34.3%	49.6%
Bay City, MI	$674	$954	$575	$35,535	$888	51.2%	55.3%
Holland, MI	$831	$1,091	$766	$43,906	$1,098	49.6%	47.4%
Marquette, MI	$686	$954	$655	$38,319	$958	33.5%	55.0%
Muskegon, MI	$645	$877	$638	$28,659	$716	49.5%	64.0%
Duluth, MN	$820	$1,210	$728	$44,466	$1,112	37.7%	57.5%
Sheboygan, WI	$721	$1,047	$623	$43,289	$1,082	39.0%	41.7%
Lorain, OH	$694	$1,022	$656	$36,124	$903	38.8%	58.0%

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year estimates

HOME LOAN THRESHOLDS

Housing "affordability" is, of course, a relative term based upon the annual income of the household. To better determine affordability, as well as general need, the HUD has broken households into a series of classifications based upon income. As noted in TEC Table 25, *Home Loan Thresholds in Michigan City (2016)*, categories range from High Income (greater than 120 percent of the median household income) to Extremely Low Income (less than 30 percent of the median household income). An online tool known as the "Affordability Calculator" (available on www.zillow.com) can be used to estimate the maximum value of a home that is affordable to individuals at the top of each HUD income classification, including at the median household income level. Displayed in TEC Table 25, *Home Loan Thresholds in Michigan City (2016)* are the calculation results for Michigan City based on the local median income. The results show that an individual or family in Michigan City earning the median household income for 2016 ($37,618) could afford to purchase a house as much as $142,744 depending on the type of loan involved. It should be emphasized that these calculations assume no other significant consumer debt, which would impact the purchasing power of a potential home buyer depending on the amount of credit card and other debt being carried. The table also illustrates that persons who qualify for a conventional loan typically can buy "more house" in terms of dollar value, but they must also cover more of the closing costs themselves, which can be significant depending on the final sale price and loan amount.

The Affordability Calculator results also indicate that even those individuals and families earning 80 percent of the median household income in Michigan City ($30,094) could afford to purchase the median value home ($98,594 – refer to TEC Table 23, *Affordable Home Ownership (2016-17)*) using any of the common loan types. This is another indicator of the housing affordability advantage Michigan City has to offer. As noted elsewhere, the challenge in coming years will be whether the community can keep income levels growing in line with the increases in housing costs that are already occurring and will likely continue over time.

TEC Table 24, *Monthly Rent / Mortgage Payment (2015)* provides a summary the amount of discretionary income that could be allocated toward monthly housing expenses, for the median value of owner-occupied units in Michigan City, factoring-in costs associated with a variety of fixed-rate, 30-year home loan structures. The table indicates that the median household income in Michigan City in 2015 could afford to purchase a home value above the median value of a typical home within the City of Michigan City.

CITY ADMINISTRATION

As summarized on the Michigan City municipal website, the **Michigan City Housing Authority** provides a variety of housing options including low rent public housing, home ownership, PHA Plans, and a Housing Development and Business Activity Program.

The **Michigan City Office of Community Development** is responsible for the Community Development Block Grant and the Neighborhood Stabilization Program. These grants provide communities resources to accommodate the needs for low to moderate income persons.

TEC Table 25, Home Loan Thresholds in Michigan City (2016)

Percent of Median	Median Household Income	Affordable monthly house payment (30%)	Maximum Sales Price **	Loan Amount	Down payment 3.5% of sales price of home*	Monthly Housing Cost**	Maximum Sales Price **
30	$11,285	$282	$1,185	$0	$1,185	$300	$0
50	$18,809	$470	$34,509	$32,534	$1,975	$469	$31,657
80	$30,094	$752	$86,804	$83,644	$3,160	$750	$84,124
100	$37,618	$940	$122,455	$118,505	$3,950	$937	$119,105
120	$45,142	$1,129	$158,106	$153,366	$4,740	$1,125	$154,086

* Calculated by multiplying the loan required down payment rate times 3-times the "Median Household Income."

** Affordability Calculator calculates Home Price and Payment Breakdown. Assumes no other monthly debt; Includes Property tax of $2,800 per year; Home Insurance $800 a year; Private Mortgage Insurance (PMI); and HOA of $0 a year. http://www.zillow.com/mortgage-calculator/house-affordability/

Housing Programs

DOWNTOWN UPPER STORY RESIDENTIAL PROGRAM

The Michigan City Redevelopment Commission's Downtown Upper Story Residential Program is designed to promote new downtown residential units. The goals of this program are to support additional residential units in downtown, add residential density back to the Uptown Arts District to support existing businesses, and create economic development opportunities within the District as well as the surrounding area. The program supports preservation through adaptive reuse of historic buildings within the historic districts as well as the construction of new mixed-use buildings in Downtown. Applicants are eligible for up to $15,000 per residential unit. A maximum of four units per floor will be funded with a maximum of eight units per building and a maximum funding of $120,000 per building. To be eligible for the grant program, an applicant and commercial building shall meet several criteria, including being located in the Uptown Arts District between 11th and 4th Streets, and between Washington and Pine Streets.

HOOSIER HOMESTEAD INITIATIVE (HHI)

The Hoosier Homestead Initiative is a program to enable qualified buyers in Indiana to purchase a property from the LaPorte County Commissioners sale or directly from a nonprofit organization acting on behalf of the Commissioners prior to a deed sale. The goal is to create a long-term resident owner active in the community that will restore and maintain the property. The buyer will be required to agree to specific guidelines of the sale to qualify as a buyer, including:

- Owner brings the home to safe living condition within 6 months of recording the deed.
- Owner moves in and resides in the home within 6 months of taking possession of the property.
- Owners reside in the home for a minimum of 3 years.
- Owner brings the exterior of the property to exceed local government codes within 6 months.
- Owner maintains the exterior to comply with local government codes for minimum of 3 years.
- Owner remains current on all property taxes and utility payments for 3 years.

Cities and other government entities desire to have all residences occupied by a person that will maintain the property and meet all city requirements. The goal of this program is to avoid the issues of absentee landlords in our communities and to create resident owners that will be good citizens at a price they can afford. This program will help revitalize the community bringing homes up to code and restoring neighborhoods as well as give individuals an opportunity, who otherwise may not have had a chance, to be a homeowner.

To qualify for the Hoosier Homestead Initiative applicants:

- Must have a steady verifiable source of monthly income;
- Must have $1500 to purchase the homes;
- Must have current checking and/or saving account at a bank or credit union;
- Must have resources to be able to complete the rehab work;
- Cannot currently own any other homes.

TEC Table 25, Home Loan Thresholds in Michigan City (2016)

Loan Amount	Requires no downpayment*	Monthly Housing Cost**	Maximum Sales Price **	Loan Amount	Down payment 20% of sales price of home*	Monthly Housing Cost**
$0	$0	$300	$6,771	$0	$6,771	$300
$31,657	$0	$470	$47,157	$35,872	$11,285	$470
$84,124	$0	$752	$105,249	$87,192	$18,057	$746
$119,105	$0	$940	$142,744	$120,173	$22,571	$914
$154,086	$0	$1,129	$182,800	$155,715	$27,085	$1,115

Residential Land Use Designation

This designation pertains to current and future residential development and includes detached residential dwellings; attached housing types (subject to compatibility and open space standards, e.g., duplexes, triplexes, townhomes, patio homes); planned developments (with a potential mix of housing types and varying densities, subject to compatibility and open space standards), etc.

Housing plays an essential role in fulfilling the vision for the future of Michigan City. The character of the housing stock shapes the quality of life in Michigan City. As previously discussed, more land area is allocated to housing (67 percent) than any other type of non-residential land use, combined (33 percent). Housing provides the foundation for economic growth. Business growth requires employees. Employees require housing. People living in Michigan City provide the demand for goods and services. Housing provides the customer base needed to support business retention and expansion.

HOUSING TYPOLOGIES

There are several variations of conventional housing:

Single Family Detached: This housing style is characterized by several features. There is a one-to-one relationship between house and parcel of land. The housing unit is located on a single parcel. The house is not physically attached to another housing unit. The housing is designed for occupancy by a single family unit.

Single Family Attached: Single family attached housing comes in many forms. Duplexes, quads and townhomes are common examples of this housing style. Although the specific form changes, there are several common characteristics. Each housing unit is designed for occupancy by an individual or a single family. The housing units are physically attached to each other generally in a horizontal orientation. There is not a single pattern of organization for single family attached housing and parcels. The same physical structure may have different parcel configurations. For example, a duplex (two units attached) typically sits on a single parcel. The same structure can straddle two lots and be called a "twin home."

Multiple Family: In Michigan City, multi-family dwellings are structures of two of more stories containing four or more housing units. Units available for rent are called "apartments." Owned housing is typically referred to as "condominiums."

Residential Character Classes

The Comprehensive Plan classifies three Residential Characters as depicted in TEC Map 33, *Residential Land*, Suburban Residential Character; Auto-Urban (General) Residential Character (AUR); and Auto-Urban Multi-Family Residential Character (MF).

RURAL RESIDENTIAL CHARACTER (RR)

Development of suburban character can be found throughout Michigan City, and the Planning Area. A Rural Residential Character exhibits low-density development on larger properties, thereby producing a visual openness. As a result of larger lot sizes, open space and vegetation are intended to be the more dominant views. The buildings remain the most apparent, dominant forms, with the landscape assuming a designed and apparent, yet secondary role. Depending on the size of the home and its percent of coverage and location on the lot, the Suburban Estate character category may more closely resemble a larger version of the typical suburban character. To achieve a Suburban Residential Character, the design of these subdivisions must actively seek to imitate more rural areas through the use of rural street cross sections without sidewalks, significant open space throughout the development, the use of rural fence types and/or hedgerows to divide properties, the preservation or planting of native vegetation along property boundaries, and generous building setbacks on all sides.

As in other cities, Michigan City has fringe areas that have developed with residential intensities that are not appropriate to the location or level of public services available, which is why these areas still fall within the Suburban Residential Character classification.

Development Types:

- Large lot, single family detached residential.
- Planned development to accommodate conservation and cluster designs (i.e., Tryon Farm);
- Residential dwellings set back from rural roads;
- Outbuildings are for leisure activities (e.g., pool houses, cabanas, recreational vehicle and boats storage) and landscape maintenance (lawn mowers).

Steps in Demolition Process

1. Inspect for code violation and unsafe premises
2. Evaluate premises to determine whether rehabilitation or demolition should be ordered by doing the following.
    - Inspect with all trades (plumbing, electric, HVAC, building, and code) both interior and exterior
    - Photograph
    - Complete inspection summary
3. Send Order to Repair to current listed owner certified and standard mail allowing minimum of 10 days to respond and 30-60 days for repairs (time frame dependent upon level of repairs required) to demonstrate city's willingness to work with homeowners
4. If no response, order full commitment title work (minimal policy) to determine all parties of interest
5. Prepare and Notarize Order to Demolish/Notice of Public Hearing, to all Owners and Substantial Parties of Interest (date of hearing to be minimum of 45 days from mailing to allow sufficient time for response)
6. With respect to the Order to Demolish/Notice of Public Hearing, perform the following tasks simultaneously:
    - Mail the Order to Demolish/Notice of Public Hearing, certified and standard 1st Class to all Owner and Parties of Substantial Interest
    - Publish the Order to Demolish/Notice of Public Hearing 14 days in advance of hearing in the Michigan City New Dispatch; and
    - Record the Order to Demolish/Notice of Public Hearing with the LaPorte County Recorder's Office
7. Send letter to Clerk's Office to request to get on the agenda
8. Present case to the Board of Works & Safety for affirmation, modification, or rejection of the order to Demolish
9. If the owner does not demolish the structure within specified time frame, request affirmation for city to demolish structure
10. If the Board of Works approves the Order to Demolish and directs a Solicitation of Bids, complete Bid Packet, send to City Attorney for approval
11. Send letter to Clerk's Office to get on the next BOW agenda after city attorney's approval
12. Appear at the BOW meeting for approval of Bid Packet
13. After Affirmation to Demolish from BOW, perform the following tasks simultaneously in preparation for the next Board of Works Meeting;
    - Mail Notice to Bidders, certified, to all Owners and Parties of Substantial Interest
    - Publish the Notice to Bidders on two consecutive days in the Michigan City News Dispatch
    - Record the Notice to Bidders with the LaPorte County Recorder's Office
    - Prepare affidavit of publication and give to City Attorney
14. Schedule mandatory pre-demolition bid meeting at demolition site
15. Acquire agency to test for asbestos
16. Contact NIPSCO to retire services
17. Contact the Water Department to retire services
18. Call Sanitation to notify before demolition starts
19. Appear at the next scheduled Board of Works for opening of bids
20. Appear at next scheduled Board of Works meeting to present Department's review, tabulation, and recommendations to the Board of Works for award of Contract for Demolition of structure
21. Monitor demolition process and report any noncompliance issues with bid
22. Inspect completed demolition and address any outstanding issues with Contractor
23. Prepare Verified Record of Remedial Action Against Unsafe Premises and Associated Costs and Notice of Claim to Office of City Attorney for further processing.
24. Provide all records to City Attorney to file Notice of Claim
25. Legal Department must:
    - File Verified Record and Notice of Claim with the Clerk of the Circuit Court, Together with Appearance and appropriate CCS
    - Send Record and Notice of Claim by First Class mail to all Owners and Substantial Interest holders
    - Publish the Verified Record and Notice of Claim on two consecutive days
26. After thirty (30) days have passed since the second date of publication, file the following documents with the Court:
    - Proof of Service and proof of Publication
    - Motion for Entry of Judgment
    - Judgment on Verified Claim
    - Chronological Summary
27. After the Court signs the Judgment on Verified Claim, forward the Judgment to the Auditor's office for collection as special assessment against remediated property.

