

# Emmet County

Growth & Investment Area Study  
And Commercial Corridor Inventory



## FRAMEWORK FOR OUR FUTURE

A REGIONAL PROSPERITY PLAN  
FOR NORTHWEST LOWER MICHIGAN

2014 Edition

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## Acknowledgements

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## Introduction

The vitality of our villages and cities and their central business districts and commercial corridors is a critical part of what determines our standard of living in Northwest Michigan. Without economically viable and vibrant commercial areas our ability to earn a living, purchase goods and services, and learn of new opportunities would fail to meet our expectations and needs. Lending support to the self-evident importance of our Northwest Michigan villages' and cities', is a wealth of economic studies that demonstrate the positive impacts that concentrating people and economic activity can have for lifting real wages and elevating our quality of life. To provide the best foundation for our citizens to maximize their individual potentials it is essential that these areas attract growth and investment as the area grows.

The disciplines of planning and economic development imply the ability to analyze a situation and gauge the effectiveness of policy choices. The complexity of our interactions has always been a difficult mountain to climb for discovering which policies lead to successful outcomes. However, we gain better tools to help us sort through the complexities every year. Today's Apple iPad has the computing power of a super computer from 20 years ago. Increasingly we have the ability to make use of large amounts of data to help make better decisions. Not taking advantage of these tools, can potentially lead to the waste of the public and private wealth that Northwest Michigan works so hard to build.

To insure economically healthy and vibrant communities in Northwest Michigan, we need to study how our various communities are preparing themselves to leverage growth and investment forces to assist in achieving their community's goals. The first step is the identification of communities or areas that are preparing for growth and investment. Are they maximizing the benefits, while minimizing the impacts to our predominately rural setting and natural landscapes?

In addition to learning which locally implemented policies are successful, it is useful to measure key components of growth and investment, as identified by experts in the field of community economic development. Understanding where our Northwest Michigan communities fall on the scale of a group of select factors will provide potential goals for communities interested in maximizing their potential outcomes for their citizens. Studying these areas and learning what policies are working and which ones are not, will ultimately help to maintain and improve life in Northwest Michigan.

In order to gauge how our communities are growing, attracting economic activity, and putting in place policies that maximize potentials, Networks Northwest has conducted studies of Growth & Investment Areas (G&I Areas) and their associated Commercial Corridors, with the assistance of the State of Michigan Regional Prosperity Initiative (RPI) and the Partnership for Sustainable Communities, a cooperative program of the U.S. Department of Housing and Urban Development (HUD), the U.S. Department of Transportation (DOT), and the U.S. Environmental Protection Agency (EPA). This companion document to the Regional Prosperity Plan collected data from a variety of public and commercial providers, as well as conducted interviews of public officials, which were synthesized into this report.



## Growth & Investment Areas

### Elements of Identification

A community asset inventory survey was conducted in 2010 by the Northwest Michigan Council of Governments in conjunction with the Growth & Investment Network, which was initially formed during the community engagement portion of The Grand Vision. The survey collected responses from cities, incorporated and unincorporated villages, townships, and planned growth areas in Antrim, Benzie, Charlevoix, Emmet, Grand Traverse, Kalkaska, Leelanau, Manistee, Missaukee, and Wexford counties. The results of the survey were used to develop criteria for selecting areas from the region that were best positioned to accommodate future growth patterns anticipated for northern Michigan over the next 25 years. Initially, five criteria were chosen to select areas for additional analysis regarding their Growth & Investment readiness, trends, and capabilities. The five criteria are:

1. Operational Municipal Water System
2. Operational Municipal Sewer System
3. Approved Master Plan that recommends a defined higher density downtown core for development & investment
4. A Zoning Ordinance in place that codifies higher density development in the downtown core
5. Available Governmental Staff to process requests and permits

The community asset inventory was updated in 2012 with respect to these five criteria and then used to select the initial Growth & Investment areas for additional study. This resulted in 31 areas being selected. In those 31 initially identified Growth & Investment Areas, there are 42 individual units of government comprising the core commercial development areas. These 42 units of government were contacted by the Networks Northwest and asked to assist this study by providing time with staff or elected officials to conduct the Commercial Corridor Inventory Interviews.

### Commercial Corridor Inventory Interviews

As a central component of this project, units of government in the initial selection of G&I Areas were interviewed to collect their responses to questions regarding master planning, land use, capital improvement, transportation, infrastructure, and community marketing policies. The communities were asked to select their best qualified personal and/or elected official(s) to participate. Additionally, these interviews asked the local units of government to self-identify their commercial corridors of significance. The interviews were conducted from December 2012 to March 2014.

The interviews were conducted using a checklist tool called the *Commercial Corridor Inventory*. This inventory was designed to be objective and focused on current attributes, not future plans. Most of the Inventory's questions required a simple "Yes/No" answer; however they also contained an "Additional Comments" space to expand upon the answers or in many cases indicate policy areas that are currently in the development stage. Many of the policy questions relate to a sampling of best practices from the Michigan Economic Development Corporation's (MEDC) Redevelopment Ready Communities (RRC) program.

The commercial corridors were identified by the units of government based on their own criteria for significance to their community after receiving a brief introduction to the goals for the study. The corridor identification information from the interview was then entered in a Geographic Information System and place database for the mapping and analysis contained in this report.

**Focus for Growth & Investment Study**

The wealth of economic studies that demonstrate the positive impacts that concentrating people and economic activity can have for lifting real wages and elevating our quality of life was used as a guide in the development of the analysis components for Northwest Michigan Growth & Investment Area Studies and Commercial Corridor Inventories. This study is not intended as a one size fits all yard stick for Northwest Michigan communities to measure their status with respect to growth and investment. Some communities may choose to focus on areas that can assist in maintaining the viability of their community's existing business establishments and others may choose to focus their attention on areas that can grow their local economies and population. One of the study's components that contains a mix of evaluation tools is a Growth Readiness Assessment. The mix of included criteria contain some that apply to all communities regardless of size and some that are designed primarily for larger communities. Communities should evaluate which study criteria are of value in gauging progress on the individual growth and investment goals they have set for their communities.



## Growth & Investment Readiness Assessments

### ■ Original Selection Criteria

#### Municipal Water & Sewer

Determining the density limit for individual residential septic systems is a complex issue and is based on an understanding of the site specific hydrology and water quality impacts. Michigan is the only state without specific state enabling legislation related to on-site wastewater treatment systems. Regulatory control over conventional septic tank and drain field siting, design, and construction is under the jurisdiction of local health departments. (Michigan Department of Environmental Quality 2004) The commonly accepted housing density standards before Municipal Water or Sewer are required may be summarized as follows: (American Society of Planning Officials 1952)

- *Two families to the acre where both water and sewage systems are lacking.*
- *Four families to the acre where either water or sewer systems are lacking.*
- *Greater density where both facilities are provided.*

As a caveat to these standards, studies have indicated that depending on the site conditions, even one family to the acre may not be sufficient to protect water quality and guard against conditions that could lead to premature failure of Onsite Sewage Disposal Systems.

Thus for the greater density made possible by community water and sewer service together with the greater environmental protections that properly maintained and updated municipal systems can achieve, This study focused on communities that had municipal systems in place or were trending towards implementing them.

#### Government Staff

In order to process development requests as well as having the capacity to analyze the successes and failures of land use application reviews, this study focused on communities that had sufficient staff resources.

#### Master Plan Includes Higher Density Center

The previous Community Asset Inventory reviewed community master plans to determine if they contained goals for the establishment of a higher density core or downtown. This was determined as a key predictor of the community's capability to accommodate future growth.

#### Zoning Ordinance Supporting Master Plan Density Center

As with the master plan high density center criterion, the previous Community Asset Inventory reviewed community zoning ordinances to determine if they codified the master plan goals for the establishment of a higher density core or downtown.

### ■ Census Data Criteria

#### Core Place Population Increasing

One of the effects of Northwest Michigan's vacation market, is declining year round population for some of the communities with high rates of second home ownership. This can lead to year round cash flow challenges for the local retail sector. As a result this study chose to track changes in Core Place population as a potential indicator for the sustainability of retail business activity.

#### Housing Growth Rate Over 15% (2000-2010 Census)

The criterion of a 15% housing growth rate for the period between the 2000 and 2010 Censuses assists in determining which communities presently are experiencing significant development activity.

#### Core Place Housing Growth Increasing Faster than Surrounding Area

This criterion is utilized as a measure of how our rural quality is being preserved by minimizing sprawl. It is measured by the percentage change of housing in the Core Place over the Growth & Investment Area as a whole from the 2000 to 2010 decadal Census. Other techniques for measuring of sprawl, such as satellite spectral analysis for changes in impervious surface, could be employed in the future provided sufficient budget availability.

**Census Class (Rural, Urban Cluster, Urbanized Area, MSA)**

The US Census provides a classification of rural and urban areas that is helpful in determining growth and concentrations of population (see: 2010 Census Urban and Rural Classification and Urban Area Criteria, page 69)

**Job Density Over 75 Jobs per Acre in Commercial Corridors**

A study on density as it relates to the reduction of Single Occupant Vehicle (SOV) trips and transit use found that SOV travel decreases at employment densities of 20 to 50 jobs per acre, and transit use increases dramatically at densities over 75 jobs per acre. (Frank and Pivo 1994) The Growth & Investment study chose to measure Job Densities over 75 jobs per acre to indicate corridors with strong demand for fixed route transit. In addition to transit benefits, workers support nearby retail and food service business. On average, an office worker can support 7 square feet of restaurant space and 23 square feet of retail space. (Gibbs 2012)

**50% of Workers Living within 5 miles**

The criterion of determining whether 50% or more of the workers are living within a 5 mile commute of jobs located in Growth & Investment Core Places was selected to measure potential positive agglomeration effects for real wage growth as supported by the economic studies cited previously in this report.

**■ Zoning Policy Criteria****Zoned Densities Greater Than 30 Dwellings/Acre in Commercial Corridors**

The criterion of 30 dwellings per acre was selected for study based on studies of density thresholds required for high quality walkable communities. This density is also supportive of transit operations.

**Zoning Allows Mixed-Use by Right in Commercial Corridors**

Walkable communities require a mix of uses to be successful in providing transportation options demanded by market shifts in housing preferences. Requiring a “Special Use” process for mixed use land use applicants can lead to constraints on the supply of mixed use development over the less cumbersome “By Right” zoning and thus hamper the success of establishing vibrant walkable communities.

**Zoning Allows Multi-Family Residential by Right in Commercial Corridors**

Multi-Family housing is increasingly in demand as the housing market shifts to smaller households looking for walkable communities. This criterion evaluates a communities policy restrictions on the supply of multi-family housing development.

**Building Height Limits Greater than 35 feet in Commercial Corridors**

Allowing Building Height limits greater than 35 feet gives greater flexibility for both creating density in Core Places and allocating public space to critical placemaking efforts that help build vibrant communities.

**No On-Site Parking Requirement in Central Business District**

Many traditional Northwest Michigan downtowns development patterns were established before the establishment of auto parking requirements. Many existing historic downtowns can't meet the typical auto centric parking requirements without utilizing premium downtown real estate for large surface parking. Additionally, trends as outlined in this document are reducing vehicle ownership rates and thus parking requirements. This criterion helps to assess a Growth & Investment Area's flexibility to accommodate new market trends.

**Density Bonuses Offered for Contributions towards Public Policy Goals**

The lack of supply of affordable housing has been identified as an issue for Northwest Michigan's economic competitiveness. This fact together with the need to create vibrant communities while protecting the areas natural resources can be partially addressed with policies such as density bonuses. This study is tracking community incentive policies for addressing these regionally important goals.

**■ Placemaking Criteria****Placemaking Elements in Support of Walkable Corridors**

Placemaking elements that support walkable mixed-use corridors were selected as criterion for the assessment. These elements include the presence of theaters and entertainment venues, grocery stores, parks and pocket parks, and the abundance of pedestrian connections. This selection is not intended to diminish the importance of

other placemaking elements supportive of walkable corridors, but the ability to seek entertainment, purchase food, and recreate within a pedestrian friendly environment where considered important factors to measure.

#### **Retail Hub**

This criterion evaluates whether a communities retail sector acts as a local or regional hub. (see: Retail Classification: page 72)

#### **Educational Institutions (Trade Schools, Community Colleges, Universities)**

In studying the performance of economic clusters, educational institutions play an important role in concentrating entrepreneurial activity and fostering growth and investment.

#### **Contain Medical Centers**

With the high concentration of senior demographics in Northwest Michigan's population, this study gave significance to medical infrastructure as a predictor/indicator of growth.

#### **Walkable Density CBD or Commercial Corridors (20-30 Dwellings per Acre)**

While the Zoning Policy Criteria is looking at zoning densities sufficient to create viable walkable communities, this criterion tracks actual densities as determined by the 2010 Census.

### ■ Opportunity Criteria

#### **Community Identified Development Opportunities**

The presence of community identified development opportunities demonstrates that the community is proactive about development and has devoted resources towards potential future growth and investment.

#### **Marketing Redevelopment & Infill Sites**

Potential development sites are abundant, especially in the current post-recession economic recovery period. The existence of a marketing effort by communities of redevelopment and infill sites can lead to a greater probability of attracting development activity.

#### **Fixed Route Transit (Headways 15 mins or less)**

According to The Transit Cooperative Research Program headways of 15 minutes or less is an acceptable threshold for employment commuting transit use, with 10 minutes or less being ideal.

#### **Commercial Corridors with High Traffic Count AADT (Over 10k, Over 25k)**

Traffic Counts are a determinate of the retail site viability. Average Annual Daily Counts of 10,000 can augment a neighborhood or village store's business, making it sustainable for market areas with less than the required 800 to 1,000 households that are need to support them. Larger retailer site selection criteria typically require traffic counts from 20,000 to 40,000 depending on the specifics of the capture rate.

### ■ Infrastructure Criteria

#### **Additional Water & Sewer Capacity**

Municipal water and sewer expansions take a significant time to permit and build. If the municipal water and sewer capabilities are at their limits, businesses looking to expand or relocate to a new facility may not be in a position to wait for the completion of an expansion project. It is important that communities plan for sufficient capacity reserve to accommodate new service and provide for time to properly plan additional expansions.

#### **Broadband Service over 1 Gbps Available**

The next-generation of broadband service is providing speeds over 1 Gigabit per Second (Gbps) These speeds rely on fiber optic wires that run all the way to the premises referred to Fiber To The Home (FTTH) or Fiber To The Premises (FTTP). FTTH Consumers consistently rate it as the fastest and most reliable broadband technology. They also appreciate that fiber networks can deliver many unique broadband services for medicine, education, home-based businesses, home automation and entertainment. "There's growing evidence among economic development officials that fiber connectivity encourages businesses to stay, helps businesses grow and become more productive, and attracts new businesses, particularly in high-tech industries." (Broadband Communities 2013) In the United States, one of every five households is within reach of fiber, and nearly 10 million households are using FTTH services now.

**Municipal WiFi**

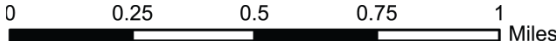
Wireless services are important public amenities, especially for younger population demographics, and are highly desirable in targeted areas such as pedestrian friendly commercial corridors and public areas. The existence of Municipal WiFi is an indicator of support for new infrastructure development important for growth and investment.

### Growth & Investment Area Maps Legend



#### North Directional










#### Mileage Scale



#### Corridor Identification










-  Commercial Corridor Identification Number Graphic
-  Community Defined Commercial Corridors

#### Map Area Key

-  Land
-  Bordering County
-  Bodies of Water
-  Municipal Boundary
-  Urban Cluster (as defined by the 2010 Census)
-  Municipal/Urban Cluster Overlap Area
-  Census Designated Place (CDP)

### Commercial Corridor Maps Legend

#### Points of Interest

-  Public Use Airport
-  College
-  Cultural Site
-  Grocery Store
-  Hospital
-  Library
-  School
-  Theater/Entertainment Venue
-  Transit

#### North Directional



#### Mileage Scale


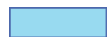
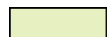



#### Study Area Outline



The Study Area is delineated by the area within .25 miles of the community defined commercial corridor (red line) and is shaded in a transparent red. Area calculations are derived from the land area only. For the purposes of pulling Census information, any 2010 Census block that is fully or partially contained with the study area was utilized in the data summaries.

#### Map Area Key

-  Land
-  Bodies of Water
-  Municipal Boundary
-  Urban Cluster (as defined by the 2010 Census)

**Growth & Investment Area Unit(s) of Government:**

*Village of Alanson, Littlefield Township*

**Core Place Census Areas:**

*Village of Alanson*

**County**

*Emmet*

**Census Class**

*Rural*

**Land Area**

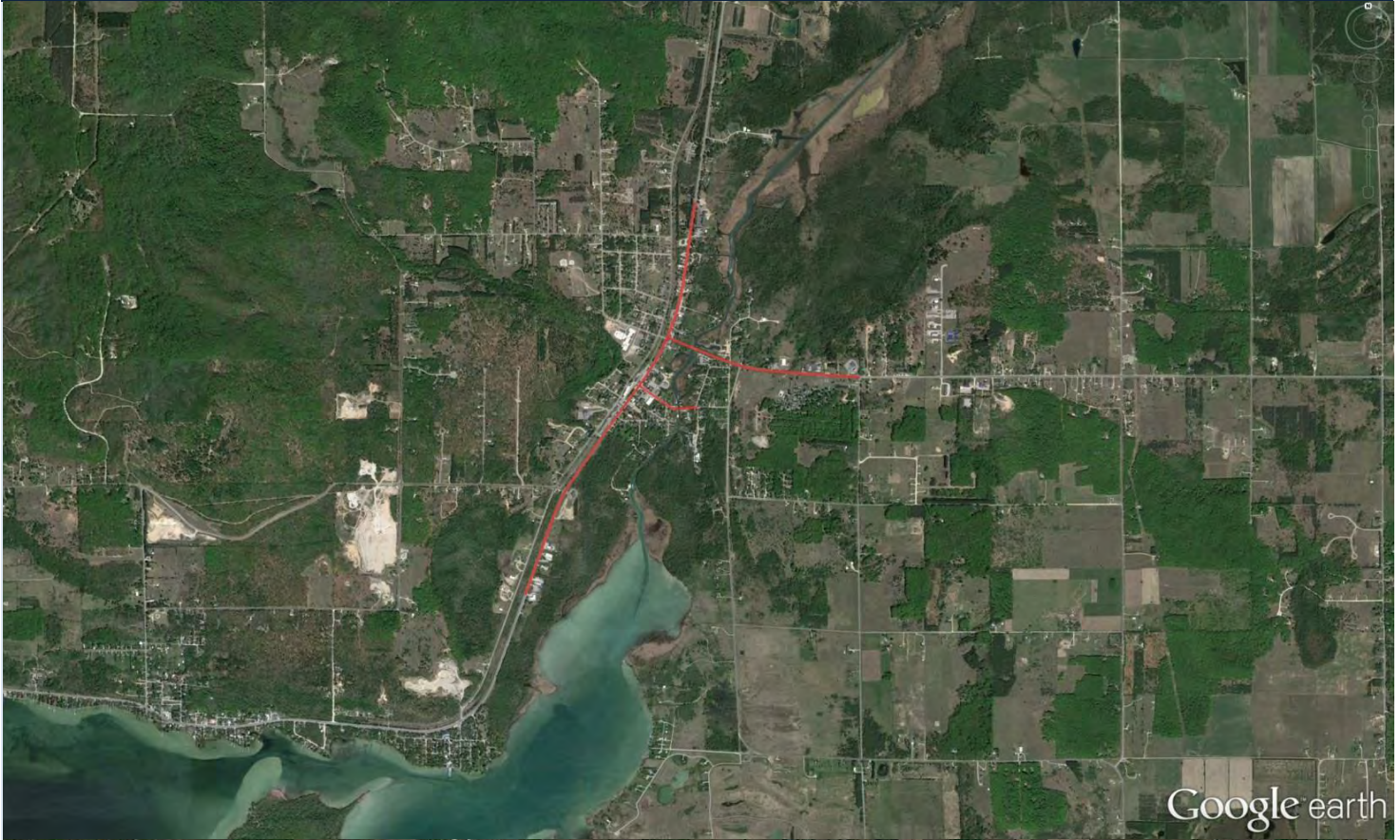
**G&I Area**

21.72 sq. miles

**Core Place**

0.99 sq. miles

**Aerial Map with Commercial Corridors**



**3 Commercial Corridors Identified**

<b>Highest Corridor Traffic Count (Annual Average Daily Traffic)</b>	10,690	<i>2013 Data Year</i>
<b>Population Density Range of G&amp;I Area Corridors (per acre)</b>	1.0 - 1.6	<i>Density calculations a derived from the area within a 1/4 mile of Corridor (Corridor Study Area)</i>
<b>Gross Neighborhood Density Range of G&amp;I Area Corridors (per acre)</b>	2.0 - 2.6	
<b>Job Density Range of G&amp;I Area Corridors (per acre)</b>	0.3 - 0.9	
<b>Worker Density Range of G&amp;I Area Corridors (per acre)</b>	0.6 - 0.8	

**Retail**

<b>Total Sales</b>	\$9,524,675	<b>Classification:</b>	Retail Potential Exporter
<b>Potential Sales</b>	\$26,751,351	<b>Seasonal Housing:</b>	22.3% of G&I Area Housing
<b>Leakage</b>	\$17,226,676		

**Sprawl**

*Percentage of Housing in the Core Place is Declining by -2.4%*

**Population**

**2000-2010:** *Growing at 7.0% with the Core Place Declining at -6.0%*  
**Average Age:** 39.9 [*+10.0% change from 2000 Census* ]  
**Demographic Shifts:** *Baby Boomers had the largest % gain (up 7.5%); Millennial Generation had the largest % loss (down -8.7%)*

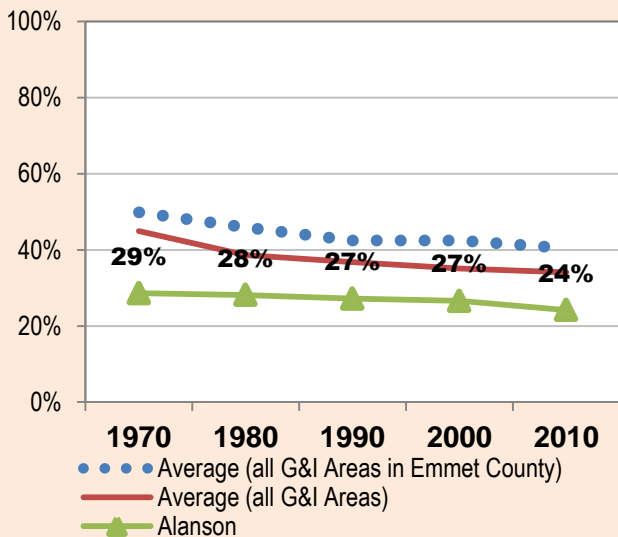
**Jobshed**

*Worker Exporter – Resident Worker population exceeds the number of Jobs by 62%*

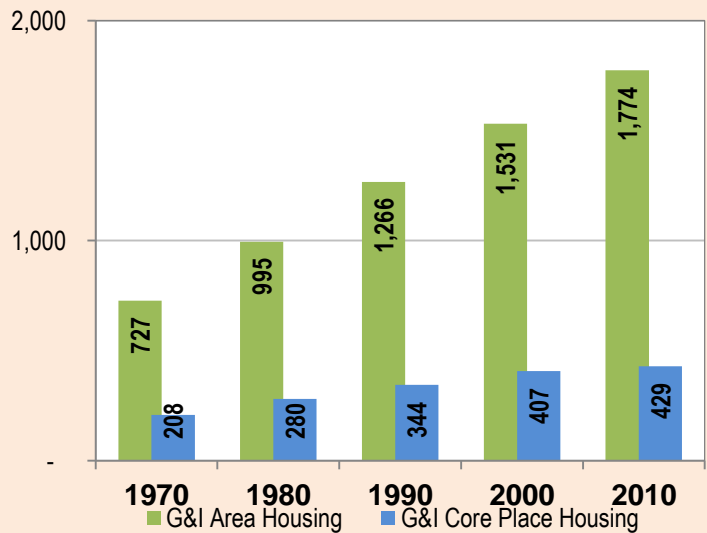
Population & Housing Trends

Census Data	Core Place	G&I Area
	Village of Alanson	Village of Alanson, Littlefield Township
<b>Total Population (2010)</b>	<b>738</b>	<b>2,978</b>
Percentage Change from 2000	<b>-6.0%</b>	<b>+7.0%</b>
People per Acre	1.16	0.21
People per Square Mile	745	137
Average Age [% Change from 2000]	<b>37.3 [ +8.5% ]</b>	<b>39.9 [ +10.0% ]</b>
<b>Total Housing (2010)</b>	<b>429</b>	<b>1,774</b>
Percentage Change from 2000	<b>5.4%</b>	<b>15.9%</b>
Gross Neighborhood Density (per acre)	0.68	0.13
<b>Total Households (2010)</b>	<b>307</b>	<b>1,186</b>
Percentage of Households without Children (under 18)	62%	66%
<b>Study Area Size (Land Cover)</b>		
Acres	633.60	13,900.80
Square Miles	0.99	21.72

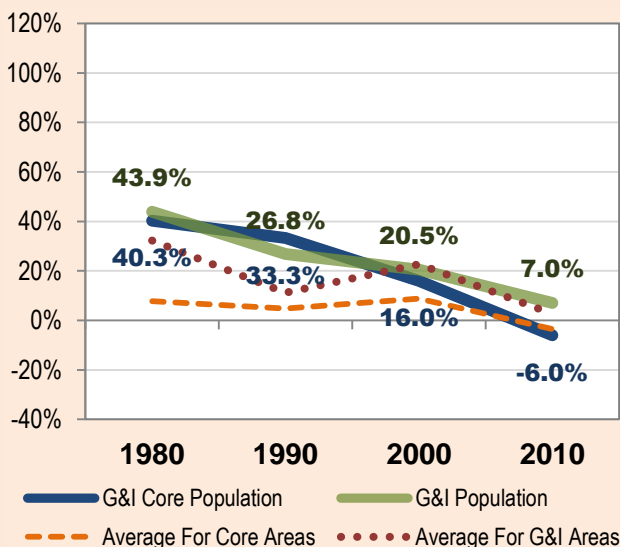
Housing in Core Place as a Percentage of Total Growth & Investment Area



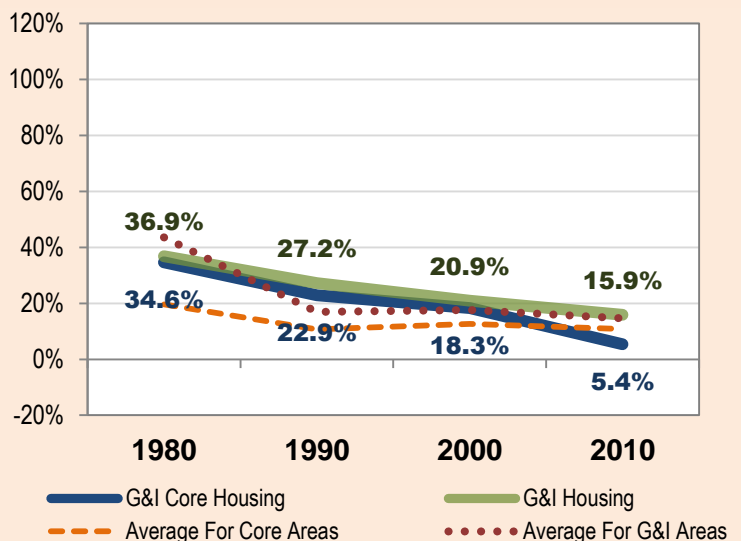
Housing Units in G&I Area and Core Place