– Some agricultural storage and support uses, e.g., barns and related outbuildings;
– Ornamental landscape enhancements and manicured lawn areas;

Characteristics:

– Scattered residential development on relatively large acreages, resulting in very high open space ratios and very low site coverage (sometimes with residential "estate" areas providing a transition from rural to suburban densities);
– The automobile is often celebrated as the driveway is a dominant element in the composition of the manicured landscape. Garages are often free-standing and situated to the side or rear of the main dwelling.

City Zoning Districts:

– A1 Restricted Agricultural District
– R1A Residence District

SUBURBAN (GENERAL) RESIDENTIAL (SR) LAND USE CATEGORY

This designation pertains to current and future residential development and includes detached residential dwellings; attached housing types (subject to compatibility and open space standards, e.g., duplexes, triplexes, townhomes, and patio homes); planned developments (with a potential mix of housing types and varying densities, subject to compatibility and open space standards), etc.

Development Types:

– Detached residential.
– Attached residential.

Characteristics:

– Accommodation of the automobile on sites. However, garages are typically integrated into the front facade of the dwelling, or hidden behind the dwelling; with driveways on the side of homes or occupying a portion of the front yard space.
– Less openness and separation between dwellings compared to suburban character areas, due to size of parcel and proportion of building footprint to parcel;
– Landscape enhancements remain subordinate to the structure.

City Zoning Districts:

– R1B Residence District
– R1C Residence District
– R1D Residence District
– R1E Waterfront Residence District

AUTO-URBAN MULTI-FAMILY RESIDENTIAL CHARACTER (MF)

Higher density residential uses such as attached and multiple-family housing (up to three stories in height), and manufactured home communities also have this character due to their density, limited open space, relative amount of impervious surface devoted to buildings and parking lots, and increased building enclosure. Multi-family residential developments are typically setback from road frontages, with buildings surrounded by surface parking lots and oriented inward toward recreational / social amenities, such as swimming pools, cabanas, etc.

Development Types:

– Complexes of often several, multi-story (two-three) multi-family buildings, interspersed with parking lots and open spaces areas.

Characteristics:

– Gated automobile and pedestrian entrances;
– Internal orientation;
– Designated recreational areas, often with pool house and pool;
– Shared stair wells and elevators, depending on the number of stories;
– Perimeter buildings heights are typically reduced compared to internal buildings.
– Surface parking lots.

City Zoning Districts:

– R2A Townhouse Residential District
– R2B Townhouse Residential District
– R3A Low-Rise Multiple Family Residential District
– R3B High-Rise Multiple Family Residential District
– R4 Manufactured Housing Park District

LEGEND

- City Limits
- Comprehensive Plan Area
- Rural Residential Character
- Suburban (General) Residential Character
- Auto-Urban Multi-Family Residential Character

City Limits
3,242.8 acres, 25.7%
Land within Planning Area, outside the City Limits
3,999.7 acres, 20.5%
Planning Area
7,242.5 acres, 22.5%

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Dunelend Beach
Michiana Shores
Long Beach
Michigan Township
Pottawattamie Park
Lake Michigan
Michigan City
Trail Creek
Springfield Township
Town of Pines
Beverly Shores
Pine Township
Coolspring Township
Center Township
PORTER COUNTY
LA PORTE COUNTY

Client: City of Michigan City.

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

MOMENTUM: MICHIGAN CITY 2040

THE EXISTING CITY

TEC Map 33: Residential Land

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Senior Living and Services

As depicted in TEC Map 34, *Senior Living and Services*, there are a variety of facilities that provide living accommodations and services for senior citizens based on the degree of assistance required. Unfortunately, retirement / assisted living communities are not within walking distance of parks, commercial, or entertainment centers. Franciscan Homecare is the only senior healthcare facility that is in close proximity to senior living accommodations. Fortunately, the Route 2 line of the Michigan City Transit service provides transportation services to most senior living centers.

TEC Table 26, Senior Living

Facility Name	Address	Living Description
Aperion Care Arbors Nursing Home	1101 E. Coolspring	
Life Care Center of Michigan City	802 US Highway 20E	
Rittenhouse Village Assisted Living	4300 Cleveland Ave.	Independent Living; Assisted Care; Memory Care
Simeon Square Retirement Community	1207 S Woodland Ave #300	37 units for independent seniors 62+; have life leases and charge monthly maintenance fee
Trail Creek Place Assisted Living (Enlivant)	1300 East Coolspring Ave.	Two buildings: Memory Care – 32 apartments (accommodates either 1 or 2 people); Assisted Living – 42 apartments (accommodates either 1 or 2 people); Private Pay Only
Wexford Senior Apartments	103 Grayson Drive	40 units: Two-bedroom one bath duplexes; Private Pay and Section 8 Housing funds.

LEGEND
Senior Living
Senior Services
City Limits
Comprehensive Plan Area
Lake Michigan
Dunelands Beach
Long Beach
Michigan City
Pottawattamie Park
Michigan Township
Coolspring Township
Pine Township
PORTER COUNTY
LA PORTE COUNTY
Senior Center
Visiting Angels of Michiana
Visiting Angels of Michiana
VNA Homecare
Trail Creek Place Assisted Living
Simeon Square Retirement Community
Aperion Care Arbors Nursing Home
Franciscan Homecare
Help At Home
Rittenhouse Village Assisted Living
Life Care Center Nursing Home
Wexford Senior Apartments
LaPorte Council on Aging
12
212
20
94
421
MOMENTUM: MICHIGAN CITY 2040
THE EXISTING CITY
TEC Map 34: Senior Living and Services
0
2,250
4,500
9,000
Feet
Client: City of Michigan City
Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham
Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI
Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.
ADOPTED November 20, 2018

Neighborhoods

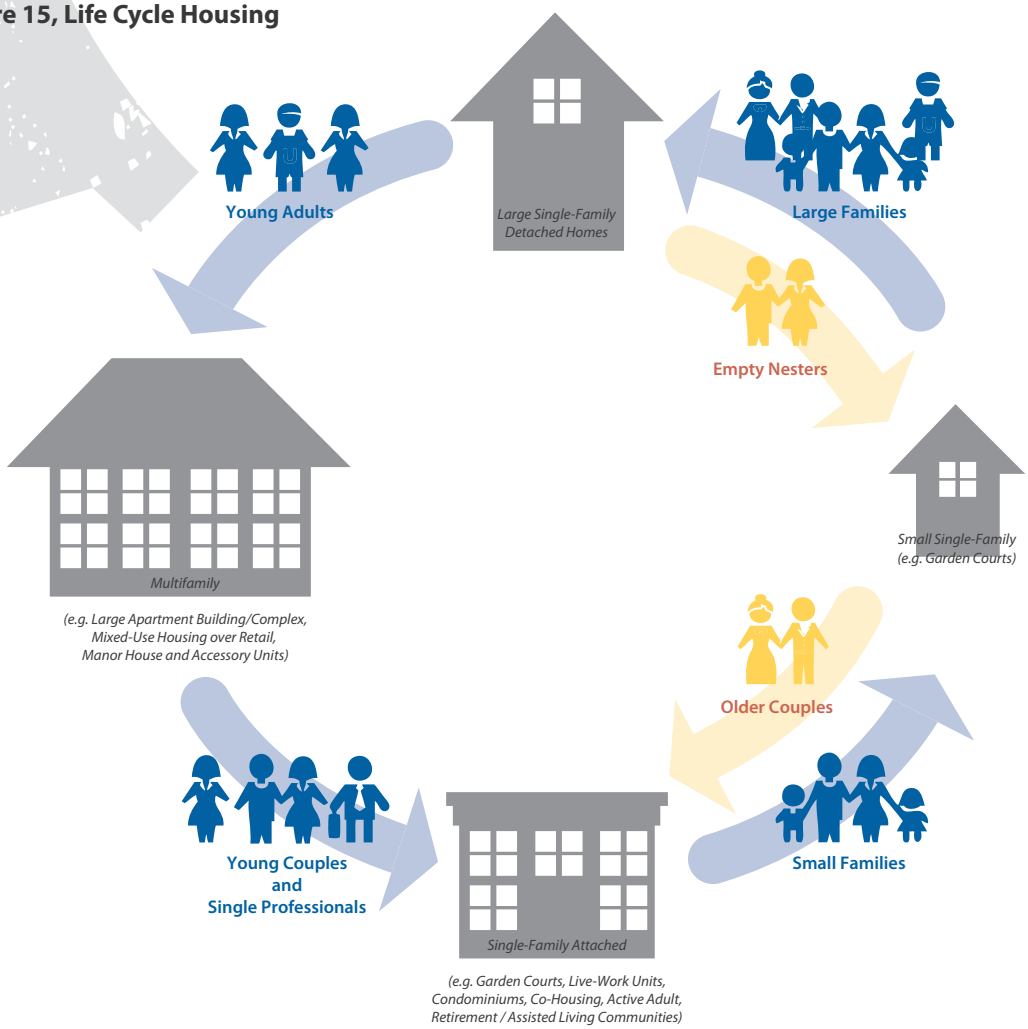
PURPOSE

A fundamental element of neighborhood development is creating residential areas that build upon existing assets. In the context of neighborhoods, physical assets are the framework elements that form the fabric of the community including parks, trails, natural features, character districts such as the downtown or schools. These framework elements provide an anchor and identity for the surrounding neighborhoods which supports property values, reinvestment, and property maintenance.

As depicted in TEC Figure 15, *Life Cycle Housing*, strong neighborhoods and communities include a variety of housing types that allow residents to transition from entry-level housing, through their family homes, and to their downsizing phase without needing to leave their neighborhood or community at any step of the process. Further, these neighborhoods offer quality amenities, places to build connections and community, while allowing residents to contribute to the fabric and character of the place in which they live. These are some of the same foundational elements that create strong communities.

TEC Map 35, *Neighborhoods and Subdivisions*, delineates Michigan City's neighborhoods and residential subdivisions; most of which can be defined by housing typology, age, and character. Some neighborhoods are defined by principal vehicular / rail corridors. During the course of Comprehensive Plan development, existing neighborhoods will be evaluated as to their integrity and condition, presence of amenities and character-defining elements, walkability and connectivity, and proximity to public transit and commercial land uses.

TEC Figure 15, Life Cycle Housing



LEGEND

- City Limits
- Comprehensive Plan Area
- Neighborhoods and Subdivisions

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Lake Michigan

Dunelend Beach
Michiana Shores
Shoreland Hills
Kimball Woods
Birch Tree Farms
Long Beach
The Shores
Long Beach Cove
Sheridan Beach
Michigan Township
Beachwalk
Lakeland
Tryon Farm
Springfield Township
Lake Hills
Washington Park/ Hungry Hollow
Canada
CBD
Memorial
Pottawattamie Park
Mayfield Place
The Woodlands
Tall Timbers
Elston Grove
Eastport
Westside
Near Westside
St. Stans/ Midtown
Marsh
Michigan City
Queens
Beechwood
Mott's Woods
Davidson Manor
Midtown West
Greenwood
Cushman Acres
White Oak Manor
Southshore Acres
Southpark / Jefferson
Old Greenwood
Gardena Park
Edgewood Forest
Coolspring Acres
Trail Creek
Forest Manor / Knapp
Southwood
Edgewood
Hawthorne Park
Lakeside Glen
Village Green
Barker Woods
Suburban Estates
Eddyville
Oakwood Manor
Southgate
Town of Pines
Beverly Shores
Pine Township
Coolspring Township
Center Township
PORTER COUNTY
LA PORTE COUNTY

12 20 35 94 212 421

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

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MOMENTUM: MICHIGAN CITY 2040

THE EXISTING CITY

TEC Map 35: Neighborhoods and Subdivisions

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Commercial / Office Land Use Designation

Several economic factors play a role in land use planning. From an economic perspective, commercial land use provides the community with goods and services, jobs, and a tax base. Commerce is an integral part of Michigan City's vision for the future. Aside from offering the most complete array of housing, jobs, shopping, health care, religious, and recreation opportunities - all of which make an important contribution to citizens' quality of life. Indeed, all of these factors influence the creation and the implementation of the Comprehensive Plan. Michigan City also works to be the best place to do business. Achieving this vision requires strong commercial districts.