Percentage Change in Population in G&I Area and Core Place



Percentage Change in Housing Units in G&I Area and Core Place





**Growth & Investment Readiness Assessment**

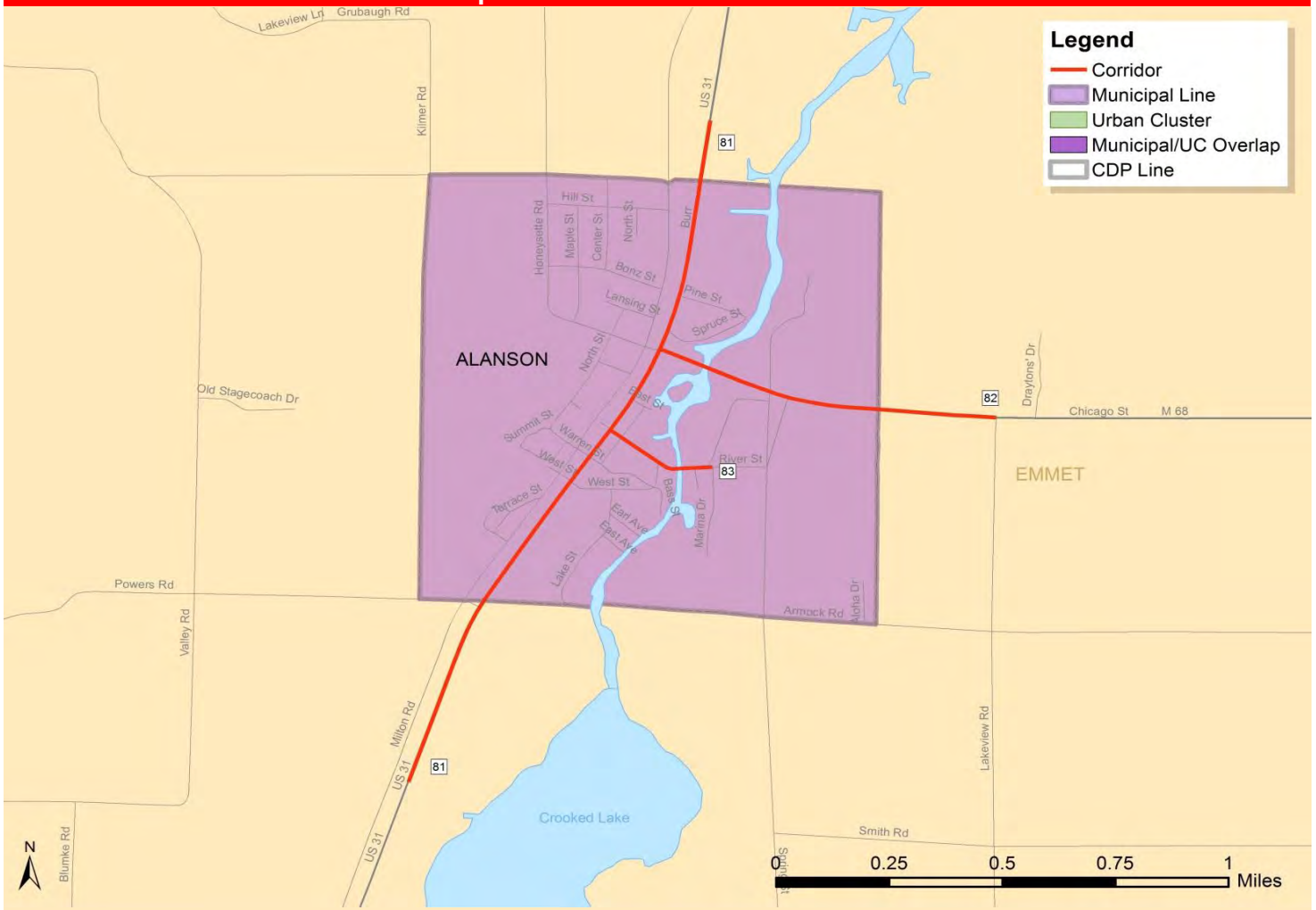
**Criteria Status**

		Criteria Status	
Initial Selection Criteria	1	Municipal Water	Yes
	2	Municipal Sewer	Yes
	3	Government Staff	No
	4	Master Plan Includes Higher Density Center	Yes
	5	Zoning Ordinance Supporting Master Plan Density Center	Yes
Census Data	6	Core Place Population Increasing	No
	7	Housing Growth Rate Over 15% (2000-2010 Census)	Yes
	8	Core Place Housing Growth Increasing Faster than Surrounding Area	No
	9	Census Class (Rural, Urban Cluster, Urbanized Area, MSA)	Rural
	10	Job Density Over 75 Jobs Per Acre in Commercial Corridors	No
	11	50% of Workers Living within 5 miles	No
Zoning Policy	12	Zoned Densities Greater Than 30 Dwellings/Acre in Commercial Corridors	No
	13	Zoning Allows Mixed-Use by Right in Commercial Corridors	No
	14	Zoning Allows Multi-Family Residential by Right in Commercial Corridors	No
	15	Building Height Limits Greater than 35 feet in Commercial Corridors	No
	16	No On Site Parking Requirement in Central Business District	Qualified Yes
	17	Density Bonuses Offered for Contributions Towards Public Policy Goals	No
Placemaking	18	4 Key Placemaking Elements in Corridors	No
	19	Retail Hub	No
	20	Educational Institutions (Trade Schools, Community Colleges, Universities)	No
	21	Contain Medical Centers	No
	23	Walkable Density CBD or Commercial Corridors (20-30 Dwellings per Acre)	No
Opportunity	24	Community Identified Development Opportunities	Yes
	25	Marketing Redevelopment & Infill Sites	No
	22	Fixed Route Transit (Headways 15 mins or less)	No
	30	Commercial Corridors with High Traffic Count AADT (Over 10k, Over 25k)	Yes > 10,000
Infrastructure	26	Additional Water Capacity	No
	27	Additional Sewer Capacity	Yes
	28	Broadband Service over 1 Gbps Available	No
	29	Municipal WiFi	No

Commercial Corridors

ID	Name	Corridor Length (feet)	Population Density (People per acre)	Housing Density (Dwellings per acre)	Job Density (Jobs per acre)	Worker Density (Workers per acre)
81	Alanson US31 Corridor	9,227	2.0	1.0	0.3	0.6
82	Alanson M68 Corridor	4,120	2.1	1.4	0.6	0.6
83	Alanson River Street	1,362	2.6	1.6	0.9	0.8

Growth & Investment Core Place Map with Commercial Corridors



Housing Data

Census-ACS Data	Core Place Village of Alanson	G&I Area Village of Alanson, Littlefield Township
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**Housing Efficiency Rating (Average HERS)**

*Efficiency compared to 2012 DOE Challenge Home (30 HERS)*

**284**

254% Less Efficient

**239**

209% Less Efficient

**Percentage Built by Year**

Before 1940	23%	16%
1940-1949	3%	3%
1950-1959	6%	7%
1960-1969	5%	5%
1970-1979	28%	13%
1980-1989	17%	16%
1990-1999	14%	27%
2000-2009	4%	14%
Later than 2010	0%	0%

**Average Age**

**1964**

**1974**

**Median Value**

**\$89,500**

**\$101,500**

Village of Alanson	\$89,500
Littlefield Township	\$101,500

**Home Heating Fuel**

Percent of Homes Natural Gas	58%	48%
Percent of Homes Using Propane	<b>25%</b>	<b>36%</b>
Percent of Homes Using Wood	6%	12%
Percent of Homes Using Solar Energy	0%	0%

**Personal Income**

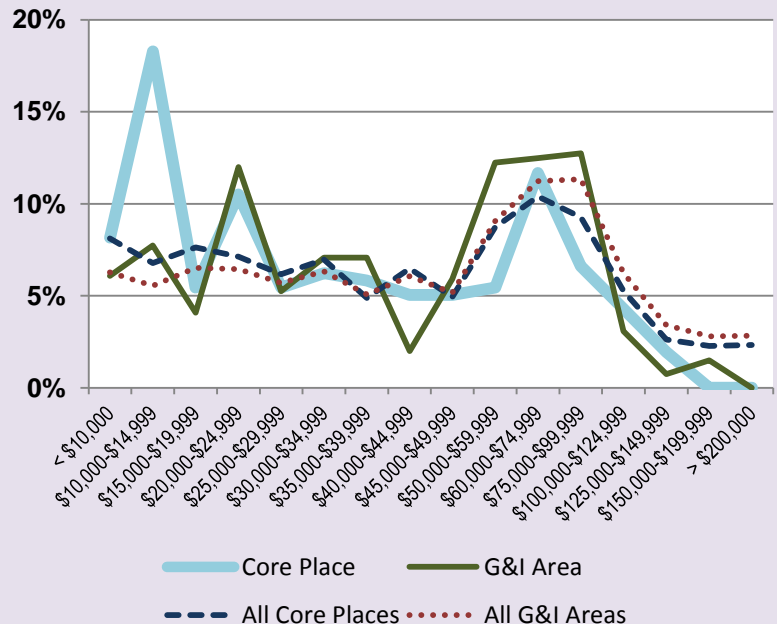
Census-ACS Data (2008-2012 5 Year Summary File)

**Median Household Income (2012 Dollars)**

<b>Core Place</b>	<b>\$32,981</b>
Village of Alanson	\$32,981

<b>G&amp;I Area</b>	<b>\$41,635</b>
Village of Alanson	\$32,981
Littlefield Township	\$41,635

**Household Income Distribution**



**Per Capita Annual Income (2012 Dollars)**

<b>Core Place</b>	<b>\$17,202</b>
<b>G&amp;I Area</b>	<b>\$19,452</b>

**Policy**

Data Source: Commercial Corridor Inventory Interview	Core Place Units of Government Interviewed			
	Village of Alanson			

**Year of Master Plan Approval** **NA**  
*Master Plan Update* NA

**Community Economic Strategy** **Yes**  
*Economic Strategy Coordinates with Regional Strategy* Yes

**Growth & Investment Strategy** **Yes**  
*Identify Areas of Focus for Growth & Investment Strategy* Yes  
*Active G&I Strategy Development Discussions* NA  
*Planning Zoning Benchmarks* NA

**Development Opportunities on Corridor** **Yes**  
*Redevelopment Priorities Identified* No  
*Redevelopment Resources Identified* No  
*Market Potential Development Sites* No

**Guides and Resources**  
*Publish Development Guide* No  
*Zoning Orientation Package Provided to Staff & Committees* Yes  
*Zoning Training Funding* No

**Community Marketing Strategy** **Yes**

**Area Plans**  
*Downtown Plan* **Yes**  
*Downtown Development Authority* DDA Established 2004  
*Corridor Improvement Plan* **No**  
*Corridor Improvement Authority*

**Zoning**

Zoning Authority with Identified Commercial Corridors	Districts in Identified Commercial Corridors	Max Dwelling Density for Districts in Corridors	% of Districts in Corridors where Mixed Use is allowed by Right	% of Districts in Corridors where Multi-Family Use is allowed by Right	Max Building Height Allowed in Corridors
Village of Alanson	B-1   B-2	7	0%	0%	30 ft



## Talent Jobshed

Census Data	Core Place	G&I Area
	Village of Alanson	Village of Alanson, Littlefield Township
<b>Workers Living within Study Area</b>	<b>218</b>	<b>936</b>
Worker Density (per acre)	0.34	0.07
<b>Worker's Earnings</b>		
% with earnings \$1250/month or less	25%	29%
% with earnings \$1251/month to \$3333/month	50%	45%
% with earnings greater than \$3333/month	25%	26%
<b>Jobs Located in Area</b>	<b>189</b>	<b>354</b>
Job Density (per acre)	0.30	0.03

## Commute Data for Workers Employed in Core Place

Commuting data for workers residing from 2 - 175 miles from G&amp;I Area

<b>Commuting Workers</b>	<b>170</b>	<b>19% Commuting 5 Miles or Less</b>
<b>Total Daily One Way Commute for all Commuters</b>		
Route Distance (Miles)	4,165	
Commute Time (Minutes)	5,251	
<b>Total Annual Commute for all Commuters</b>		
Distance (Miles)	2,186,733	
Time (Hours)	<b>45,948</b>	
<b>Annual Commuting Costs</b>		
Total Fuel Cost	332,764	
Total Cost (IRS 2014 Standard Mileage Rate)	<b>\$1,224,570</b>	
<b>Average Per Worker Commute</b>	<b>Daily (2-Way)</b>	<b>Annual</b>
Distance (Miles)	49	12,863
Time (Hours)	1.0	270
Cost (IRS Standard Mileage Rate)	<b>\$27</b>	<b>\$7,203</b>

## Retail Activity

	Core Place Activity	G&I Area Activity	County Activity
<b>Total Retail Sales</b>	\$2,174,577	<b>\$9,524,675</b>	\$450,773,091
<b>Total Potential Retail Sales</b>	\$6,642,882	<b>\$26,751,351</b>	\$359,281,470
<b>Leakage</b>	\$4,468,305	<b>\$17,226,676</b>	(\$91,491,621)

Classification: **Retail Potential Exporter**

Residents of the Alanson Growth & Investment Area are making 64% of their purchases at businesses located outside the area.

Sales by Retail Store Type	Core Place Sales	Potential G&I Area Sales	Core Place Sales / Potential G&I Sales
Food & Beverage Stores	\$1,055,318	<b>\$3,320,811</b>	32%
Health/Personal Care Stores	\$0	<b>\$2,150,218</b>	0%
Clothing & Accessories Stores	\$0	<b>\$1,268,135</b>	0%
Sport/Hobby/Book/Music Stores	\$32,715	<b>\$624,482</b>	5%
General Merchandise Stores	\$0	<b>\$5,573,932</b>	0%
Food & Beverage Establishments	\$650,378	<b>\$2,422,809</b>	27%
E-Shopping/Mail-Order	\$0	<b>\$1,339,692</b>	0%

**Corridor Street Name(s):** Burr Avenue (US31) from South of Admirals Point Drive to south of Powers Road

**Corridor Classification:** Commercial

**Unit(s) of Government:** Village of Alanson

**Length:** 1.75 miles

**Street Classification:** Principal Arterial - Other

**2013 Traffic Volume(AADT):** 10,690 Source: MDOT

**Number of Traffic Lanes:** 2, Bi-Directional Traffic with Turn/Passing Lanes

**Parking:** Parallel

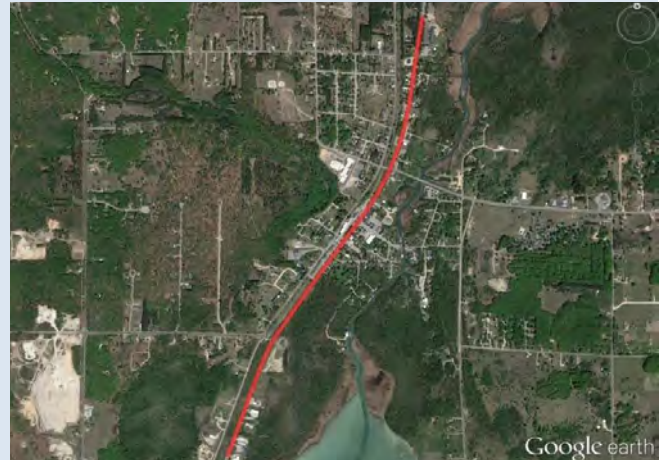
**Transit Service:** Straits Regional Ride - Flexible Route

**Bike Lane:** Yes

**Entertainment Venues:** No

**Pedestrian Amenities:** Sidewalks, Crosswalks

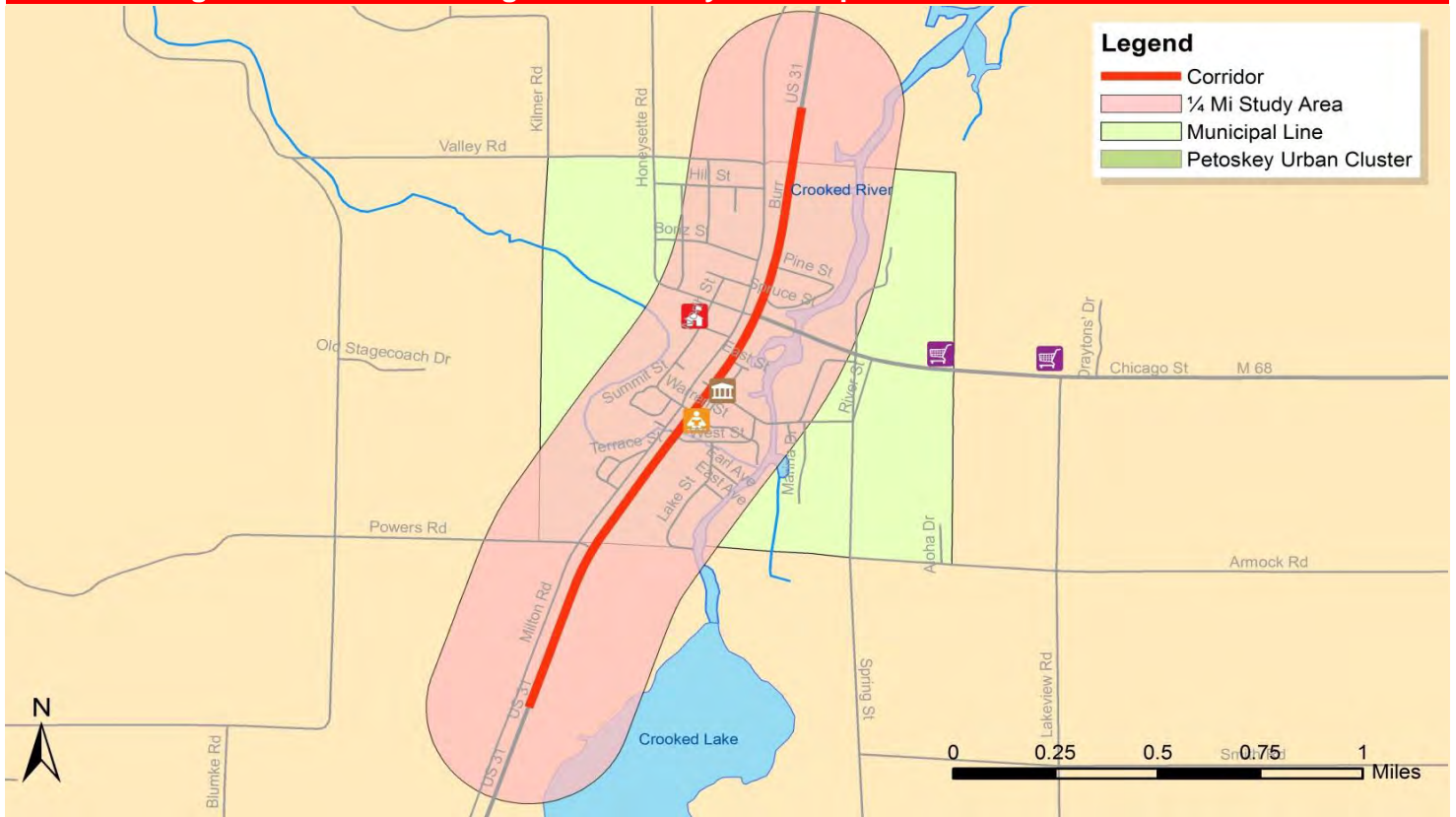
**Walk Score:** 46



### Corridor Overview

The US31 Corridor is a major regional route connecting Petoskey and Harbor Springs area to the Pellston Regional Airport and Interstate 75. It consists of a Central Business District bordered on the north and south by a General Business District. The CBD provides neighborhood shopping, personal services and professional offices that are compatible with and of service to Village residential uses. Tourist services are also included as being in character with the District.

### Corridor Segment and Surrounding 1/4 Mile Study Area Map



### Economic Development

Community policies or activities assisting economic development (Village of Alanson)

<b>Growth &amp; Investment Strategy</b>	Yes	<b>Community Economic Strategy</b>	Yes
<b>Identify Areas of Focus for G&amp;I</b>	Yes	<b>Community Marketing Strategy</b>	Yes
<b>Development Opportunities</b>	Yes	<b>Market Potential Development Sites</b>	No
<b>Publish Development Guide</b>	No	<b>Capital Improvement Plan</b>	No

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Alanson US31 Corridor	Village of Alanson	Alanson
<b>Total Population (2010)</b>	<b>1,289</b>	<b>738</b>	<b>2,978</b>
People per Acre	1.98	1.16	0.21
People per Square Mile	1,268	745	137
<b>Total Housing (2010)</b>	<b>655</b>	<b>429</b>	<b>1,774</b>
Gross Neighborhood Density (per acre)	1.01	0.68	0.13
<b>Study Area Size (Land Cover)</b>			
Acres	650.48	633.60	13,900.80
Square Miles	1.02	0.99	21.72
<b>Workers Living within Study Area</b>	<b>385</b>	<b>218</b>	<b>936</b>
% with earnings \$1250/month or less	28%	25%	29%
% with earnings \$1251/month to \$3333/month	48%	50%	45%
% with earnings greater than \$3333/month	24%	25%	26%
<b>Jobs Located within Study Area</b>	<b>210</b>	<b>189</b>	<b>354</b>
Job Density (per acre)	0.32	0.30	0.03

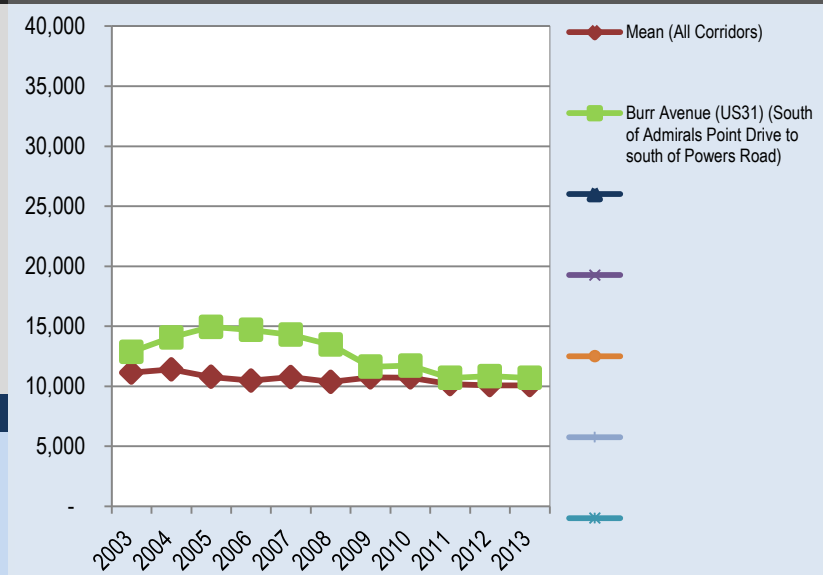
Zoning

District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	
B-1   B-2	0%	0%	0%	0.0	0.0	30 ft

Infrastructure

<b>Public Utilities</b>		
Sewer	Yes	<i>Additional Capacity</i>
Water	No	<i>No Additional Capacity</i>
<b>Energy Utilities</b>		
Underground Electric	No	
Renewable Energy Production	No	
Natural Gas	Yes	
<b>Broadband</b>	Yes - 5 Technologies <i>(Fiber, Cable, DSL, 4G, Fixed Wireless)</i>	

Traffic Counts



Policy

<b>Downtown Plan</b>	Yes
DDA	
<b>Corridor Improvement Plan</b>	No

Placemaking Elements

<b>Theaters/Entertainment Venues</b>	No	<b>Grocery Stores</b>	No
		<b>Restaurants</b>	Yes
		<b>Sidewalk Cafés</b>	No
		<b>Parks</b>	Yes
<b>Iconic Buildings</b>	Yes	<b>Pocket Parks</b>	No
Alanson Railroad Depot		<b>Public Art Installations</b>	Yes
		<b>Wayfinding</b>	Yes
		<b>Pedestrian Connections</b>	Yes



**Corridor Street Name(s):** M66 from US31 to Lakeview Road

**Corridor Classification:** Commercial

**Unit(s) of Government:** Village of Alanson

**Length:** 0.78 miles

**Street Classification:** Minor Arterial

**2013 Traffic Volume(AADT):** 6,228 Source: MDOT

**Number of Traffic Lanes:** 2, Bi-Directional Traffic with Turn/Passing Lanes

**Parking:** No Street Parking

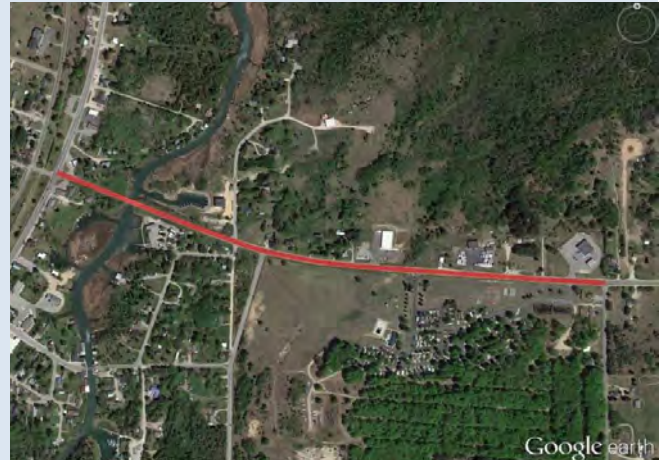
**Transit Service:** Straits Regional Ride - Flexible Route

**Bike Lane:** No

**Entertainment Venues:** No

**Pedestrian Amenities:** None

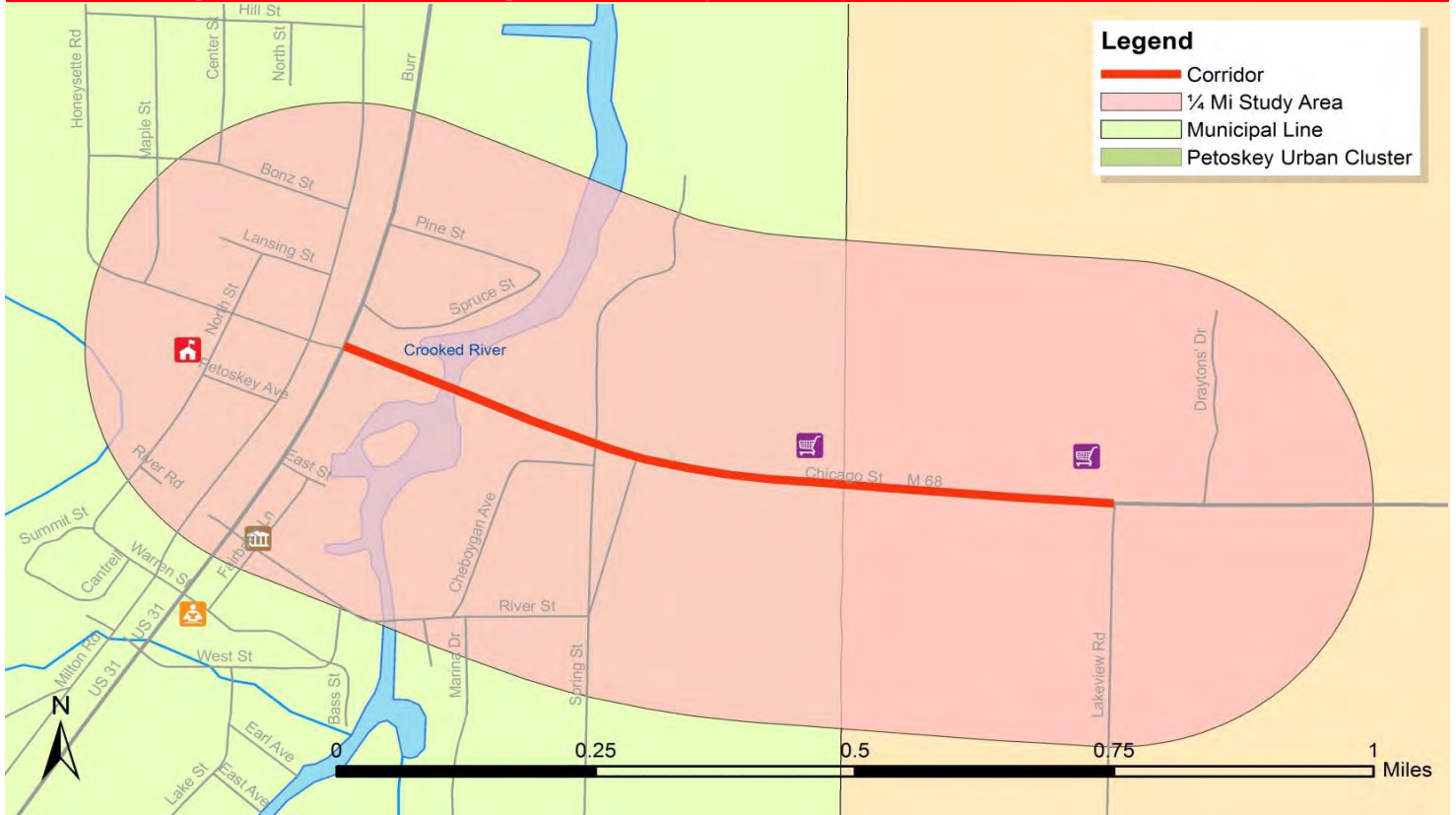
**Walk Score:** 37



### Corridor Overview

The M66 Corridor is a regional route providing a connection to Indian River and Interstate 75. It consists of a General Business District that is designed to provide sites for diversified business types served by local and transiting traffic.

### Corridor Segment and Surrounding 1/4 Mile Study Area Map



### Economic Development

Community policies or activities assisting economic development (Village of Alanson)

<b>Growth &amp; Investment Strategy</b>	Yes	<b>Community Economic Strategy</b>	Yes
<b>Identify Areas of Focus for G&amp;I</b>	Yes	<b>Community Marketing Strategy</b>	Yes
<b>Development Opportunities</b>	Yes	<b>Market Potential Development Sites</b>	No
<b>Publish Development Guide</b>	No	<b>Capital Improvement Plan</b>	No

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Alanson M68 Corridor	Village of Alanson	Alanson
<b>Total Population (2010)</b>	<b>774</b>	<b>738</b>	<b>2,978</b>
People per Acre	2.11	1.16	0.21
People per Square Mile	1,348	745	137
<b>Total Housing (2010)</b>	<b>531</b>	<b>429</b>	<b>1,774</b>
Gross Neighborhood Density (per acre)	1.45	0.68	0.13
<b>Study Area Size (Land Cover)</b>			
Acres	367.37	633.60	13,900.80
Square Miles	0.57	0.99	21.72
<b>Workers Living within Study Area</b>	<b>235</b>	<b>218</b>	<b>936</b>
% with earnings \$1250/month or less	27%	25%	29%
% with earnings \$1251/month to \$3333/month	49%	50%	45%
% with earnings greater than \$3333/month	24%	25%	26%
<b>Jobs Located within Study Area</b>	<b>210</b>	<b>189</b>	<b>354</b>
Job Density (per acre)	0.57	0.30	0.03

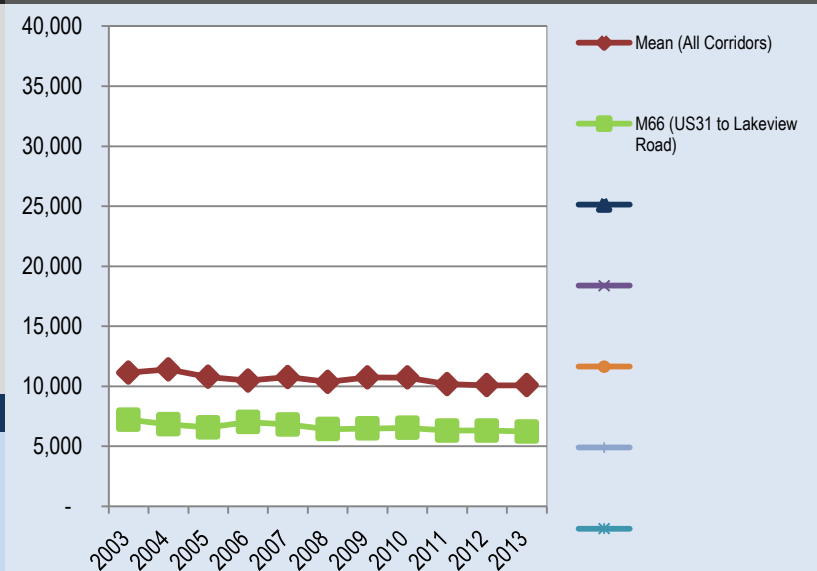
Zoning

District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	
B-1   B-2	0%	0%	0%	0.0	0.0	30 ft