BUSINESS TYPES

Commercial businesses are not a single, uniform commodity. Commercial land uses typically fall into two broad categories:

Retail. These businesses provide for the sale of goods and commodities to the public. The interaction between the business and the customer (shopping) is an essential factor in this type of commercial land use. Retail uses typically produce the highest amount of vehicle trips among commercial land uses. Traffic, access and visibility are important variables which influence the location of retail uses.

Services. Service-oriented businesses provide a wide range of professional services. Examples of professional service businesses include law, health care, banking, consulting, accounting and real estate. Services typically entail less business/customer interaction than retail. Many services can be obtained without visiting the premises of the business. The nature of the interaction with the customer influences the location for service businesses.

The Comprehensive Plan uses three types of commercial land use categories to guide development: Suburban (Neighborhood) Commercial, Auto-Urban (General) Commercial, and Urban Commercial / Mixed-Use as depicted in TEC Map 36, *Commercial Land*. The differences between these categories is based on the market, location, scale and size, infrastructure capacity/ support characteristics, and the character of adjacent development. The Comprehensive Plan seeks to provide an adequate supply of each category in locations that support the overall principles and objectives of the Plan.

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

LEGEND

- City Limits
- Comprehensive Plan Area
- Suburban (Neighborhood) Commercial
- Auto-Urban (General) Commercial
- Urban Commercial / Mixed-Use

City Limits
1,072.5 acres, 8.5%
Land within Planning Area, outside the City Limits
411.8 acres, 2.1%
Planning Area
1,484.4 acres, 4.6%

Lake Michigan

PORTER COUNTY
LA PORTE COUNTY

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

MOMENTUM: MICHIGAN CITY 2040

THE EXISTING CITY

TEC Map 36: Commercial Land

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Michigan City's Public Art Program

The Michigan City Art Committee (MAC), is an 11-member Committee whose mandate is to administer art in public places. The MAC was first appointed in March, 2011, and includes representatives from the Lubeznik Center, the LaPorte County Convention and Visitors Bureau, the Michigan City Public Library, Parks and Recreation Department, Purdue University North Central, members at large, and a member of the Common Council. The Committee meets monthly, at City Hall. The MAC's Mission is as follows:

"The Michigan City Public Art Committee has been formed to enrich the community through public art. Its purpose is to create an identity that celebrates Michigan City's unique historical, cultural, and natural resources."

PURPOSE

As stated in the Public Art Master Plan for Michigan City (MAC), the purpose of the Michigan City Public Art Program is to strengthen the positive reputation of the community, enhance its natural resources, coordinate an artistic vision and enrich the lives of its citizens, the business community, and visitors throughout Michigan City. The major goals of the Public Art Program are:

- Enhance the visibility of Michigan City.
- Use public art as a means to further the community's sense of spirit and pride.
- Encourage cultural tourism through public art.
- Give visual expression to cultural diversity.
- Involve artists in realizing MAC's mission.
- Create a strong sense of community.
- Engage artists in the overall planning and design of the City, including both new projects and rethinking the existing visual fabric of the community.
- To encourage the City to develop and institute a Percent for Art Ordinance, using negotiations with potential developers to support public art until such an ordinance is enacted.
- Increase patronage of public art and art programming.
- Create partnerships that expand the resources available to the public art program with other organizations, businesses and private individuals interested in and supportive of the arts.
- Implement the Public Art Program Plan.

The art in public spaces is a visible symbol of the standards, values, and aspirations of the community. At its best, the citizens feel a closer connection than they would without it and its existence becomes a part of the environment. When most successful, it becomes a unifying element that ties together the streetscape, the architecture, and the natural elements of the community.

~ Public Art Master Plan for Michigan City

MAC PROGRAM COMPONENTS

Michigan City's MAC provides continuity and vision for the Art Program for Michigan City and advises on policies, procedures and funding strategies. It is envisioned that the Art Program will be comprised of the following categories:

1. **Acquisitions of Existing Art Works:** Existing art works may be acquired through gift or direct purchase if they are consistent with the goals of the Art Program.
2. **Commissioned Works:** This category includes visual art works, performances and streetscape enhancements. The art will be site or program specific, designed by artists in direct response to a program of work that may include the special conditions for a given space.
3. **Changing Site-specific Projects:** These works shall be commissioned at various locations throughout the City and will be installed for limited periods of time. Spaces will not be built especially for these projects. Artists will be periodically invited to choose sites within existing public settings and propose site-specific projects within the given guidelines established in this Program. This part of the program will involve an on-going creative exploration by artists of Michigan City's natural and built environments.
4. **Temporary Exhibits:** These time-limited exhibits will be part of and in conjunction with on-going

educational programming, artists in residence programs, or as an annual event to expose citizens to different types of art. They will include exhibits of art works as well as talks and demonstrations by artists. The exhibits may be themed or not.

5. **Expansion and Development of The Art Walk:** The development of this project grows out of the extant Art Walk that is held on Friday's in Downtown Michigan City. Taking place over an unspecified period of time, it will include permanent and temporary pieces of art in Downtown, though additional sites might be developed. The enrichment of the Art Walk will be enhanced by the creation of art benches or other street furniture programs.
6. **Infrastructure projects:** In conjunction with Downtown and any other redevelopment projects, the MAC will have a committee work with coordinator to identify design elements: signage, benches, bike racks, kiosks, or whatever else might be deemed appropriate and useful. Consultation opportunities will bring artists into the design process at the earliest possible point for City redevelopment, renovation or new construction projects. As design consultants, artists will provide input and advice into the decision-making that will shape public spaces, enhancing and unifying the newly developed or redeveloped projects.
7. **ArtSpace:** Michigan City has been pursuing the development of an artist live/work space in the Downtown. There is much community support for the project, and models in other cities abound. The Committee is committed to making such a center of creative activity a reality and sees it as the core of the arts district and a major focus of Downtown Michigan City.
8. **Artist-in-Residence Programs:** The Artist-in-Residency program offers opportunities for diverse artists to develop project proposals that are designed to engage the community, youth or seniors, and tourists/visitors in a process that expands their understanding, and knowledge of art. This program will also provide the artist with resources to advance the development of their work and obtain broader exposure.
9. **Uptown Art District as Cultural District:** Designation of the Uptown Art District as a State designated Cultural District is an important aim of the Committee and the business community.

DESIGN ENVIRONMENTS

MAC's Public Art Master Plan describes a series of "design environments" which can affect all of the previously mentioned program components in their application within the built environment. Design environments include the following:

1. The **Information Environment** includes verbal, visual, auditory information displays. This environment includes signage for orientation, direction, and information as well as printed materials, such as maps and historical photographs. Light and sound to denote transition or destination is part of this environment.
2. The **Social Environment** creates opportunities for public gathering, watching, conversing and interaction. It includes viewing places, plazas and all the areas of circulation, which might connect them. As already mentioned, "furniture" to accommodate the functional needs of the public in these settings will be considered an opportunity for artists. Items of street furniture might include: bicycle racks, benches, and specifically designed and innovative signage.
3. The **Ecological Environment** includes the landscape setting that is inherent in each site. The manipulation of materials and forms as well as features of the site can forge strong relationships that influence how the viewer perceives the work of art. The historic, cultural and geological backgrounds in which the piece sits are part of this environment. Within Michigan City, the Lake shore, the gateways, the entrance to Downtown, and the parks are natural sites for art, especially works that organically relate to the physical environment.
4. The **Transportation Environment** includes movement systems such as the highways, their built gateways, walkways, forms of public transportation and other people passageways that orchestrate the movement of the public through the environment. In Michigan City, the South Shore Rail Line and the older sites of transportation by ship are major sites to consider. This area offers opportunities for artists to develop works recalling and celebrating the role of transportation on the peoples and community institutions.
5. The **Educational Environment** includes signage and printed materials, which serve as the basis for the education of the viewer with displays incorporated to encourage learning. This is an area where artists can explore, document, and celebrate

TEC Map 37, Public Art

the diverse cultures and traditions of the City, particularly in regard to both the past and present populations and activities of each area.

TEC Table 27, *Public Art*, and corresponding TEC Map 37, *Public Art*, identifies the names and locations of public art in the Downtown area. TEC Table 28, *Art Galleries and Studios,* and corresponding TEC Map 38, *Art Galleries and Studios*, identifies the names and locations of art studios and galleries in the Planning Area which are open to the public.

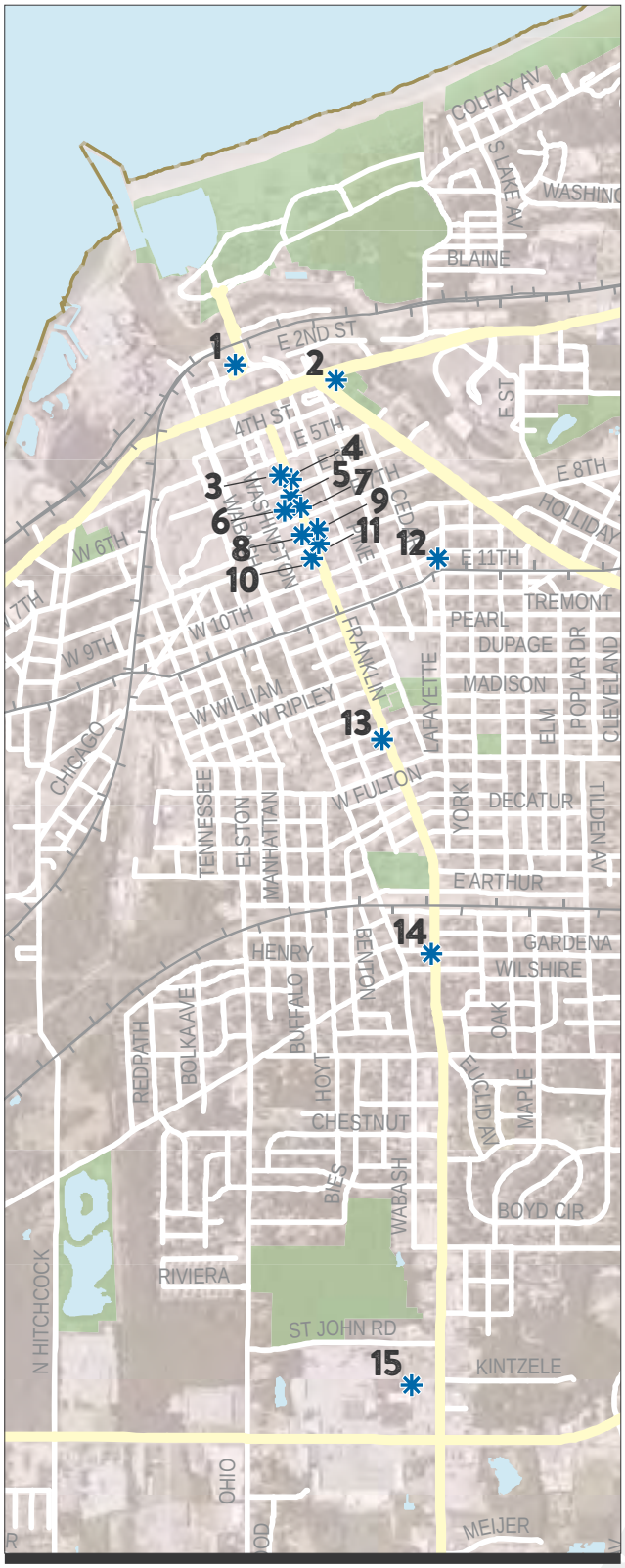
PERCENT FOR ART ORDINANCE

An important strategy within the MAC's Public Art Master Plan for Michigan City includes the development of a Percent for Art Ordinance as a means through which the City can raise revenue for their public art program. Every capital improvement project funded by the City will include in its budget an amount to be designated for public art. It is envisioned that an artist will be able to work with the design team to incorporate art in the initial design of the project. The MAC believes that through adopting a Percent for Art Ordinance will enable Michigan City to provide a firm footing for its public art program. As the city continues to grow, additional works of art can be commissioned or purchased and incorporated during the design phase of construction. This would enable the public art to be integral – designed in conjunction with the infrastructure; thus avoiding situations where the purchase of art takes place after the fact which often create conflicts with existing infrastructure.