Infrastructure

<b>Public Utilities</b>		
Sewer	Yes	<i>Additional Capacity</i>
Water	No	<i>No Additional Capacity</i>
<b>Energy Utilities</b>		
Underground Electric	No	
Renewable Energy Production	No	
Natural Gas	Yes	
<b>Broadband</b>	Yes - 5 Technologies <i>(Fiber, Cable, DSL, 4G, Fixed Wireless)</i>	

Traffic Counts



Policy

<b>Downtown Plan</b>	Yes
DDA	
<b>Corridor Improvement Plan</b>	No

Placemaking Elements

<b>Theaters/Entertainment Venues</b>	No	<b>Grocery Stores</b>	Yes
		<b>Restaurants</b>	No
		<b>Sidewalk Cafés</b>	No
		<b>Parks</b>	Yes
<b>Iconic Buildings</b>	No	<b>Pocket Parks</b>	No
		<b>Public Art Installations</b>	Yes
		<b>Wayfinding</b>	Yes
		<b>Pedestrian Connections</b>	Yes

**Corridor Street Name(s):** River Street from US31 to Marina Drive

**Corridor Classification:** Commercial

**Unit(s) of Government:** Village of Alanson

**Length:** 0.26 miles

**Street Classification:** Local

**2013 Traffic Volume(AADT):** NA

**Number of Traffic Lanes:** 2, Bi-Directional Traffic

**Parking:** Parallel, Diagonal

**Transit Service:** Straits Regional Ride - Flexible Route

**Bike Lane:** No

**Entertainment Venues:** No

**Pedestrian Amenities:** Sidewalks

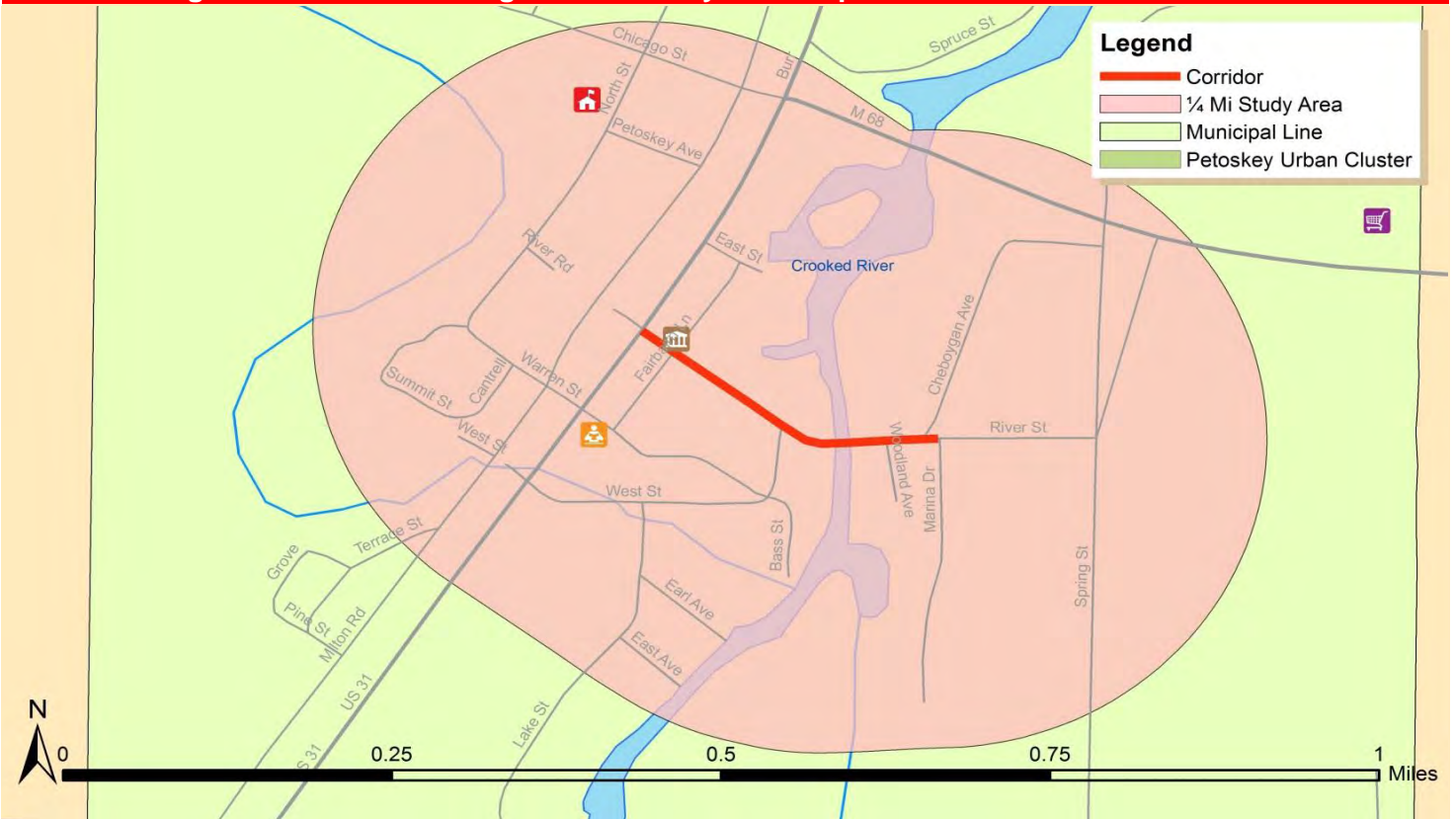
**Walk Score:** 54



### Corridor Overview

The River Street Corridor is a primarily local route that lies in the Central Business District. The CBD provides neighborhood shopping, personal services and professional offices that are compatible with and of service to Village residential uses. Tourist services are also included as being in character with the District. River Street plays host to what is billed as the worlds shortest swing bridge over the Crooked River.

### Corridor Segment and Surrounding 1/4 Mile Study Area Map



### Economic Development

Community policies or activities assisting economic development (Village of Alanson)

<b>Growth &amp; Investment Strategy</b>	Yes	<b>Community Economic Strategy</b>	Yes
<b>Identify Areas of Focus for G&amp;I</b>	Yes	<b>Community Marketing Strategy</b>	Yes
<b>Development Opportunities</b>	Yes	<b>Market Potential Development Sites</b>	No
<b>Publish Development Guide</b>	No	<b>Capital Improvement Plan</b>	No

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Alanson River Street	Village of Alanson	Alanson
<b>Total Population (2010)</b>	<b>524</b>	<b>738</b>	<b>2,978</b>
People per Acre	2.57	1.16	0.21
People per Square Mile	1,642	745	137
<b>Total Housing (2010)</b>	<b>323</b>	<b>429</b>	<b>1,774</b>
Gross Neighborhood Density (per acre)	1.58	0.68	0.13
<b>Study Area Size (Land Cover)</b>			
Acres	204.23	633.60	13,900.80
Square Miles	0.32	0.99	21.72
<b>Workers Living within Study Area</b>	<b>155</b>	<b>218</b>	<b>936</b>
% with earnings \$1250/month or less	28%	25%	29%
% with earnings \$1251/month to \$3333/month	44%	50%	45%
% with earnings greater than \$3333/month	28%	25%	26%
<b>Jobs Located within Study Area</b>	<b>189</b>	<b>189</b>	<b>354</b>
Job Density (per acre)	0.93	0.30	0.03

Zoning

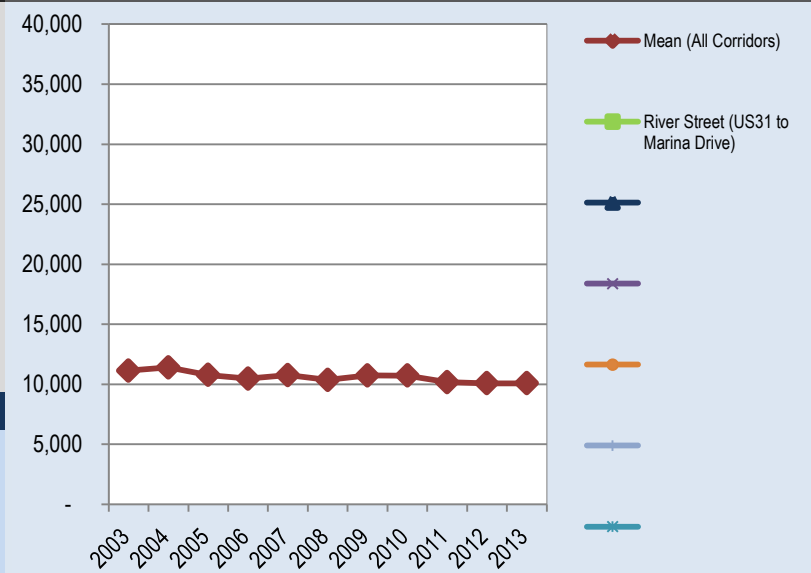
District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	
B-1	0%	0%	0%	0.0	0.0	30 ft

Infrastructure

<b>Public Utilities</b>		
Sewer	Yes	<i>Additional Capacity</i>
Water	No	<i>No Additional Capacity</i>
<b>Energy Utilities</b>		
Underground Electric	No	
Renewable Energy Production	No	
Natural Gas	Yes	
<b>Broadband</b>	Yes - 5 Technologies <i>(Fiber, Cable, DSL, 4G, Fixed Wireless)</i>	

Traffic Counts

(Data Unavailable for Corridor)



Policy

<b>Downtown Plan</b>	Yes
DDA	
<b>Corridor Improvement Plan</b>	No

Placemaking Elements

<b>Theaters/Entertainment Venues</b>	No	<b>Grocery Stores</b>	No
		<b>Restaurants</b>	Yes
		<b>Sidewalk Cafés</b>	No
		<b>Parks</b>	Yes
<b>Iconic Buildings</b>	Yes	<b>Pocket Parks</b>	No
Alanson Swing Bridge		<b>Public Art Installations</b>	Yes
		<b>Wayfinding</b>	Yes
		<b>Pedestrian Connections</b>	Yes

**Growth & Investment Area Unit(s) of Government:**

*City of Harbor Springs, Little Traverse Township, West Traverse Township*

**Core Place Census Areas:**

*City of Harbor Springs*

**County**

*Emmet*

**Census Class**

*Rural*

**Land Area**

**G&I Area**

32.62 sq. miles

**Core Place**

1.29 sq. miles

**Aerial Map with Commercial Corridors**



**3 Commercial Corridors Identified**

<b>Highest Corridor Traffic Count (Annual Average Daily Traffic)</b>	4,751	<i>2013 Data Year</i>
<b>Population Density Range of G&amp;I Area Corridors (per acre)</b>	2.0 - 3.5	<i>Density calculations a derived from the area within a 1/4 mile of Corridor (Corridor Study Area)</i>
<b>Gross Neighborhood Density Range of G&amp;I Area Corridors (per acre)</b>	2.7 - 3.1	
<b>Job Density Range of G&amp;I Area Corridors (per acre)</b>	0.6 - 3.4	
<b>Worker Density Range of G&amp;I Area Corridors (per acre)</b>	0.9 - 1.1	

**Retail**

<b>Total Sales</b>	\$25,488,740	<b>Classification:</b>	Retail Potential Exporter
<b>Potential Sales</b>	\$66,634,885		
<b>Leakage</b>	\$41,146,145	<b>Seasonal Housing:</b>	39.9% of G&I Area Housing

**Sprawl**

*Percentage of Housing in the Core Place is Declining by -2.9%*

**Population**

**2000-2010:** *Declining at -5.5% with the Core Place Declining at -23.8%*

**Average Age:** 46.3 [*+11.1% change from 2000 Census*]

**Demographic Shifts:** *Generation X had the largest % gain (up 7.2%); Millennial Generation had the largest % loss (down -24.2%)*

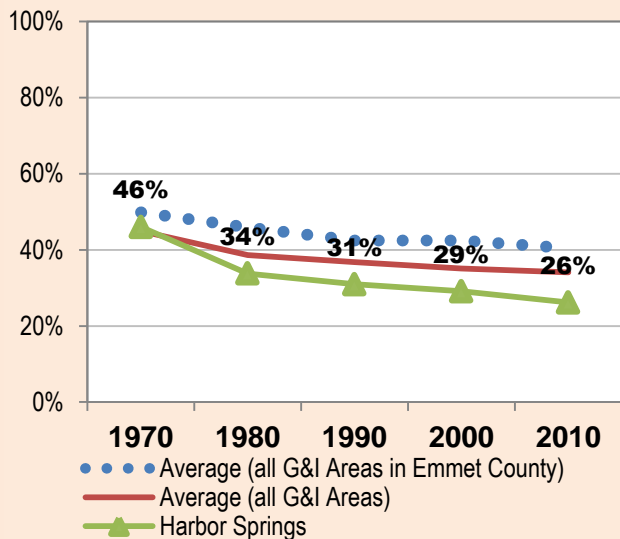
**Jobshed**

*Worker Importer – Number of Jobs exceeds Resident Worker population by 6%*

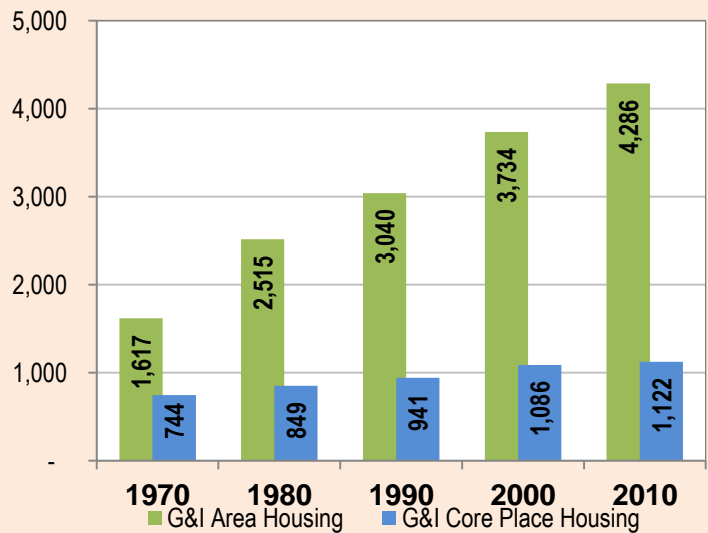
Population & Housing Trends

Census Data	Core Place	G&I Area
	City of Harbor Springs	City of Harbor Springs, West Traverse Township, Little Traverse Township
<b>Total Population (2010)</b>	<b>1,194</b>	<b>5,180</b>
Percentage Change from 2000	<b>-23.8%</b>	<b>-5.5%</b>
People per Acre	1.45	0.25
People per Square Mile	926	159
Average Age [% Change from 2000]	<b>51.5 [+14.8%]</b>	<b>46.3 [+11.1%]</b>
<b>Total Housing (2010)</b>	<b>1,122</b>	<b>4,286</b>
Percentage Change from 2000	<b>3.3%</b>	<b>14.8%</b>
Gross Neighborhood Density (per acre)	1.36	0.21
<b>Total Households (2010)</b>	<b>558</b>	<b>2,296</b>
Percentage of Households without Children (under 18)	76%	73%
<b>Study Area Size (Land Cover)</b>		
Acres	825.60	20,876.80
Square Miles	1.29	32.62