TEC Table 27, Public Art

	Names and Locations
1	***Bear Family*** Lot 2 Entry to Washington Park off Lake Shore Dr.
2	***Duet*** Marine Dr. and Lake Shore Dr. (at amphitheater)
3	***Celebrate*** US 12 and 4th St.
4	***Iron Hooks, Center Pins and Master Plates*** Wabash St. (in boulevard) at US 12
5	***You Are Beautiful*** Lot west of City Hall
6	***Bright Days*** Northwest corner of US 12 and Michigan Blvd.
7	***Owl and Pussycat*** Charles R. Westcott Park at Michigan Blvd. side
8	***Libretto*** Southwest corner of 5th St. and Franklin St.
9	***Waterbird*** Southeast corner of 5th St. and Franklin St.
10	***Thin Series: Off the Diet*** Northeast corner of 7th St. and Franklin St.
11	***Whoa*** Northwest corner of 8th St. and Franklin St.
12	***Tower of the Winds*** 8th St. and Washington St. (at Farmer's Market)
13	***Isle of Caprine*** 8th St. and Washington St. (at Farmer's Market)
14	***American Gothic*** 8th St. and Washington St. (at Farmer's Market)
15	***Sol Invictus*** Northwest corner of 9th St. and Franklin St.
16	***Zeitgeist*** Wabash St. (in boulevard) at 11th St.
17	***Red Green*** Northwest corner 8th St. and Michigan Blvd.

OR THE ARTS



TEC Map 38, Art Galleries and Studios

TEC Table 28, Art Gallery and Studios	
*	**Names and Locations**
1	Lubeznik Center for the Arts 101 W 2nd St.
2	Charles R. Westcott Park US 12 and Michigan Blvd.
3	Ballyea Jewelry Design 519 Franklin St.
4	Down Gallery 525 Franklin St.
5	SFC Gallery 607 Franklin St.
6	Beach Bum Jewels 617 Franklin St.
7	FADA 617 Franklin St.
8	Artspace Uptown Artist Lofts 717 Franklin St.
9	Southern Shore Art Association 722 Franklin St.
10	The Nest 803 Franklin St.
11	Prince Gallery 726 Franklin St.
12	Neil Kienitz Studio & Gallery 423 E 10th St.
13	Blink Contemporary Art 1709 Franklin St.
14	Rising Phoenix Gallery LLC 2803 S Franklin St.
15	Visit Michigan City La Porte Gallery 4073 S Franklin St.
	Locations outside the Comprehensive Plan Area
16	Hook Pottery Paper 0756 W 900 N (La Porte)
17	Thaddeus C Gallery 822 Lincolnway (La Porte)
18	Purdue University Northwest Sculpture Garden 1401 S US Hwy 421 (Westville)
19	Sew Many Things/Fawn Run Farm Mercantile 3883 E 700 N (Rolling Prairie)

Industrial Land Use Designation

Industrial areas are important elements of Michigan City's identity and its future. Building on this foundation is a key aspect of the community's vision. The employment created by local industry brings people to live in Michigan City. These people create the demand for housing and provide the market for commercial development. Industry is also a market driver for local commercial businesses. Industry creates tax base to finance local government operations and infrastructure.

Heavy Industrial land use designation will be used to cover the majority of industrial resource extraction, production and manufacturing land uses in Michigan City; while Light Industrial is used to classify land uses that are primarily associated with some product assembly, warehousing and distribution. See TEC Map 39 for Business Park and Industrial Area Locations.

BUSINESS PARKS

Woodruff Business Park (formerly Millennium Business Park)

The Woodruff Business Park, formerly known as the Millennium Business Park, is a 100-acre business park developed by the Roy J. Woodruff Family and Woodruff & Sons, Inc. in 1999. Over the years, several companies have moved into the park but shovel-ready sites are still available. The Business Park is located within the City's Urban Enterprise Zone, has access to rail, is in close proximity to the interstate, utilities in place, and has AT&T Fiber Ready certification. Local economic development leaders say the park is ideal for any company looking to relocate or expand in Michigan City. The Woodruff Business Park features:

- 100 acres: divisible to one acre, although up to a 60 acre site is possible
- AT&T Fiber Ready Certification
- Rail Access: Chicago, South Shore & South Bend
- Highway/Road Access: U.S. Highway 20, Interstate 94
- Electric and Gas: NIPSCO
- Water and Sewer: City of Michigan City

LifeWorks Business Park

LifeWorks Business Park is a joint development between Holladay Properties and IU Health La Porte Hospital. The LifeWorks Business Park is a 40 acre, master-planned Business Park in Michigan City, developed for the purpose of creating a mix of hospitality, retail, office and medical space. The Business Park has excellent highway and interstate frontage with visibility from Interstate 94 and U.S. Highway 421; the combined traffic counts of which are in excess of 70,000 vehicles per day. Frontage Road access extends through the park with an additional east access point to CR 400 N / Kiefer Road. Land sites are available for build-to-suit, land lease, and land purchase. Site sizes vary from one to four acres and may be combined for larger building development. The LifeWorks Business Park features:

- 40 acres: divisible to one acre
- Highway/Road Access: U.S. Highway 421, Interstate 94
- Electric and Gas: NIPSCO
- Water and Sewer: City of Michigan City

LEGEND

- City Limits
- Comprehensive Plan Area
- Business and Industrial Parks
- Industrial Areas

City Limits
1,385.9 acres, 11.0%
Land within Planning Area, outside the City Limits
173.2 acres, 0.9%
Planning Area
1,559.0 acres, 4.9%

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Lake Michigan

Dunelands Beach
Michiana Shores
Long Beach
Michiana Industrial Park and Woodruff Holdings
Criterion Catalyst
IN-212 Industrial Park
NIPSCO Power Plant
Pottawattamie Park
CSS Rail Yards and Northern Indiana Commuter Transportation District
Federal Mogul
SpringfieldTownship
Michigan City
Sullair
Kentucky Street Industrial Park
Michigan Township
Woodruff Business Park
MC Enterprise Center
Trail Creek
Town of Pines
Beverly Shores
Ameriplex Marquette Business Park
Ohio Street Industrial Park
LIfeworks Business Park
Center Township
PORTER COUNTY
LA PORTE COUNTY

Client: City of Michigan City.

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

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MOMENTUM: MICHIGAN CITY 2040
THE EXISTING CITY
TEC Map 39: Business Parks and Industrial Areas

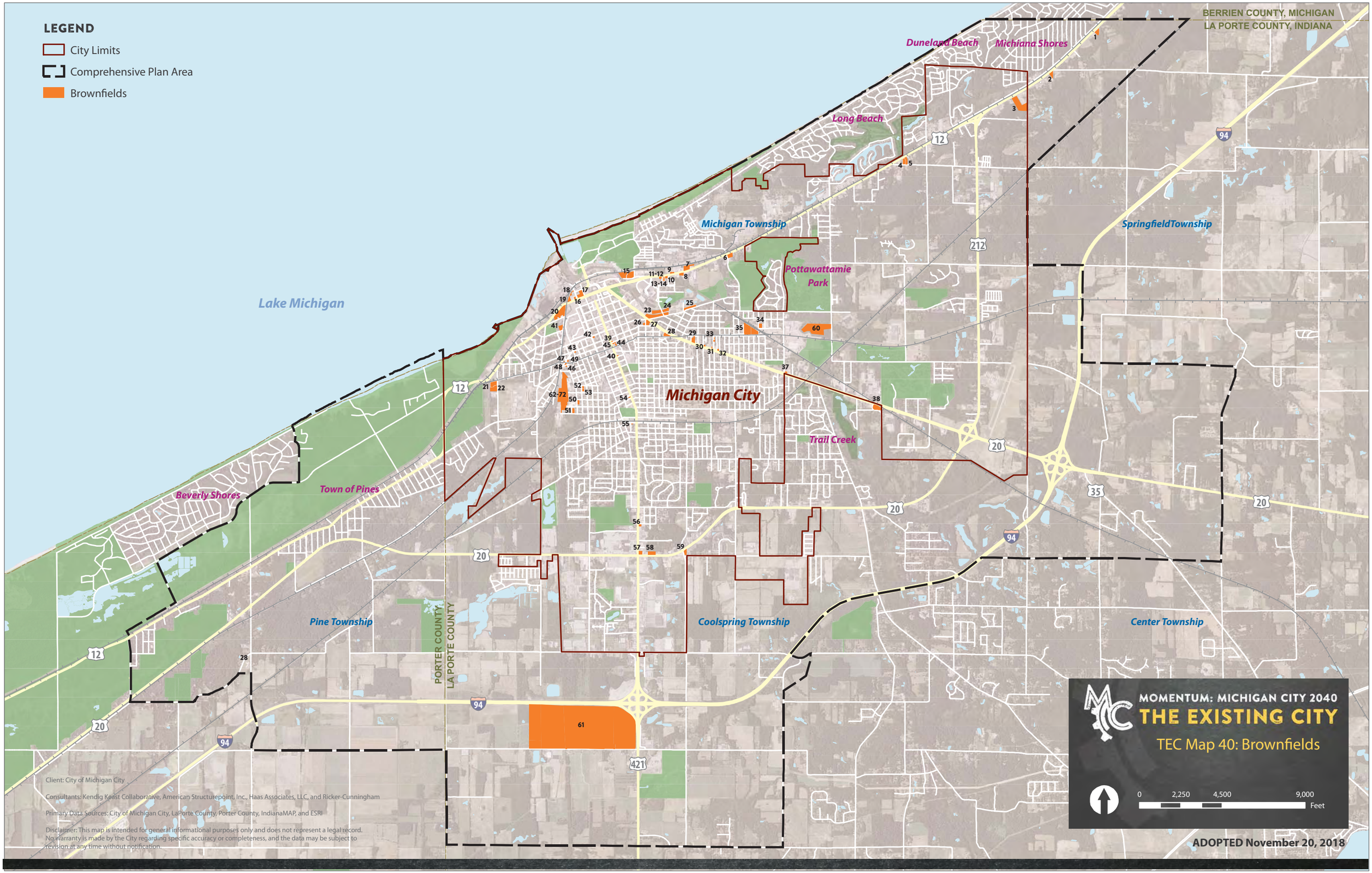
0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Brownfields

TEC Map 40, Brownfields

1 Under-utilized building
2 Vacant Building
3 Vacant Building
4 Vacant Building
5 Vacant Building
6 Under-utilized building
7 Vacant except for Storage Building
8 Vacant Lot
9 Auto Detail Facility
10 Former Manufacturing Facility
11 Vacant Lot
12 Vacant Lot
13 Vacant Building
14 Vacant Building
15 Vacant Office / Warehouse
16 Former Jaymar-Ruby Service Station
17 Former Golden Eagle Motor Service Station
18 Under-utilized warehouse
19 Vacant Building
20 Vacant Building
21 Vacant Building
22 Vacant Building
23 Vacant Lots
24 Former Sanitary District Maintenance
25 Bulk Petroleum Facility
26 Vacant Building
27 Former Brewery
28 Former Chrysler-Plymouth Dealership
29 Auto Sales/Service
30 Auto Sales (appears vacant)
31 Vacant Building
32 Auto Sales/Garage (appears vacant)
33 Vacant Lot
34 Vacant Lot
35 Vacant Warehouse
36 Former Bromwell Housewares
37 Former Custom Motors
38 Former Garden Center
39 Vacant Barber Shop
40 Former Clark Oil Service Station
41 Vacant Building
42 Sevick Gardens and Farmers Market
43 Vacant Lot
44 Former South Shore Rail Road Station
45 Vacant Store
46 Former Al's Marathon Service Station
47 Body Shop (appears vacant)
48 Auto Body Shop
49 Printer (appears vacant)
50 Former Winn Machine
51 Former Schmock Brothers Oil Company
52 Former Burnham Glove Company
53 Former Starreon Warehouse Corporation
54 Former Express Press Printers
55 Former Auto Works
56 Former Martin Oil Service Station
57 Former Dres Shell Service Station
58 Vacant Building
59 Former Fast Eddies/Unocal Service Station
60 Karwick Road Landfill
61 Former Waste Management Dump
62-72 Former Barker-Pullman Railyard


LEGEND
City Limits
Comprehensive Plan Area
Brownfields
BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA
Dunelands Beach
Michiana Shores
Long Beach
Michigan Township
Pottawattamie Park
SpringfieldTownship
Lake Michigan
Michigan City
Trail Creek
Beverly Shores
Town of Pines
Pine Township
Coolspring Township
Center Township
PORTER COUNTY
LA PORTE COUNTY
12
20
94
212
421
35
Client: City of Michigan City
Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham
Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI
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MOMENTUM: MICHIGAN CITY 2040
THE EXISTING CITY
TEC Map 40: Brownfields
0
2,250
4,500
9,000
Feet
ADOPTED November 20, 2018

Rural / Undeveloped Land

The Rural / Undeveloped Land category consists of lands that are sparsely developed, the primary uses of which consist of mainly agricultural and semi-wilderness forested lands interspersed with very low-density residential (homes are customarily an accessory to agriculture), see TEC Map 41, *Rural / Undeveloped Land*. The landscape is accented by a few farmsteads, outbuildings, and gently rolling hills, which contribute to its rural character. This category provides its residents with the choice of seclusion within the countryside, and away from a more developed setting. Landscapes possessing the Rural / Undeveloped Land character are primarily found outside the City limits.