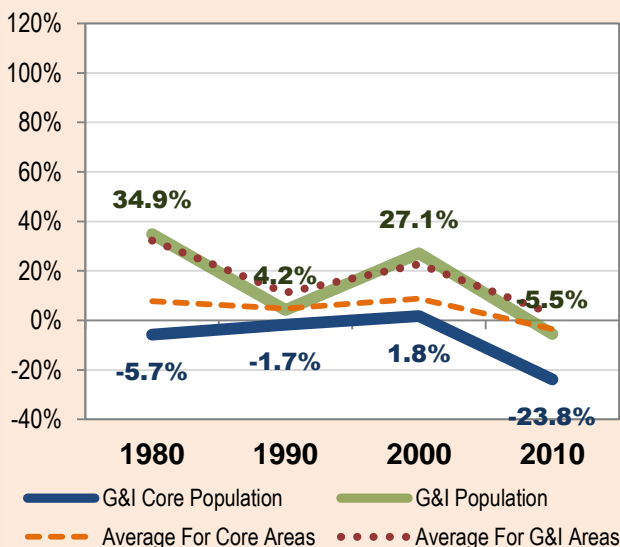
Housing in Core Place as a Percentage of Total Growth & Investment Area



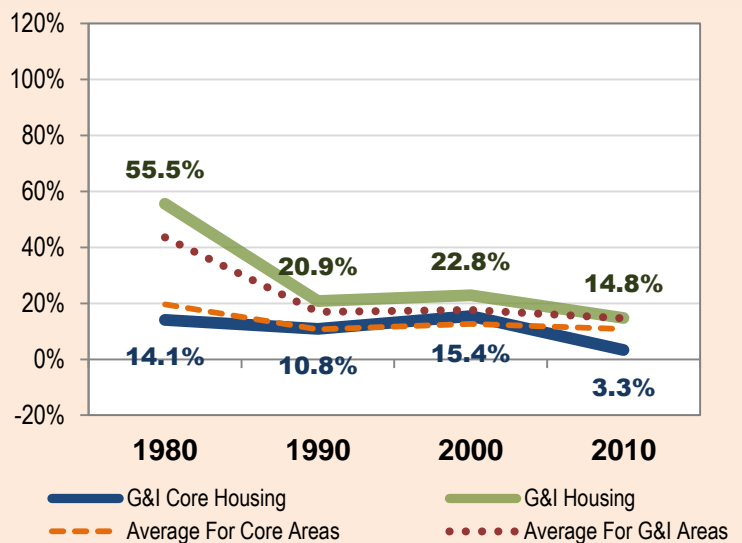
Housing Units in G&I Area and Core Place



Percentage Change in Population in G&I Area and Core Place



Percentage Change in Housing Units in G&I Area and Core Place



**Growth & Investment Readiness Assessment**

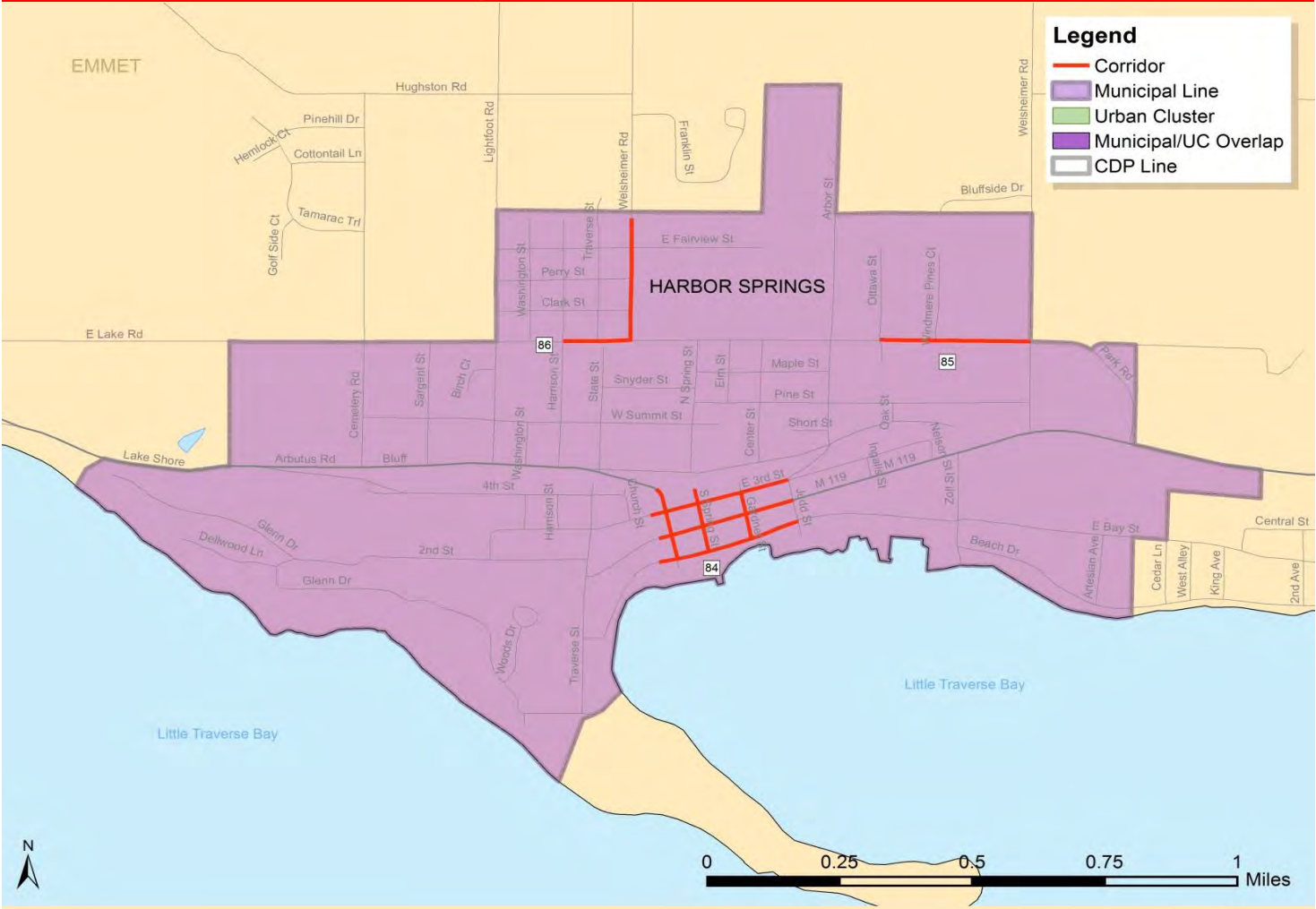
**Criteria Status**

		Criteria Status	
Initial Selection Criteria	1	Municipal Water	Yes
	2	Municipal Sewer	Yes
	3	Government Staff	Yes
	4	Master Plan Includes Higher Density Center	Yes
	5	Zoning Ordinance Supporting Master Plan Density Center	Yes
Census Data	6	Core Place Population Increasing	No
	7	Housing Growth Rate Over 15% (2000-2010 Census)	No
	8	Core Place Housing Growth Increasing Faster than Surrounding Area	No
	9	Census Class (Rural, Urban Cluster, Urbanized Area, MSA)	Rural
	10	Job Density Over 75 Jobs Per Acre in Commercial Corridors	No
	11	50% of Workers Living within 5 miles	No
Zoning Policy	12	Zoned Densities Greater Than 30 Dwellings/Acre in Commercial Corridors	Yes
	13	Zoning Allows Mixed-Use by Right in Commercial Corridors	Yes
	14	Zoning Allows Multi-Family Residential by Right in Commercial Corridors	Yes
	15	Building Height Limits Greater than 35 feet in Commercial Corridors	Yes
	16	No On Site Parking Requirement in Central Business District	No
	17	Density Bonuses Offered for Contributions Towards Public Policy Goals	No
Placemaking	18	4 Key Placemaking Elements in Corridors	No
	19	Retail Hub	No
	20	Educational Institutions (Trade Schools, Community Colleges, Universities)	No
	21	Contain Medical Centers	No
	23	Walkable Density CBD or Commercial Corridors (20-30 Dwellings per Acre)	No
Opportunity	24	Community Identified Development Opportunities	No
	25	Marketing Redevelopment & Infill Sites	No
	22	Fixed Route Transit (Headways 15 mins or less)	No
	30	Commercial Corridors with High Traffic Count AADT (Over 10k, Over 25k)	No
Infrastructure	26	Additional Water Capacity	Yes
	27	Additional Sewer Capacity	Yes
	28	Broadband Service over 1 Gbps Available	No
	29	Municipal WiFi	Yes

Commercial Corridors

ID	Name	Corridor Length (feet)	Population Density (People per acre)	Housing Density (Dwellings per acre)	Job Density (Jobs per acre)	Worker Density (Workers per acre)
84	Harbor Springs CBD	6,346	2.7	3.5	3.4	0.9
85	Harbor Springs East Lake Street	1,520	3.1	2.1	0.6	1.1
86	Harbor Springs West Lake Street-Fairview Plaza	1,997	2.9	2.0	1.5	1.1

Growth & Investment Core Place Map with Commercial Corridors





Housing Data

Census-ACS Data

Core Place

City of Harbor Springs

G&I Area

City of Harbor Springs, West Traverse Township, Little Traverse Township

Housing Efficiency Rating (Average HERS)

Efficiency compared to 2012 DOE Challenge Home (30 HERS)

**300**

270% Less Efficient

**256**

226% Less Efficient

Percentage Built by Year

Before 1940	34%	17%
1940-1949	8%	4%
1950-1959	10%	7%
1960-1969	8%	9%
1970-1979	10%	16%
1980-1989	10%	15%
1990-1999	16%	20%
2000-2009	4%	11%
Later than 2010	0%	0%

Average Age

**1955**

**1970**

Median Value

**\$205,300**

City of Harbor Springs	\$205,300
Little Traverse Township	\$181,300
West Traverse Township	\$321,400

Home Heating Fuel

Percent of Homes Natural Gas	87%	74%
Percent of Homes Using Propane	<b>1%</b>	<b>14%</b>
Percent of Homes Using Wood	2%	5%
Percent of Homes Using Solar Energy	0%	0%

Personal Income

Census-ACS Data (2008-2012 5 Year Summary File)

Median Household Income (2012 Dollars)

**Core Place \$42,019**

City of Harbor Springs \$42,019

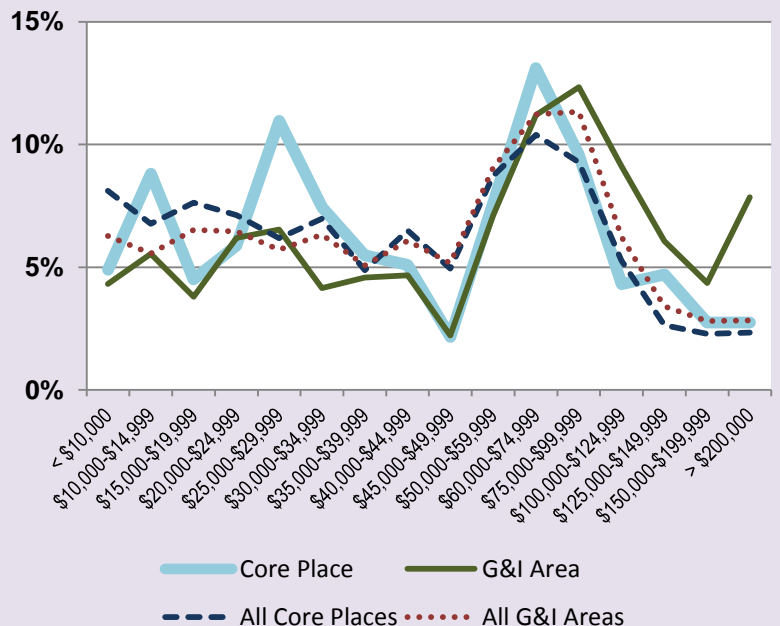
G&I Area

City of Harbor Springs \$42,019

Little Traverse Township \$56,779

West Traverse Township \$88,375

Household Income Distribution



Per Capita Annual Income (2012 Dollars)

**Core Place \$34,286**

**G&I Area \$41,161**

**Policy**

Data Source: Commercial Corridor Inventory Interview	Core Place Units of Government Interviewed			
	City of Harbor Springs			
<b>Year of Master Plan Approval</b>	<b>2007</b>			
<i>Master Plan Update</i>	2014			
<b>Community Economic Strategy</b>	<b>Yes</b>			
<i>Economic Strategy Coordinates with Regional Strategy</i>	Yes			
<b>Growth &amp; Investment Strategy</b>	<b>Yes</b>			
<i>Identify Areas of Focus for Growth &amp; Investment Strategy</i>	No			
<i>Active G&amp;I Strategy Development Discussions</i>	NA			
<i>Planning Zoning Benchmarks</i>	Yes			
<b>Development Opportunities on Corridor</b>	<b>No</b>			
<i>Redevelopment Priorities Identified</i>	No			
<i>Redevelopment Resources Identified</i>	NA			
<i>Market Potential Development Sites</i>	No			
<b>Guides and Resources</b>				
<i>Publish Development Guide</i>	No			
<i>Zoning Orientation Package Provided to Staff &amp; Committees</i>	Yes			
<i>Zoning Training Funding</i>	Yes			
<b>Community Marketing Strategy</b>	<b>Yes</b>			
<b>Area Plans</b>				
<i>Downtown Plan</i>	<b>Yes</b>			
<i>Downtown Development Authority</i>	DDA Established 1981			
<i>Corridor Improvement Plan</i>	<b>No</b>			
<i>Corridor Improvement Authority</i>				

**Zoning**

Zoning Authority with Identified Commercial Corridors	Districts in Identified Commercial Corridors	Max Dwelling Density for Districts in Corridors	% of Districts in Corridors where Mixed Use is allowed by Right	% of Districts in Corridors where Multi-Family Use is allowed by Right	Max Building Height Allowed in Corridors
City of Harbor Springs	AR   R-1C   R-2   MHP   C   R/O/S   TR   CBD   B-1   B-2   WF	45	27%	27%	40 ft



## Talent Jobshed

Census Data	Core Place	G&I Area
	City of Harbor Springs	City of Harbor Springs, West Traverse Township, Little Traverse Township
<b>Workers Living within Study Area</b>	<b>406</b>	<b>1,772</b>
Worker Density (per acre)	0.49	0.08
<b>Worker's Earnings</b>		
% with earnings \$1250/month or less	29%	29%
% with earnings \$1251/month to \$3333/month	42%	38%
% with earnings greater than \$3333/month	29%	32%
<b>Jobs Located in Area</b>	<b>748</b>	<b>1,885</b>
Job Density (per acre)	0.91	0.09

## Commute Data for Workers Employed in Core Place

Commuting data for workers residing from 2 - 175 miles from G&amp;I Area

<b>Commuting Workers</b>	<b>611</b>	<b>26% Commuting 5 Miles or Less</b>
<b>Total Daily One Way Commute for all Commuters</b>		
Route Distance (Miles)	18,330	
Commute Time (Minutes)	23,812	
<b>Total Annual Commute for all Commuters</b>		
Distance (Miles)	9,623,511	
Time (Hours)	<b>208,353</b>	
<b>Annual Commuting Costs</b>		
Total Fuel Cost	1,464,447	
Total Cost (IRS 2014 Standard Mileage Rate)	<b>\$5,389,166</b>	
<b>Average Per Worker Commute</b>	<b>Daily (2-Way)</b>	<b>Annual</b>
Distance (Miles)	60	15,750
Time (Hours)	1.3	341
Cost (IRS Standard Mileage Rate)	<b>\$34</b>	<b>\$8,820</b>

## Retail Activity

	Core Place Activity	G&I Area Activity	County Activity
<b>Total Retail Sales</b>	\$19,015,377	<b>\$25,488,740</b>	\$450,773,091
<b>Total Potential Retail Sales</b>	\$14,981,714	<b>\$66,634,885</b>	\$359,281,470
<b>Leakage</b>	(\$4,033,663)	<b>\$41,146,145</b>	(\$91,491,621)

Classification: *Retail Potential Exporter*

Residents of the Harbor Springs Growth & Investment Area are making 62% of their purchases at businesses located outside the area.

Sales by Retail Store Type	Core Place Sales	Potential G&I Area Sales	Core Place Sales / Potential G&I Sales
Food & Beverage Stores	\$3,176,587	<b>\$8,376,766</b>	38%
Health/Personal Care Stores	\$903,861	<b>\$5,716,403</b>	16%
Clothing & Accessories Stores	\$1,300,617	<b>\$2,929,376</b>	44%
Sport/Hobby/Book/Music Stores	\$662,962	<b>\$1,524,695</b>	43%
General Merchandise Stores	\$820,964	<b>\$13,824,758</b>	6%
Food & Beverage Establishments	\$4,781,714	<b>\$5,689,142</b>	84%
E-Shopping/Mail-Order	\$0	<b>\$3,437,786</b>	0%

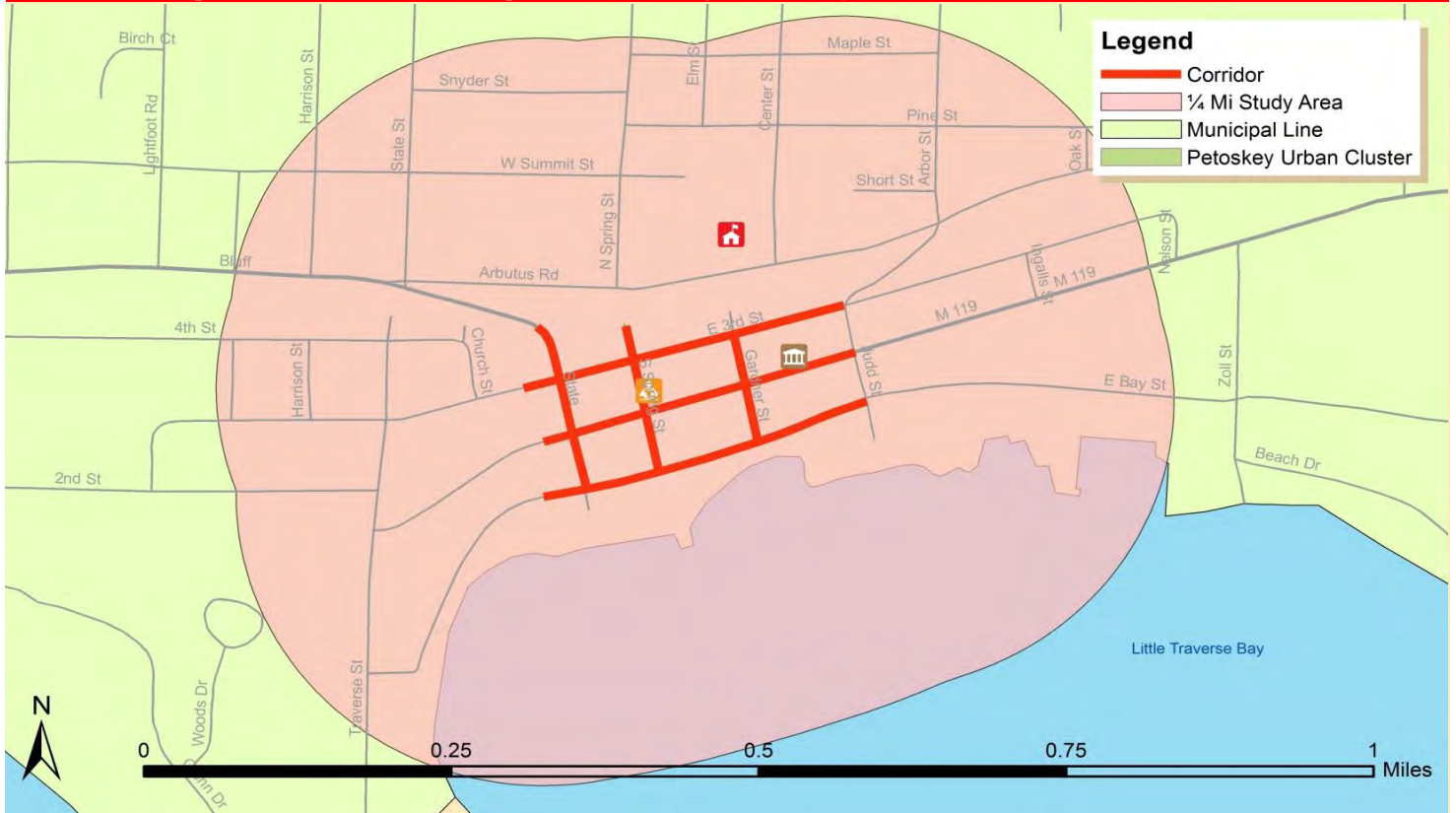
<b>Corridor Street Name(s):</b>	State Street (M119) from North of 3rd Street to Bay Street; Main Street (M119) from West of State Street to Judd Street; 3rd Street from West of State Street to Judd Street; South Spring Street from North End to Bay Street; Gardner Street from 3rd Street to Bay Street; Bay Street from West of State Street to Judd Street
<b>Corridor Classification:</b>	Central Business District
<b>Unit(s) of Government:</b>	City of Harbor Springs
<b>Length:</b>	1.20 miles
<b>Street Classification:</b>	Major Collector, Local
<b>2013 Traffic Volume(AADT):</b>	4,751 Source: MDOT, N/A
<b>Number of Traffic Lanes:</b>	1-2, Sections with Bi-Directional or One Way Traffic
<b>Parking</b>	Parallel
<b>Transit Service:</b>	Friendship Centers of Emmet County - Senior Tran
<b>Bike Lane:</b>	No
<b>Entertainment Venues:</b>	No
<b>Pedestrian Amenities:</b>	Sidewalks, Crosswalks, Mid-Block Crosswalks
<b>Walk Score</b>	88



### Corridor Overview

The downtown business district is compact and walkable. Businesses downtown include convenience uses which cater to the daily needs of the local population, and specialty boutique shops that attract the resort population. While a balanced mixture of uses exists, a majority of downtown uses serve summer visitors. The majority of new building in this area will come in the form of remodels or redevelopment of a site.

### Corridor Segment and Surrounding 1/4 Mile Study Area Map



### Economic Development

Community policies or activities assisting economic development (City of Harbor Springs)

<b>Growth &amp; Investment Strategy</b>	Yes	<b>Community Economic Strategy</b>	Yes
<b>Identify Areas of Focus for G&amp;I</b>	No	<b>Community Marketing Strategy</b>	Yes
<b>Development Opportunities</b>	No	<b>Market Potential Development Sites</b>	No
<b>Publish Development Guide</b>	No	<b>Capital Improvement Plan</b>	No

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Harbor Springs CBD	City of Harbor Springs	Harbor Springs
<b>Total Population (2010)</b>	<b>537</b>	<b>1,194</b>	<b>5,180</b>
People per Acre	2.71	1.45	0.25
People per Square Mile	1,735	926	159
<b>Total Housing (2010)</b>	<b>697</b>	<b>1,122</b>	<b>4,286</b>
Gross Neighborhood Density (per acre)	3.52	1.36	0.21
<b>Study Area Size (Land Cover)</b>			
Acres	198.14	825.60	20,876.80
Square Miles	0.31	1.29	32.62
<b>Workers Living within Study Area</b>	<b>180</b>	<b>406</b>	<b>1,772</b>
% with earnings \$1250/month or less	29%	29%	29%
% with earnings \$1251/month to \$3333/month	44%	42%	38%
% with earnings greater than \$3333/month	27%	29%	32%
<b>Jobs Located within Study Area</b>	<b>671</b>	<b>748</b>	<b>1,885</b>
Job Density (per acre)	3.39	0.91	0.09

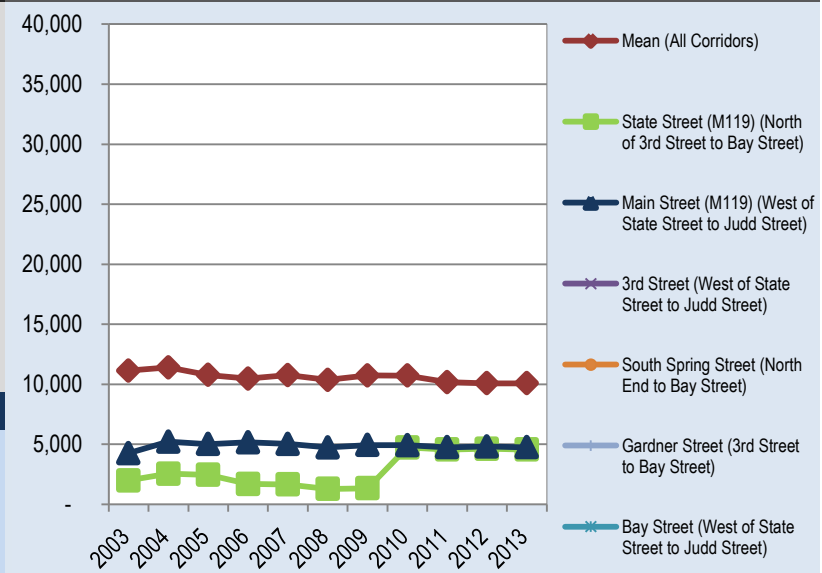
Zoning

District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	
R-2   TR   CBD   B-1   B-2   WF	67%	33%	33%	8.7	44.6	35 ft

Infrastructure

<b>Public Utilities</b>		
Sewer	Yes	<i>Additional Capacity</i>
Water	Yes	<i>Additional Capacity</i>
<b>Energy Utilities</b>		
Underground Electric	Yes	
Renewable Energy Production	No	
Natural Gas	Yes	
<b>Broadband</b>	Yes - 6 Technologies	
<i>(Fiber, Cable, DSL, WiFi, 4G, Fixed Wireless)</i>		

Traffic Counts



Policy

<b>Downtown Plan</b>	Yes
DDA	
<b>Corridor Improvement Plan</b>	No

Placemaking Elements

<b>Theaters/Entertainment Venues</b>	No	<b>Grocery Stores</b>	No
		<b>Restaurants</b>	Yes
		<b>Sidewalk Cafés</b>	Yes
		<b>Parks</b>	Yes
<b>Iconic Buildings</b>	Yes	<b>Pocket Parks</b>	No
<i>Historic City Hall, Shay Complex, Chief Andrew J Blackbird House, Holy Childhood of Jesus Church,</i>		<b>Public Art Installations</b>	No
		<b>Wayfinding</b>	No
		<b>Pedestrian Connections</b>	Yes

**Corridor Street Name(s):** East Lake Street from Ottawa Street to Hoyt Street

**Corridor Classification:** Commercial

**Unit(s) of Government:** City of Harbor Springs

**Length:** 0.29 miles

**Street Classification:** Major Collector

**2013 Traffic Volume(AADT):** NA

**Number of Traffic Lanes:** 2, Bi-Directional Traffic

**Parking:** No Street Parking

**Transit Service:** Friendship Centers of Emmet County - Senior Tran

**Bike Lane:** No

**Entertainment Venues:** No

**Pedestrian Amenities:** Sidewalks, Crosswalks

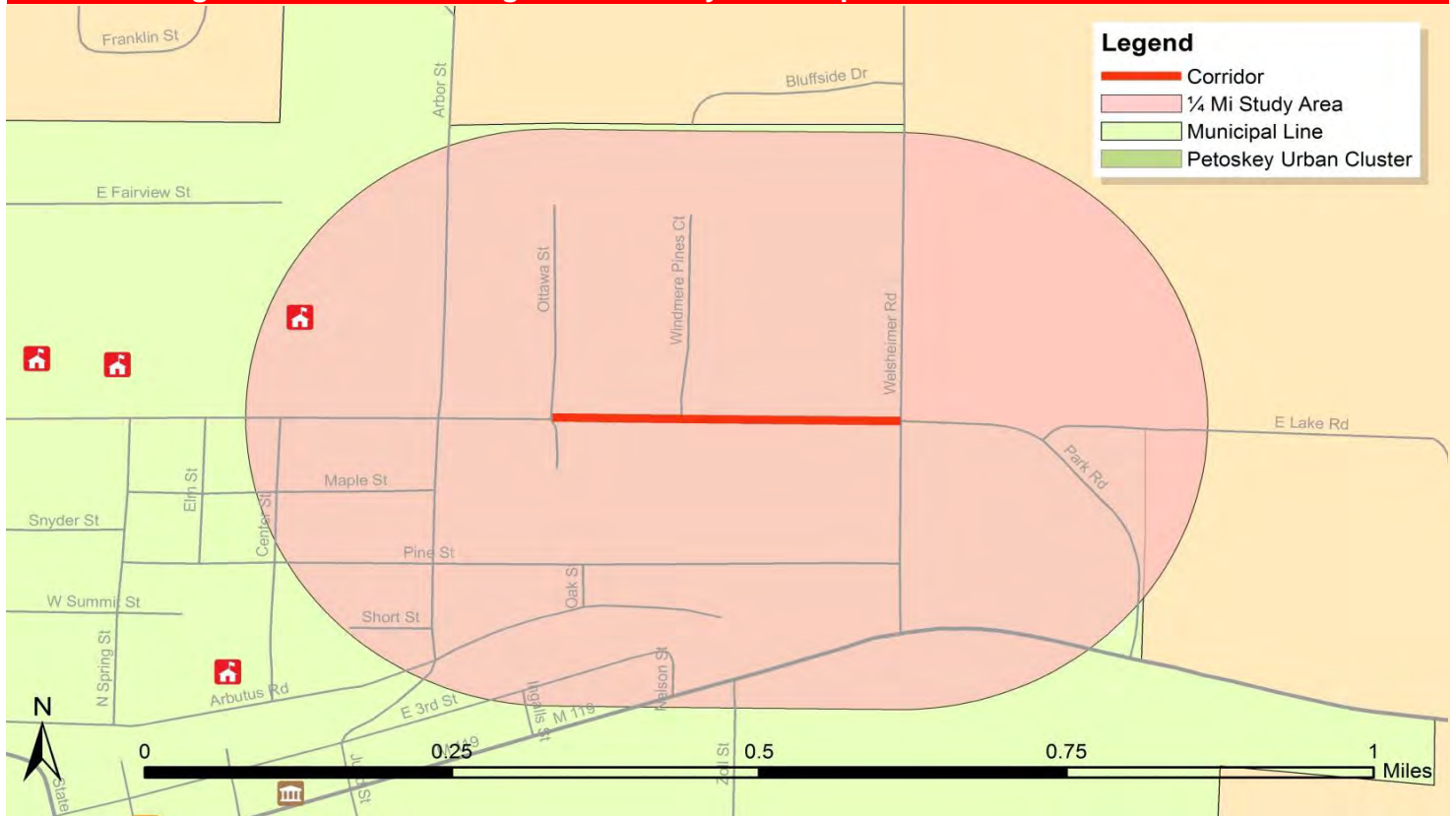
**Walk Score** 52



### Corridor Overview

The East Lake Street Corridor is a local route and mainly consists of office buildings of a scale similar to the surround residential uses.