Methods that other communities have employed to help protect and preserve agricultural land while protecting a landowner's economic investment include the Purchase of Development Rights (PDR), Transfer of Development Rights (TDR), clustering requirements for nonagricultural uses, and tax breaks or incentives for continuing agricultural use. It is recommended that these alternatives be investigated for possible application within the Planning Area as a way to balance economic rights with agricultural preservation goals.

Development Types:

- Residential homesteads;
- Planned development to accommodate conservation and cluster designs;
- Agricultural uses;
- Agriculture-focused commercial retail;
- Agricultural storage and support uses, e.g., barns and related outbuildings.
- Large lot, single family detached;
- Outbuildings associated with small-scale, intensive agriculture;
- Rural hamlets or villages.

Characteristics:

- Rural character resulting from wide open landscapes, with minimal sense of enclosure and views to the horizon unbroken by buildings in most places;
- Scattered residential development on relatively large acreages, resulting in very high open space ratios and very low site coverage (sometimes with residential "estate" areas providing a transition from rural to suburban densities, with estate lots typically being three to 10+ acres);
- Typically no centralized water or sanitary sewer service available; thus requiring the utilization of on-site septic (STEP) systems. Also, much greater reliance on natural drainage systems, except where altered significantly by agricultural operations;
- Potential for conservation developments that further concentrate the overall development footprint through cluster designs, with increased open space set-aside to maintain the overall rural character and buffer adjacent properties (may also make alternative community wastewater treatment methods feasible to eliminate the need for individual on-site septic systems).

LEGEND

- City Limits
- Comprehensive Plan Area
- Rural / Undeveloped Parcels

City Limits
2,975.8 acres, 23.6%
Land within Planning Area, outside the City Limits
10,558.2 acres, 54.2%
Planning Area
13,534.0 acres, 42.1%

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Dunelend Beach
Michiana Shores
Long Beach
Pottawattamie Park
Lake Michigan
Michigan Township
Michigan City
Trail Creek
Springfield Township
Town of Pines
Beverly Shores
Pine Township
PORTER COUNTY
LA PORTE COUNTY
Coolspring Township
Center Township

12 94 212 20 35 421

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

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MOMENTUM: MICHIGAN CITY 2040

THE EXISTING CITY

TEC Map 41:
Rural / Undeveloped Land

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Community Health

INTRODUCTION

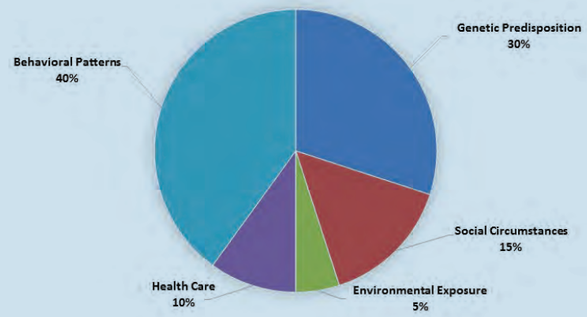
The American Planning Associations' 2017 report, *Metrics for Planning Healthy Communities*, reminds the reader that protecting public health, welfare, and safety has been the goal of planning since its origin, and planners continue to play a critical role in influencing health. The purpose of the health component of this plan is to ensure that public health needs are identified and strategies are formulated regarding policies and programs for providing health care, active living and nutrition, environmental justice, and safety within our communities.

The built environment is a key determinant of community health. It is estimated that 55 percent of health problems are the result of social and economic factors pertaining to our built environment. It is therefore imperative to document, measure, and track elements of the built environment that are known to be key determinants of health.[1] Through shaping the built environment, planners can promote healthy lifestyles, influence socioeconomic circumstances, and limit damaging environmental exposures, and can help shift behavioral patterns. Indeed, the role of planners in improving public health is significant – as shown in TEC Figure 16, *Determinants of Health and their Contribution to Premature Death*, socioeconomic status, exercise and eating habits, and the environment (natural and built), affect health in a more substantial way than traditional health factors such as health care services and genetic predisposition combined.[2]

According to the World Health Organization, "health" is recognized and defined as a "state of complete, physical, mental and social well-being, not merely the absence of disease or infirmity The elements of a community's built environment includes the physical elements that compose where people live (i.e., streets, homes, infrastructure, and open space). This environment has a direct impact on the availability of resources for residents to engage in physical activity. The availability of sidewalks, bikeways, or trails in a community, or lack thereof, may limit the amount of exercise and promote

1 APA, 2017. Metrics for Planning Healthy Communities
2 APA, 2017. Metrics for Planning Healthy Communities

TEC Figure 16, Determinants of Health and their Contribution to Premature Death



sedentary habits, which, in turn, may contribute to obesity, behavior disorders, and the like.[3]

THE STATE OF HEALTH IN MICHIGAN CITY

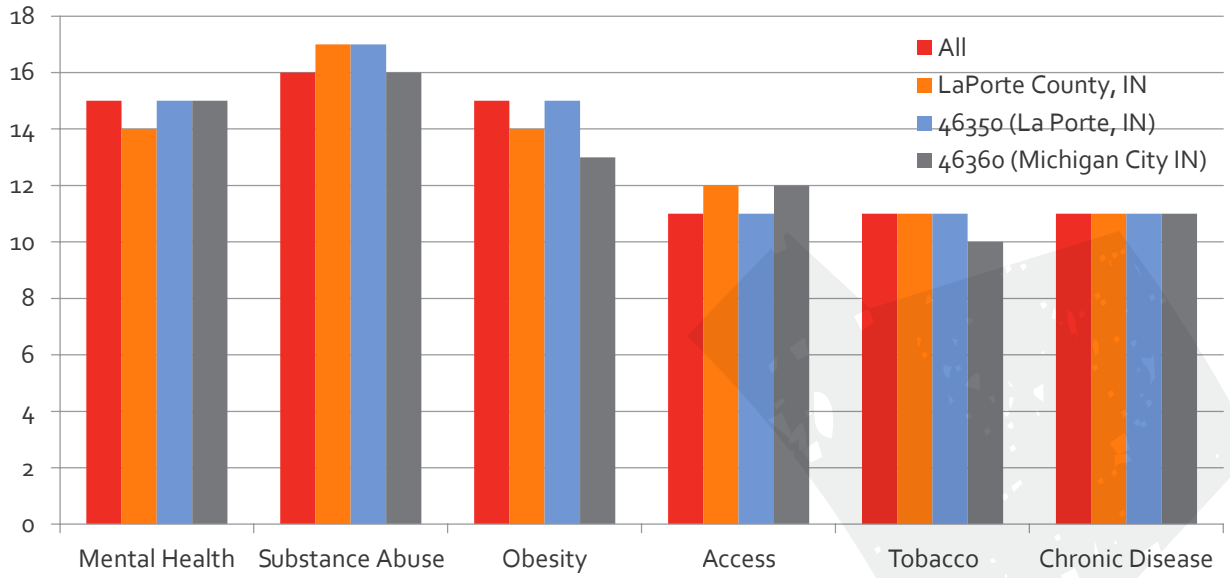
Organizations within LaPorte County and Michigan City that are focused on community health include the Healthcare Foundation of La Porte and Franciscan St. Anthony health of Michigan City. The Healthcare Foundation of La Porte (HFL) supports a variety of programs within the community and provides information and resources for County residents regarding how to live healthy (refer to the Ten 2030 Vision website (http://hflaporte.org/). The Foundation's goal is to become one of Indiana's top 10 healthiest communities in Indiana by 2030.

As summarized on the Ten 2030 website, HFL has identified three local priorities which include:

– **Healthy Living:** Many residents of LaPorte County have an unhealthy body weight, do not exercise regularly, and do not have access to healthy food. Goals within this priority include reducing obesity and weight-related chronic diseases; improving access to healthy foods; reducing food deserts (areas where there are lack of healthy foods); and increasing focus on active living and fit lifestyles.

3 CDC , 2011. *Impact of the Builgt Environment on Health.* Health Community. Design Fact Sheet Series.

TEC Figure 17, Top Needs of Communities



– **Healthy Children:** Many young children have poor health and wellness issues in LaPorte County. There are numerous goals for this priority include decreasing the number of low-weight births and uninsured children;reducing childhood obesity and teen births; improving education on smoking and drugs; and increasing safety in homes and schools, access to mental health care, and the number of children and parents making decisions about childhood health.
– **Healthy Minds** focus on prevention and treatment of mental and behavioral health issues. Goals include increasing access to care for mental illnesses and treatment for substance abuse and to decrease drug and tobacco use.

The HFL Ten 2030 website has up to date, relevant data on a variety of health and socioeconomic indicators, at the county level, Census Tract and Zip Code levels. Of the 104 health indicators that were examined, 25 were directly related to aspects of Michigan City's physical environment and were selected for framing the health element of this Comprehensive Plan.

Public health ensures fair opportunities for everyone to reach their full health potential.

~Centers of Disease Control and Prevention

In 2015, the Franciscan St. Anthony Health organization published its Community Health Needs Assessment. As part of this assessment, a survey was distributed to Michigan City residents which focused on the general health needs of the community.. These responses were divided into two zip codes within LaPorte County. Zip Code 46360 covers the Michigan City limits. As depicted in TEC Figure 17, *Top Needs of Communities*, the Community Health Needs Assessment identified that the most important community health issues include substance abuse, mental health, obesity, and access to health care.

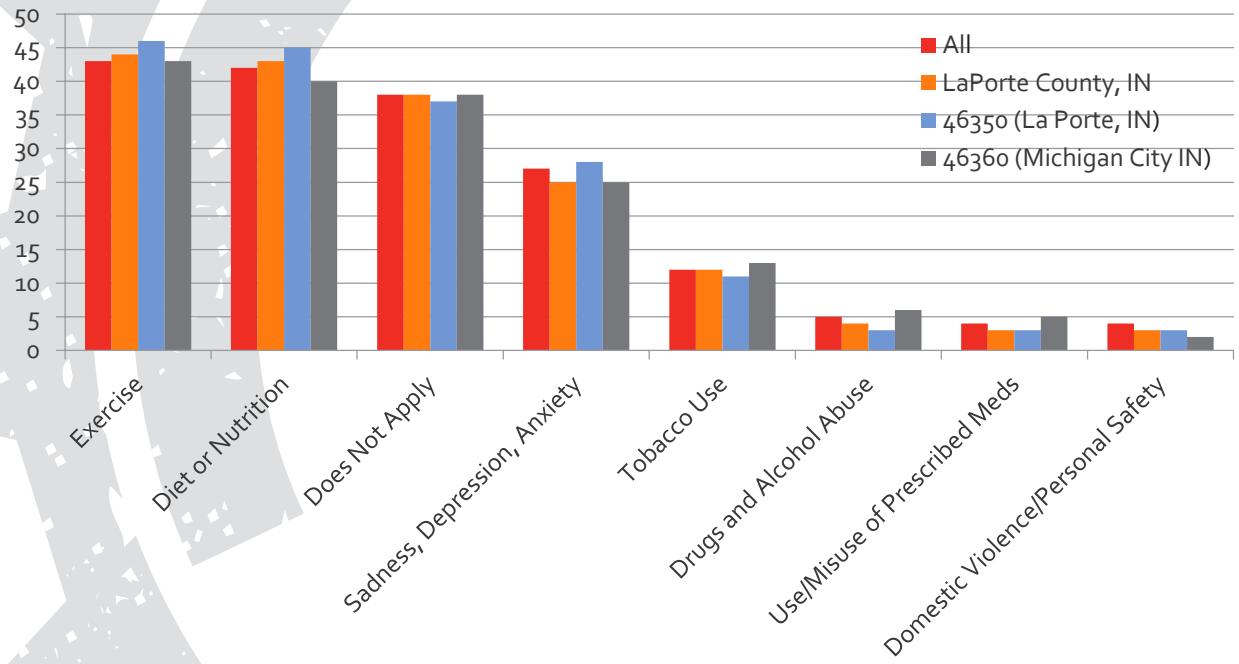
As summarized within the Community Health Needs Assessment, survey respondents were asked what topics their doctors discussed with them. As illustrated in TEC Figure 18, *Topics Discussed with Doctors*, exercise and nutrition were the main topics respondents discussed with their doctors, and to a lesser degree, issues related to sadness, depression, and anxiety.

ACTIVE LIVING AND NUTRITION

There are numerous benefits of exercise including maintaining a healthy weight, improving muscle strength and endurance, and maintaining joint flexibility. Other significant benefits include decreasing the risk of heart disease; strokes; various cancers, including colon cancer; high blood pressure, diabetes, among others. Physical activity also can relieve to an extent depression and anxiety.[4]

4 FITDAY. *The Importance of Physical Fitness*, http://www.fitday.com/fitness-articles/nutrition/healthy-eating/the-importance-of-physical-fitness.html

TEC Figure 18, Topics Discussed with Doctors



The Franciscan Community Health Needs Assessment also describes how obesity, diabetes management, arthritis, and cardiovascular conditions all scored highly in incident rates and perception of need with the respondents. A common theme among all of these clinical issues is the lack of physical activity and proper nutrition. Concerns about public safety and access to healthy food also contributed to this issue.[5]

According to the *14th Annual State of Obesity: Better Policies for a Healthier America* (August 2017) from the Trust for America's Health (www.healthyamericans.org), obesity rates for adults are leveling off but they still remain high. Across the country, more than one in three adults and one in six children (ages 2-19) are considered obese — and one in 11 young children (ages 2-5) are considered obese. Indiana's obesity rate is 32.5 percent, the tenth highest state in the country (Michigan also comes in at tenth as well). Obesity reduction programs and policies must continue in order to maintain this leveling trend. Obesity rates vary from state-to-state and even though they are leveling off they still remain high.[6]

The following physical activity and nutrition indicators from the HFL's Ten 2030 Vision website were reviewed.

As depicted in TEC Table 29, *Healthcare Foundation of La Porte Ten 2030 Vision Health Indicators,* it is apparent that, compared to other counties in Indiana:

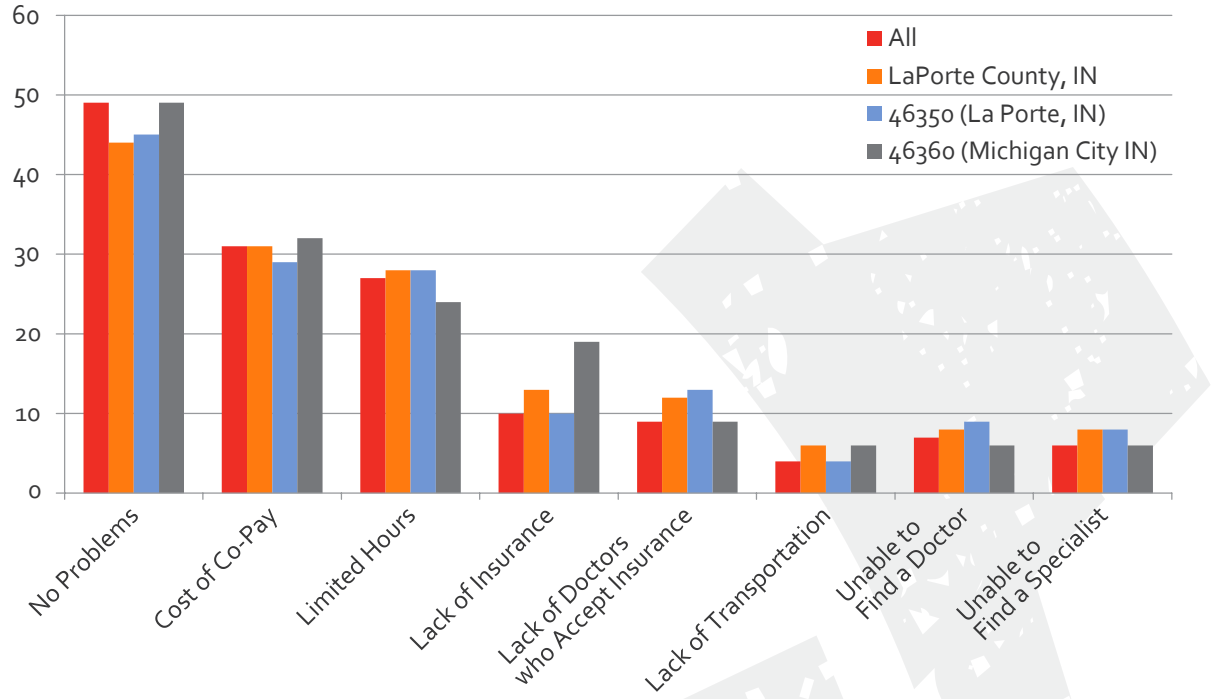
- LaPorte County is ranked below most counties in the state for the following indicators: *Adults 20+ who are Obese*, *Child Food Insecurity Rate*, *Food Insecurity Rate*, *Food Environment Index*, and *Low-Income and Low Access to a Grocery Store*.
- On average, LaPorte County ranks similarly to the rest of the counties in the state for the following indicators: *Children with Low Access to a Grocery Store*, *Grocery Store Density*, *Households with No Car,* and *Low Access to a Grocery Store*, *People 65+ with Low Access to a Grocery Store*, and *People with a Low Access to a Grocery Store*.
- LaPorte County is ranked higher than most counties in the state regarding the following indicators: *Adults 0+ who are Sedentary*, *Low-Income Preschool Obesity*, *Access to Exercise Opportunities*, F*ast Food Restaurant Density*, *SNAP Certified Stores*, and *Workers who Walk to Work*.

BEHAVIORAL HEALTH

Behavioral health describes connections between a person's behavior and their overall physical health (including body, mind, and spirit). Prominent behaviors

5 Franciscan St. Anthony Health, 2015. *Community Health Needs Assessment, Michigan City.*
6 Trust for America's Health, 2017. *The State of Obesity: Better Policies for a Healthier America*.

TEC Figure 19, Access to Health Care Challenges



include eating habits, alcohol consumption, smoking, and exercising. Some behaviors are within an individual's control while others are not. An example of not being under a person's control could be access to healthy food – if a grocery store is not close by, or a person feels it is unsafe to go to a store then it may be more difficult to maintain a healthy weight.[7]

Mental health was also examined in the Community Health Needs Assessment study. The following behavioral health indicators from the HFL's Ten 2030 Vision website were reviewed. As illustrated in TEC Table 29, *Healthcare Foundation of La Porte Ten 2030 Vision Health Indicators*, it is apparent that compared to other counties in Indiana that LaPorte County ranks lower than most counties for the following indicators: Adults who Drink Excessively, and Adults who Smoke.

ACCESS TO HEALTH CARE

Access to health care is critical to maintaining health; managing disease; reducing unnecessary disability and premature death; and achieving equity for all people.[8]

The survey summarized within the Communities Needs Health Assessment focused on the challenges associated with access to health care. As indicated in TEC Figure 19, *Access to Health Care Challenges*, respondents indicated that the cost of co-pays and limited hours of health care facilities operation were the two most cited challenges. While LaPorte County is not a federally designated Health Professions Shortage Area, there may be a shortage of providers.[9]

Indicators related to access to health care on the HFL's Ten 2030 Vision website were reviewed. As summarized within TEC Table 29, *Healthcare Foundation of La Porte Ten 2030 Vision Health Indicators*, it is apparent that compared to other counties in Indiana:

- LaPorte County is close to average with other states for the indicator of Physical Environmental Ranking.
- LaPorte County is above average regarding Adults with an Independent Living Difficulty and Dentist Rate.

Overall, there is need for improvement for particular health aspects in LaPorte County primarily with obesity and physical activity.

7 MEHAF Maine Health Access Foundation, 2011. *What is behavioral health, anyway?*

8 ODPHP Office of Disease Prevention and Health Promotion, 2016. Access to Health Services, https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services

9 Franciscan St. Anthony Health, 2015. *Community Health Needs Assessment, Michigan City.*

TEC Table 29, Healthcare Foundation of La Porte Ten 2030 Vision Health Indicators		
Physical Activity and Nutrition		
Adults 20+ who are obese	**35.0%**	Percentage of adults aged 20 and older who are obese according to the Body Mass Index (BMI)
Adults 20+ who are sedentary	**23.9%**	Percentage of adults (ages 20 and up) who did not participate in any leisure-time activities (physical activities other than their regular job) during the past month.
Child food insecurity rate	**22.1%**	Percentage of children (under 18 years of age) living in households that experienced food insecurity at some point during the year.
Food insecurity rate	**15.5%**	Percentage of the population that experienced food insecurity at some point during the year.
Low-income preschool obesity	**13.8%**	Percentage of children aged 2-4 participating in federally funded health and nutrition programs who are obese.
Access to exercise opportunities	**72.8%**	Percentage of individuals who live reasonably close to a park or recreational facility.
Children with low access to a grocery store	**3.9%**	Percentage of children living more than one mile from a supermarket or large grocery store if in an urban area, or more than 10 miles from a supermarket or large grocery store if in a rural area.
Farmers market density	**0.04**	Number of farmers markets per 1,000 population.
Fast food restaurant density	**0.63**	Number of fast food restaurants per 1,000 population.
Food environment index	**6.8**	Combines two measures of food access: the percentage of the population that is low-income and has low access to a grocery store, and the percentage of the population that did not have access to a reliable source of food during the past year (food insecurity). The index ranges from 0 (worst) to 10 (best) and equally weights the two measures.
Grocery store density	**0.15**	Number of supermarkets and grocery stores per 1,000 population.
Households with no car and low access to a grocery store	**2.1%**	Percentage of housing units that do not have a car and are more than one mile from a supermarket or large grocery store if in an urban area, or more than 10 miles from a supermarket or large grocery store if in a rural area.
Low-income and low access to a grocery store	**7.3%**	Percentage of the total population in a county that is low income and living more than one mile from a supermarket or large grocery store if in an urban area, and more than 10 miles from a supermarket or large grocery store if in a rural area.

TEC Table 29, Healthcare Foundation of La Porte Ten 2030 Vision Health Indicators		
Physical Activity and Nutrition (continued)		
People 65+ with low access to a grocery store	2.7%	Percentage of adults age 65 and older living more than one mile from a supermarket or large grocery store if in an urban area, or more than 10 miles from a supermarket or large grocery store if in a rural area.
People with low access to a grocery store	18.7%	Percentage of individuals living more than one mile from a supermarket or large grocery store if in an urban area, or more than 10 miles from a supermarket or large grocery store if in a rural area.
Recreation and fitness facilities	0.07	Number of fitness and recreation centers per 1,000 population.
SNAP Certified Stores	0.08	Number of stores certified to accept Supplemental Nutrition Assistance Program benefits per 1,000 population.
Workers who walk to work	1.8%	Percentage of workers aged 16 years and over who get to work by walking.
Behavioral Health		
Adults who drink excessively	17.1%	Percentage of adults who reported heavy drinking in the 30 days prior to the survey or binge drinking on at least one occasion during that period.
Adults who smoke	20.3%	Percentage of adults who currently smoke cigarettes.
Poor physical health: average number of days	3.9	Number of days that adults reported their physical health was not good in the past 30 days.
Self-reported general health assessment: poor or fair	18.2%	Percentage of adults who answered poor or fair to: "How is your general health?"
Access to Health Care		
Physical environmental ranking	55	Ranking of the county's physical environment according to the County Health Rankings. The ranking is based on a summary composite score calculated from the following measures: daily fine particulate matter, drinking water violations, severe housing problems, driving alone to work, and long commute while driving alone.
Adults with an independent living difficulty	6.0%	Percentage of the population aged 18 years and over with an independent living difficulty.
Dentist rate	49	Rate of dentists per 100,000 population.

Green represents the "best" 50th percentile compared to IN Counties

Yellow represents the 50th to 25th quartile compared to IN Counties

Red represents the "worst" quartile compared to IN Counties

Comparison not available

Census Tracts / Block Groups

As depicted on TEC Map 42, *Census Tracts and Block Groups*, the Planning Area is composed of the following Census Tracts in their entirety:–––

TEC Table 30, Comprehensive Plan Area Census Tracts

Census Tract	Area	Population (2015)
401	1,854 acres	4,328 people
403	447 acres	2,356 people
404	707 acres	3,345 people
405	788 acres	3,644 people
406	1,638 acres	4,662 people
407	275 acres	1,608 people
408	306 acres	3,115 people
409	463 acres	2,364 people
411	1,438 acres	2,175 people
412	791 acres	955 people
413	4,186 acres	2,538 people
414	5,297 acres	3,612 people
415	17,907 acres	4,867 people
416	21,484 acres	6,502 people
501.03	34,460 acres	8,158 people

LEGEND

- City Limits
- Comprehensive Plan Area
- Census Block Groups
- Census Tracts

BERRIEN COUNTY, MICHIGAN
LA PORTE COUNTY, INDIANA

Lake Michigan

Dunelland Beach
Michiana Shores
Long Beach
Michigan Township
Pottawattamie Park
Michigan City
Trail Creek
Springfield Township
Town of Pines
Beverly Shores
Pine Township
Coolspring Township
Center Township

411
412
413
430
409
408
403
407
401
406
405
404
414
416
501.03
502.03
415

PORTER COUNTY
LA PORTE COUNTY

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

MOMENTUM: MICHIGAN CITY 2040

THE EXISTING CITY

TEC Map 42: Census Tracts and Block Groups

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018

Michigan City / LaPorte County Zoning Districts

PURPOSE

According to the Michigan City, IN Code of Ordinances / Appendix C - Joint Zoning Ordinance:

"THIS ORDINANCE is in accordance with a comprehensive plan, hereafter referred to as the county land development plan and is adopted so that adequate light, air, convenience and access, and safety from fire, flood and other danger may be secured; that congestion in the public streets may be lessened or avoided; that the local environmental heritage be enhanced and protected; and that the public health, safety, comfort, morals, convenience and general public welfare may be promoted."

LaPorte County, including the City of La Porte and the City of Michigan City, is divided into 22 Zoning Districts, as depicted in TEC Map 44, *Zoning*. The Zoning Districts that are present within the Planning Area are described below. The area (acres) of each designated District and the percentage of land relative to the total Planning Area allocated to each District is also indicated.

AGRICULTURE

A1 Restricted Agricultural District. The A1 Restricted Agricultural District is established to provide areas of the county for major agricultural operations. The intent of this district is to protect prime agricultural areas from encroachment of residential and commercial sprawl and limit the conflict that can occur between agriculture and residential and commercial development. In order to meet this intent, the district excludes subdivisions and residential developments, other than farmsteads. This district applies to areas of the county designated for traditional agricultural in the County Land Development Plan.

- A1 Area in Planning Area*: 1,147.3 acres
- A1 Percentage of Total Planning Area*: 4.8%

RESIDENTIAL

R1A Residence District. The R1A Single Family Residential District is established to include areas of low density single-family residences and limited agricultural uses. Certain other institutional, social and recreational The intent is to maintain and enhance traditional, walkable, pedestrian-oriented neighborhoods and to provide for urban infill development that is of a form and character consistent with established historic neighborhoods. The R1D is only intended for incorporated areas of cities where all necessary utilities and community services are available to serve a higher density population.

- R1A Area in Planning Area*: 1,392.3 acres
- R1A Percentage of Total Planning Area*: 5.8%

R1B Residence District. The R1B Single Family Residential District is established to include areas of moderate density single-family residences. Certain other institutional, social and recreational uses are also included in this district, such as schools, child care and recreational uses. This district may apply to outlying areas of incorporated cities with larger lot development. This district may also apply to unincorporated areas of the county that are identified in the County Land Development Plan for planned urban expansion adjacent to established cities where sufficient public services are available to support the density. This district is intended for areas where community sewer is available or scheduled in the near future.

- R1B Area in Planning Area*: 5,738.3 acres
- R1B Percentage of Total Planning Area*: 23.9%

R1C Residence District. The R1C Single Family Residential District is established to include urban neighborhoods with moderate sized lots and larger single family dwellings. Certain other institutional, social and recreational uses are also included in this district, such as schools, child care and recreational uses. The intent is to maintain and enhance traditional, walkable, pedestrian-oriented neighborhoods and to provide for infill development that is consistent with the established character of the neighborhood. The R1C is only intended for incorporated areas of cities where all necessary utilities and community services are available to serve a higher density population.

- R1C Area in Planning Area*: 2,366.4 acres
- R1C Percentage of Total Planning Area*: 9.9%

R1D Residence District. The R1D Single Family Residential District is established to include urban neighborhoods with small lots. This district will include single family and two family dwellings. Certain other

* Zoning is not available for the following areas in the Planning Area: Porter County and the Towns of Trail Creek, Pottawattamie Park, Long Beach and Michiana Shores.

institutional, social and recreational uses are also included in this district, such as schools, child care and recreational uses.

– R1D Area in Planning Area*: 1,602.7 acres
– R1D Percentage of Total Planning Area*: 6.7%

R1E Waterfront Residence District. The R1E Waterfront Residential District is established to apply to existing waterfront residential areas developed on small lots. This district will primarily include single family dwellings. Certain other community and recreational uses are also included in this district. The intent is to provide for continued maintenance of these older waterfront neighborhoods, but to prevent overbuilding of small lots and protect from new residential construction that is out of scale with surrounding smaller homes. The R1E is only intended for existing historic waterfront neighborhoods and small scale infill development in waterfront areas. This district is not intended for new development of large areas of undeveloped land.

– R1E Area in Planning Area*: 410.4 acres
– R1E Percentage of Total Planning Area*: 1.7%

R2A Townhouse Residential District. The R2A Townhouse Residential District is established to allow development of attached single family dwellings with common side walls. This district may be utilized for infill development in cities and may also apply to unincorporated areas that are identified in the County Land Development Plan for planned urban expansion adjacent to cities, if community sewer and community services are available. Onsite cluster systems may also be a permitted option for community wastewater treatment in unincorporated areas. Certain other institutional, social and recreational uses are also permitted in this district, such as schools, child care and recreational uses. The intent is to maintain or create walkable, pedestrian-oriented neighborhoods. In cities, development within this district should be of a form and character consistent with the established historic character of the community.

– R2A Area in Planning Area*: 54.4 acres
– R2A Percentage of Total Planning Area*: 0.2%

R2B Townhouse Residential District. The R2B Townhouse Residential District is established to allow development of higher density attached single family dwellings with common side walls. This district is intended for infill development in cities only and is not intended for unincorporated areas of the county. Certain other institutional, social and recreational uses are also permitted in this district, such as schools, child care and recreational uses. The intent is to maintain and enhance traditional, walkable, pedestrian-oriented neighborhoods and to provide for urban infill development that is of a form and character consistent with established historic character of the community.

– R2B Area in Planning Area*: 121.1 acres
– R2B Percentage of Total Planning Area*: 0.5%

R3A Low-Rise Multiple Family Residential District. The R3A Low-Rise Multiple Family Residential District is established to allow development of moderate density apartment style multiple family development as well as townhouse development. This district may also apply to unincorporated areas that are identified in the County Land Development Plan for planned urban expansion adjacent to cities, if community sewer and community services are available. Onsite cluster systems may also be a permitted option for community wastewater treatment in unincorporated areas. Certain other institutional, social and recreational uses are also permitted in this district, such as schools, child care and recreational uses. The intent is to maintain or create walkable, pedestrian-oriented neighborhoods. In cities, development under this district should be of a form and character consistent with established historic character of the community.

– R3A Area in Planning Area*: 514.9 acres
– R3A Percentage of Total Planning Area*: 2.1%

R3B High-Rise Multiple Family Residential District. The R3A High-Rise Multiple Family Residential District is established to allow development of higher density apartment style multiple family development as well as townhouse development. This district is intended for infill development in cities only and is not intended for unincorporated areas of the county. Certain other institutional, social and recreational uses are also permitted in this district, such as schools, child care and recreational uses. The intent is to maintain and enhance traditional, walkable, pedestrian-oriented neighborhoods and to provide for urban infill development that is of a form and character consistent with established historic character of the community.

– R3B Area in Planning Area*: 50.1 acres
– R3B Percentage of Total Planning Area*: 0.2%

* Zoning is not available for the following areas in the Planning Area: Porter County and the Towns of Trail Creek, Pottawattamie Park, Long Beach and Michiana Shores.

R4 Manufactured Housing Park District. The R4 Manufactured Housing Park District is established to permit development of manufactured home parks. This district is intended to provide a transitional land use between higher intensity non-residential uses and residential districts. This district will apply in the cities and areas of the county that are identified in the County Land Development Plan as urban where community sewer is available and there is sufficient public infrastructure and services to support the increased density.

The regulations of this article do not apply to manufactured homes on individual lots that are located in other zoning districts. Manufactured homes that are not located in manufactured home parks, but are located on individual lots, shall be subject to the single family residential requirements of the district in which they are located and further subject Section 14.01(a).

- R4 Area in Planning Area*: 326.1 acres
- R4 Percentage of Total Planning Area*: 1.4%

COMMERCIAL / OFFICE

B1 Neighborhood Commercial District. The B1 Neighborhood Commercial District is established to provide for small-scale neighborhood commercial nodes. This district is intended to meet the day-to-day convenience shopping and service needs of persons residing in adjacent residential areas. B1 District designations are located within close proximity to residential neighborhoods and are intended to serve the immediate vicinity so as not to draw additional traffic from other areas of the county or cities. In order to promote business development compatible with nearby residential, the size and scale of uses is limited and uses that would create hazards, loud noises, odors, truck traffic or late hours of operation are not allowed. This district will apply to neighborhood shopping nodes along major corridors within the cities and convenience commercial nodes in unincorporated areas of the county.

- B1 Area in Planning Area*: 78.1 acres
- B1 Percentage of Total Planning Area*: 0.3%

B2 General Commercial District. The B2 General Commercial District is established to serve a larger population than is serviced by a B1 District. The district is generally characterized by an integrated cluster of establishments serviced by a common parking area and generating a large volume of vehicular and pedestrian traffic. The intent of this district is also to encourage the concentration of regional business areas to the mutual advantage of both the consumers and merchants and thereby to promote the best use of land at certain strategic locations and avoid encouraging marginal strip business development along major streets. Special attention must be given to site layout, building design, vehicular and pedestrian circulation and coordination of site features between adjoining sites.

- B2 Area in Planning Area*: 2,076.6 acres
- B2 Percentage of Total Planning Area: 8.6%

B3 Highway Commercial District. The uses in the B3 Highway Commercial District will be more automotive oriented and serve a market that includes the traveling public. The permitted uses would be located near highway interchanges and are generally not appropriate immediately adjacent to residential zoning districts. Special attention must be given to site layout, vehicular circulation, building design and buffering from other nearby uses.

- B3 Area in Planning Area*: 2,519.8 acres
- B3 Percentage of Total Planning Area*: 10.5%

OS Office Service District. OS District is intended to accommodate uses such as offices for professional and business services, planned office developments, medical centers, as well as appropriately located ancillary services and uses. The OS District is further intended to provide a buffer or zone of transition between residential and commercial districts and between residential districts and major streets.

- OS Area in Planning Area*: 195.8 acres
- OS Percentage of Total Planning Area*: 0.8%

CBD1 Downtown District. The CBD1 Downtown District is to be applied to the central business districts of the cities of La Porte and Michigan City. This district is intended to maintain and enhance the pedestrian-oriented, mixed-use downtown in which a variety of retail, commercial, office, civic and residential uses are permitted. The requirements of the district are designed to maintain lively social environment and economically viable downtowns through the synergy of a wide variety of uses in a traditional downtown environment. This district is further intended to support healthier and more sustainable communities through community centers that are pedestrian, and transit-friendly, reduce

* Zoning is not available for the following areas in the Planning Area: Porter County and the Towns of Trail Creek, Pottawattamie Park, Long Beach and Michiana Shores.

sprawl and provide an alternative to the segregation of land uses that cause increased vehicle travel and traffic congestion. To achieve this intent, the regulations of this district control building height and placement to ensure appropriate scale along streetscapes and frame a well-defined public realm comprised of human-scale streets and public spaces, all of which contribute to creating a safe, comfortable and downtown environment.

Michigan City has forged a collective vision for the redevelopment of the downtown and waterfront and the CBD1 district is intended to facilitate a transformative change to Michigan City's downtown and waterfront area. This district is intended to direct urban growth in the city's North End; to guide future deliberations and decisions which affect the way people build and live; to advocate the building of civil communities through economically and environmentally sustainable development practices; and to build and preserve places that are useful, beautiful and meaningful.

- CBD1 Area in Planning Area*: 82.6 acres
- CBD1 Percentage of Total Planning Area*: 0.3%

INDUSTRIAL

M1 Light Industrial District. The M1 Light Industrial District is established for light industries, such as light manufacturing or processing of previously refined materials and other industrial uses that have no adverse impact upon neighboring districts. This district also allows certain commercial uses that are industrial in character or are necessary to provide services to persons working within the district. Uses in this district must have less of an impact on surrounding uses and generate less truck traffic than the other industrial developments. Limitations regarding the degree of noise, smoke, glare, odor, and vibration are placed upon such uses to preclude any adverse effects upon nearby commercial or residential districts. it is intended that this district act as a transition between heavier industrial uses and residential or commercial areas.

- M1 Area in Planning Area*: 1,009.7 acres
- M1 Percentage of Total Planning Area*: 4.2%

M2 Heavy Industrial District. The M2 Heavy Industrial District is established to permit heavier industrial uses that are primarily of a manufacturing, assembling, and fabricating character, and are large-scale or specialized industrial operations more likely to produce external physical effects impacting to some degree surrounding districts. The M-2 District is further designed to be located in areas where heavy industrial uses can most efficiently utilize major roadways, utilities and other infrastructure while minimizing any incompatible aspects with neighboring districts.

- M2 Area in Planning Area*: 1,638.6 acres
- M2 Percentage of Total Planning Area*: 6.8%

SPECIAL DISTRICT DESIGNATIONS

MD Marina District. The MD Marina District is to be applied to the waterfront areas of Michigan City, including Washington Park and Marina, as well as development along the Trail Creek. Michigan City has forged a collective vision for the redevelopment of the downtown and waterfront and this district is intended to facilitate a transformative change to Michigan City's downtown and waterfront area.

This district is intended to provide for a mixture of uses ranging from boating and recreation to tourism-related businesses. Moderate density residential uses are also permitted to provide a range of housing opportunities, stimulate mixed-use environments and support redevelopment of the Michigan City North End. It is also the intent of this district to maintain visual and physical access to waterfront, which provides recreational opportunities, enhances economic development of the downtown and helps define a strong sense of place for Michigan City.

- MD Area in Planning Area*: 370.1 acres
- MD Percentage of Total Planning Area*: 1.5%

AP Airport District. The AP Airport District is established to provide for uses, activities, facilities, and structures necessary for the safe and efficient operation of aircraft and for providing the services and facilities required to accommodate passengers, employees, pilots, tenants and guests of the La Porte and Michigan City airports. The AP Airport District also accommodates complementary commercial, industrial and transportation facilities that are compatible and customarily associated with airports.

- AP Area in Planning Area*: 241.8 acres
- AP Percentage of Total Planning Area*: 1.0%

* Zoning is not available for the following areas in the Planning Area: Porter County and the Towns of Trail Creek, Pottawattamie Park, Long Beach and Michiana Shores.

OVERLAY DISTRICTS

Refer to TEC Map 43, *Overlay Districts*.

WVPO Waterfront View Protection Overlay Zoning District. The intent of the WVPO Waterfront View Protection Overlay Zoning District is to protect views of lakes. Among the specific purposes of the Waterfront View Protection Overlay Zoning District are:

1. Protect community character of waterfront areas by maintaining views of lakes from public roadways
2. Protect property values in waterfront neighborhoods by protecting views of the waterfront.
3. Protect waterfront neighborhoods from overbuilding with excessively large buildings on small waterfront lots that are out of scale with the established character of the neighborhood.

US12CO US-12 Corridor Overlay District. The US-12 corridor has been identified as important transportation corridor through Michigan City. The intent of the US12CO US-12 Corridor Overlay District is to provide specific standards for the corridor to achieve the following:

1. Preserve the scenic character of the outlying areas of the city and promote development around the central core of the city that creates a strong sense of place.
2. Promote US-12 as a cultural heritage corridor to encourage economic development and tourism for Michigan City.
3. Encourage multi-modal transportation through pedestrian-oriented and transit-oriented development.
4. Maximize the capacity of the road by controlling the number and location of driveways; requiring alternate means of access through shared driveways, service drives and access from side streets, and requiring traffic impact studies for developments that will generate large volumes of traffic.
5. Enhance the visual quality of this corridor by limiting signage and preserving natural and scenic landscape features.

– US12CO Area in Planning Area: acres

– US12CO Percentage of Total Planning Area: percent

NEFBO Michigan City North End Form-based Overlay District. Michigan City has forged a collective vision for the redevelopment of the downtown and waterfront, and the NEFBO Michigan City North End Form-Based Overlay District is intended to facilitate a transformative change to Michigan City's downtown and waterfront area. This overlay district is to implement the North End Plan by doing the following:

a. Direct urban growth in the city's North End.

b. Develop a fully integrated, mixed-use, pedestrian-oriented and transit-oriented environment.

c. Create a synergy of uses to support economic development and redevelopment.

d. Minimize traffic congestion, inefficient surface parking lots, infrastructure costs and environmental impacts by promoting compact, mixed-use, pedestrian-friendly and transit-oriented development.

e. Regulate building height and placement to achieve appropriate scale along streets and critical mass of development to support transit.

f. Establish clear controls on building form and placement to frame a well-defined public realm comprised of human-scale streets, neighborhoods and public spaces, all of which contribute to creating a safe, comfortable and livable environment.

g. Advocate the building of civil communities through economically and environmentally sustainable development practices.

h. Build and preserve places that are useful, beautiful and meaningful.

i. Guide future deliberations and decisions which affect the way people build and live.

Porter County Zoning Districts

CN Neighborhood Commercial. The CN (Neighborhood Commercial) District is intended to be used as follows:

Use Type and Intensity:

– small scale retail goods and services;

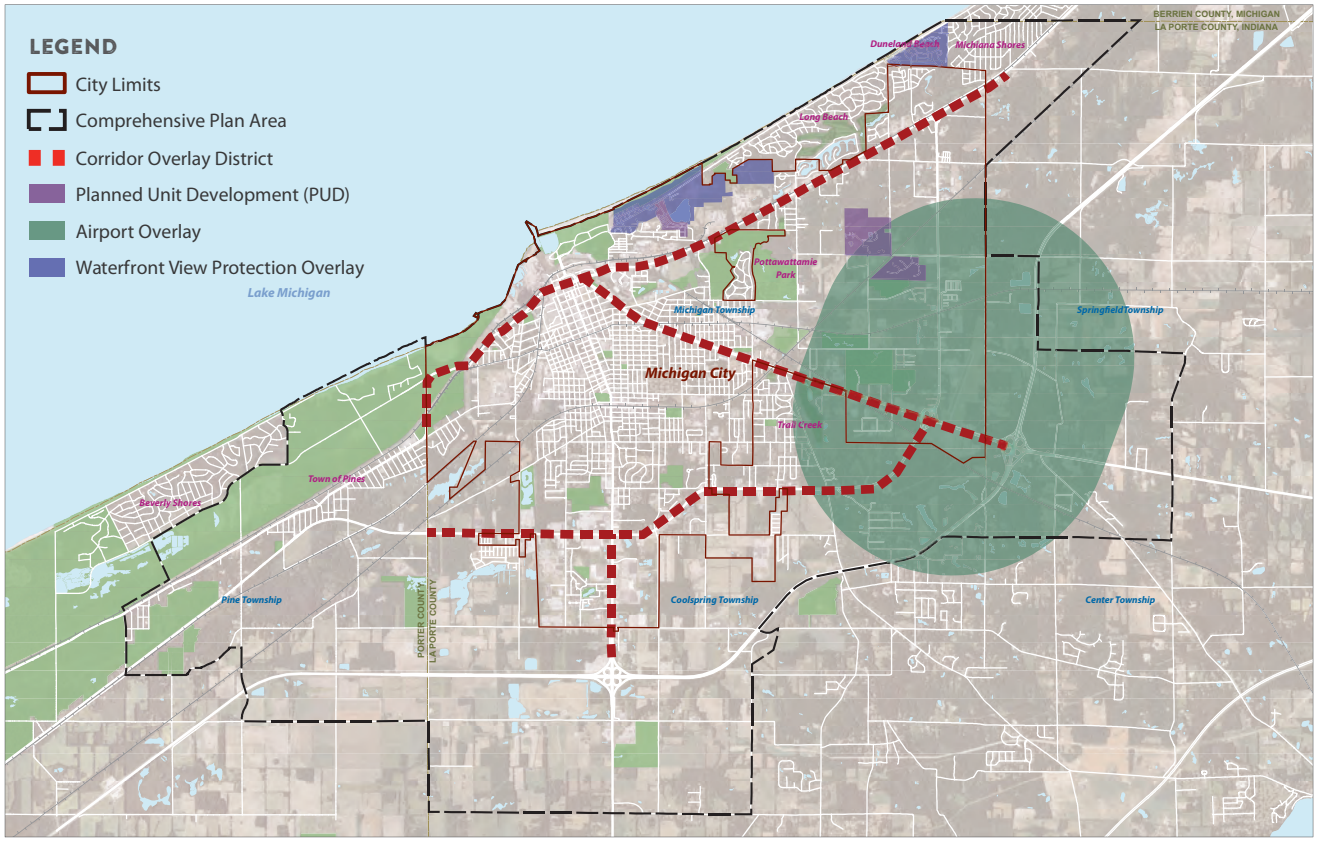
– low impact uses.

Application of District:

– Existing and new development;

– Buffering or transitional district.

* Zoning is not available for the following areas in the Planning Area: Porter County and the Towns of Trail Creek, Pottawattamie Park, Long Beach and Michiana Shores.



TEC Map 43: Overlay Districts

Development Standards:

– Recognize the need for quality time, place and manner development standards to minimize impacts on adjacent residential properties while encouraging economic vitality.

CH High-Intensity Commercial. The CH (High Intensity Commercial) District is intended to be used as follows:

Use Type and Intensity:

– wide range of retail, commercial, service, eating, and entertainment establishments;

– moderate to high impact uses.

Application of District:

– Existing and new development;

– Small to medium area zoning;

– Chiefly multiple businesses established on a single site.

Development Standards:

– Recognize the need for quality time, place and manner development standards to minimize impacts on adjacent residential properties.

LI Light Industrial. The L1 (Light Industrial) District is intended to be used as follows:

Use Type and Intensity:

– low impact industrial;

– business park, distribution operations and industrial facilities.

Application of District:

– Existing and new development;

– Small to medium area zoning.

Development Standards:

– Recognize the need for quality time, place and manner development standards to minimize impacts

* Zoning is not available for the following areas in the Planning Area: Porter County and the Towns of Trail Creek, Pottawattamie Park, Long Beach and Michiana Shores.

on adjacent properties while encouraging economic vitality;

– Assure there are minimal negative affects on the natural environment.

RR Rural Residential. The RR Rural Residential District is intended to be used as follows:

Use Type and Intensity:

– rural estates and hobby farming;
– single-family detached homes;
– medium to large sized homes;
– large lots.

Application of District:

– Existing and new development;
– Small area zoning.

Development Standards:

– Promote low-impact development in concert with a natural setting.

R1 Low Density Single Family Residential. The R1 (Low Density Single family Residential) District is intended to be used as follows:

Use Type and Intensity:

– single-family detached homes;
– medium to large sized homes;
– large lots.

Application of District:

– Existing and new development;
– Small area zoning.

Development Standards:

– Promote low-impact development in concert with a natural setting.

PUD Single Family Residential.

IN Institutional. The IN (Institutional) District is intended to be used as follows:

Uses Type and Intensity:

– institutionally-owned lands, including State and County facilities;
– multiple primary structures per lot.

Application of District:

– Existing and new development;
– Buffer district or transitional district.

Development Standards:

– Recognize the need for quality time, place and manner development standards to minimize impacts on adjacent residential properties while encouraging economic vitality.

P1 Parks and Recreation. The P1 Parks and Recreation District is intended to be used as follows:

Use Type and Intensity:

– Low impact active uses such as public parks, open space, playgrounds, bike trails, recreational areas, and single ball fields, consistent with protection of the natural features.

Application of District:

– Existing and new development;
– Buffer district.

Development Standards:

– Promote high quality recreation.

P2 Parks and Recreation. The P2 Parks and Recreation District is intended to be used as follows:

Use Type and Intensity:

– Greater intensity facilities, public or private, that anticipate higher use, increased noise levels, substantial parking requirements on a regular basis, require greater infrastructure or large structural elements.

Application of District:

– Existing and new development;
– Buffer district.

Development Standards:

– Promote high quality recreational and natural areas for public use.

Note: On TEC Map 44, *Zoning*, LaPorte County Towns (Michiana Shores, Long Beach, Pottawattamie Park and Trail Creek) without zoning data shown did not participate in the LaPorte County Zoning Mapping. In addition, zoning data is unavailable for Porter County towns, Beverly Shores and Town of Pines.

* Zoning is not available for the following areas in the Planning Area: Porter County and the Towns of Trail Creek, Pottawattamie Park, Long Beach and Michiana Shores.

LEGEND

City Limits

Comprehensive Plan Area

LaPorte County Zoning	Porter County Zoning
A	CN
AP	CH
B1	I1
B2	RR
B3	R1
CBD1	PUD
CBD2	IN
M1	P1
M2	
MD	
OS	
R1A	
R1B	
R1C	
R1D	
R1E	
R2A	
R2B	
R3A	
R3B	
R4	

Lake Michigan

Dunelend Beach

Michiana Shores

Long Beach

Pottawattamie Park

Michigan Township

Michigan City

Trail Creek

Springfield Township

Town of Pines

Beverly Shores

Pine Township

PORTER COUNTY

LA PORTE COUNTY

Coolspring Township

Center Township

BERRIEN COUNTY, MICHIGAN

LA PORTE COUNTY, INDIANA

Client: City of Michigan City

Consultants: Kendig Keast Collaborative, American Structurepoint, Inc., Haas Associates, LLC, and Ricker-Cunningham

Primary Data Sources: City of Michigan City, LaPorte County, Porter County, IndianaMAP, and ESRI

Disclaimer: This map is intended for general informational purposes only and does not represent a legal record. No warranty is made by the City regarding specific accuracy or completeness, and the data may be subject to revision at any time without notification.

MOMENTUM: MICHIGAN CITY 2040

THE EXISTING CITY

TEC Map 44: Zoning

0 2,250 4,500 9,000 Feet

ADOPTED November 20, 2018