### Corridor Segment and Surrounding 1/4 Mile Study Area Map



### Economic Development

Community policies or activities assisting economic development (City of Harbor Springs)

<b>Growth &amp; Investment Strategy</b>	Yes	<b>Community Economic Strategy</b>	Yes
<b>Identify Areas of Focus for G&amp;I</b>	No	<b>Community Marketing Strategy</b>	Yes
<b>Development Opportunities</b>	No	<b>Market Potential Development Sites</b>	No
<b>Publish Development Guide</b>	No	<b>Capital Improvement Plan</b>	No

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Harbor Springs East Lake Street	City of Harbor Springs	Harbor Springs
<b>Total Population (2010)</b>	<b>675</b>	<b>1,194</b>	<b>5,180</b>
People per Acre	3.12	1.45	0.25
People per Square Mile	1,999	926	159
<b>Total Housing (2010)</b>	<b>454</b>	<b>1,122</b>	<b>4,286</b>
Gross Neighborhood Density (per acre)	2.10	1.36	0.21
<b>Study Area Size (Land Cover)</b>			
Acres	216.13	825.60	20,876.80
Square Miles	0.34	1.29	32.62
<b>Workers Living within Study Area</b>	<b>240</b>	<b>406</b>	<b>1,772</b>
% with earnings \$1250/month or less	29%	29%	29%
% with earnings \$1251/month to \$3333/month	46%	42%	38%
% with earnings greater than \$3333/month	25%	29%	32%
<b>Jobs Located within Study Area</b>	<b>123</b>	<b>748</b>	<b>1,885</b>
Job Density (per acre)	0.57	0.91	0.09

Zoning

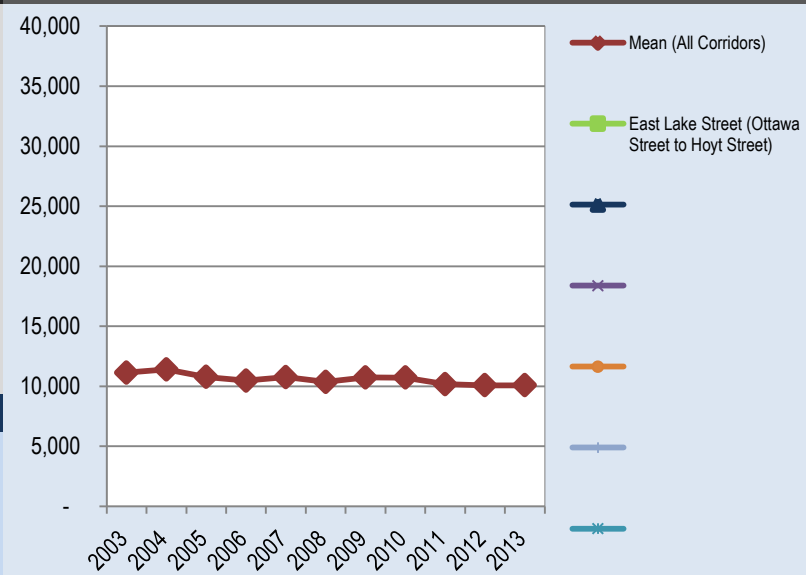
District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	
AR   R-1C   MHP   R/O/S	100%	25%	25%	3.6	14.1	35 ft

Infrastructure

<b>Public Utilities</b>		
Sewer	Yes	<i>Additional Capacity</i>
Water	Yes	<i>Additional Capacity</i>
<b>Energy Utilities</b>		
Underground Electric	Yes	
Renewable Energy Production	No	
Natural Gas	Yes	
<b>Broadband</b>	Yes - 6 Technologies <i>(Fiber, Cable, DSL, WiFi, 4G, Fixed Wireless)</i>	

Traffic Counts

(Data Unavailable for Corridor)



Policy

<b>Downtown Plan</b>	No
<i>Outside DDA</i>	
<b>Corridor Improvement Plan</b>	No

Placemaking Elements

<b>Theaters/Entertainment Venues</b>	No	<b>Grocery Stores</b>	No
		<b>Restaurants</b>	No
		<b>Sidewalk Cafés</b>	No
		<b>Parks</b>	No
<b>Iconic Buildings</b>	No	<b>Pocket Parks</b>	No
		<b>Public Art Installations</b>	No
		<b>Wayfinding</b>	No
		<b>Pedestrian Connections</b>	No



**Corridor Street Name(s):** South State Street/East Lake Street/West Lake Road from North of Fairview Street to Harrison Street

**Corridor Classification:** Commercial

**Unit(s) of Government:** City of Harbor Springs

**Length:** 0.38 miles

**Street Classification:** Major Collector

**2013 Traffic Volume(AADT):** NA

**Number of Traffic Lanes:** 2, Bi-Directional Traffic

**Parking:** No Street Parking

**Transit Service:** Friendship Centers of Emmet County - Senior Tran

**Bike Lane:** No

**Entertainment Venues:** No

**Pedestrian Amenities:** Sidewalks, Crosswalks

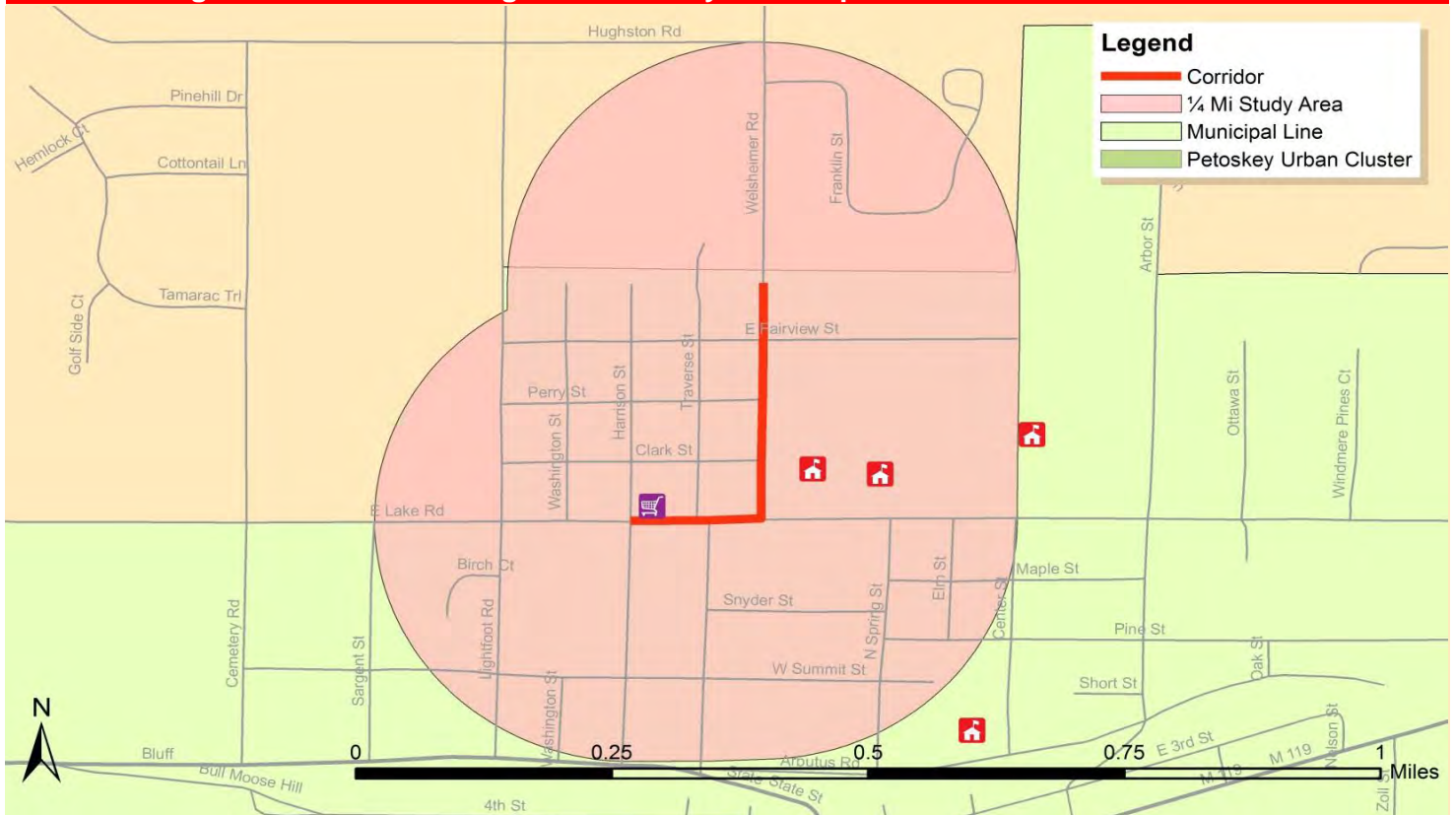
**Walk Score:** 66



### Corridor Overview

The West Lake Street-Fairview Plaza Corridor is a local route and mainly consists of a strip center development and other commercial uses primarily serving the local population.

### Corridor Segment and Surrounding 1/4 Mile Study Area Map



### Economic Development

Community policies or activities assisting economic development (City of Harbor Springs)

<b>Growth &amp; Investment Strategy</b>	Yes	<b>Community Economic Strategy</b>	Yes
<b>Identify Areas of Focus for G&amp;I</b>	No	<b>Community Marketing Strategy</b>	Yes
<b>Development Opportunities</b>	No	<b>Market Potential Development Sites</b>	No
<b>Publish Development Guide</b>	No	<b>Capital Improvement Plan</b>	No

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Harbor Springs West Lake Street-Fairview Plaza	City of Harbor Springs	Harbor Springs
<b>Total Population (2010)</b>	<b>693</b>	<b>1,194</b>	<b>5,180</b>
People per Acre	2.92	1.45	0.25
People per Square Mile	1,870	926	159
<b>Total Housing (2010)</b>	<b>474</b>	<b>1,122</b>	<b>4,286</b>
Gross Neighborhood Density (per acre)	2.00	1.36	0.21
<b>Study Area Size (Land Cover)</b>			
Acres	237.22	825.60	20,876.80
Square Miles	0.37	1.29	32.62
<b>Workers Living within Study Area</b>	<b>255</b>	<b>406</b>	<b>1,772</b>
% with earnings \$1250/month or less	29%	29%	29%
% with earnings \$1251/month to \$3333/month	34%	42%	38%
% with earnings greater than \$3333/month	37%	29%	32%
<b>Jobs Located within Study Area</b>	<b>364</b>	<b>748</b>	<b>1,885</b>
Job Density (per acre)	1.53	0.91	0.09

Zoning

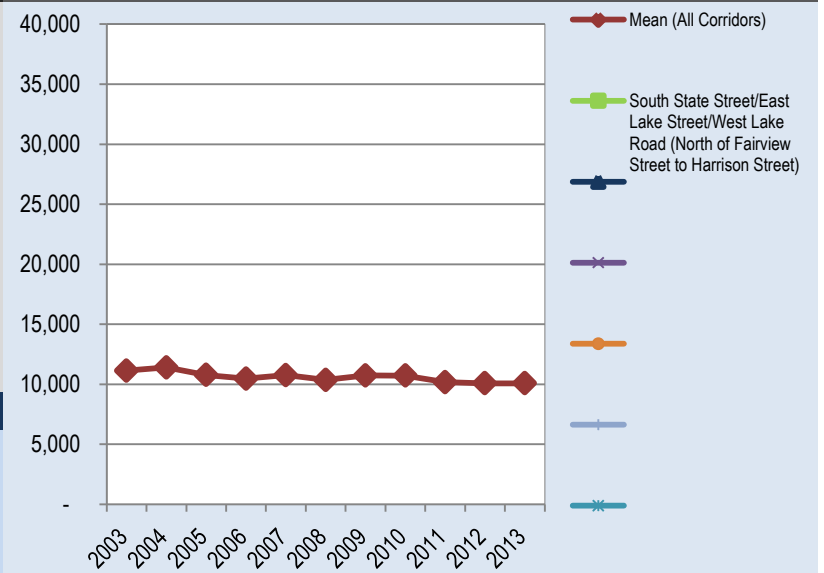
District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	
R-1C   C   B-2	33%	0%	0%	6.7	6.7	40 ft

Infrastructure

<b>Public Utilities</b>		
Sewer	Yes	<i>Additional Capacity</i>
Water	Yes	<i>Additional Capacity</i>
<b>Energy Utilities</b>		
Underground Electric	Yes	
Renewable Energy Production	No	
Natural Gas	Yes	
<b>Broadband</b>	Yes - 6 Technologies <i>(Fiber, Cable, DSL, WiFi, 4G, Fixed Wireless)</i>	

Traffic Counts

(Data Unavailable for Corridor)



Policy

<b>Downtown Plan</b>	No
<i>Outside DDA</i>	
<b>Corridor Improvement Plan</b>	No

Placemaking Elements

<b>Theaters/Entertainment Venues</b>	No	<b>Grocery Stores</b>	Yes
		<b>Restaurants</b>	Yes
		<b>Sidewalk Cafés</b>	No
		<b>Parks</b>	No
<b>Iconic Buildings</b>	No	<b>Pocket Parks</b>	No
		<b>Public Art Installations</b>	No
		<b>Wayfinding</b>	No
		<b>Pedestrian Connections</b>	Yes

**Growth & Investment Area Unit(s) of Government:**

*Village of Mackinaw City, Mackinaw Township, Wawatam Township*

**Core Place Census Areas:**

*Village of Mackinaw City*

**Counties**

*Emmet & Cheboygan*

**Census Class**

*Rural*

**Land Area**

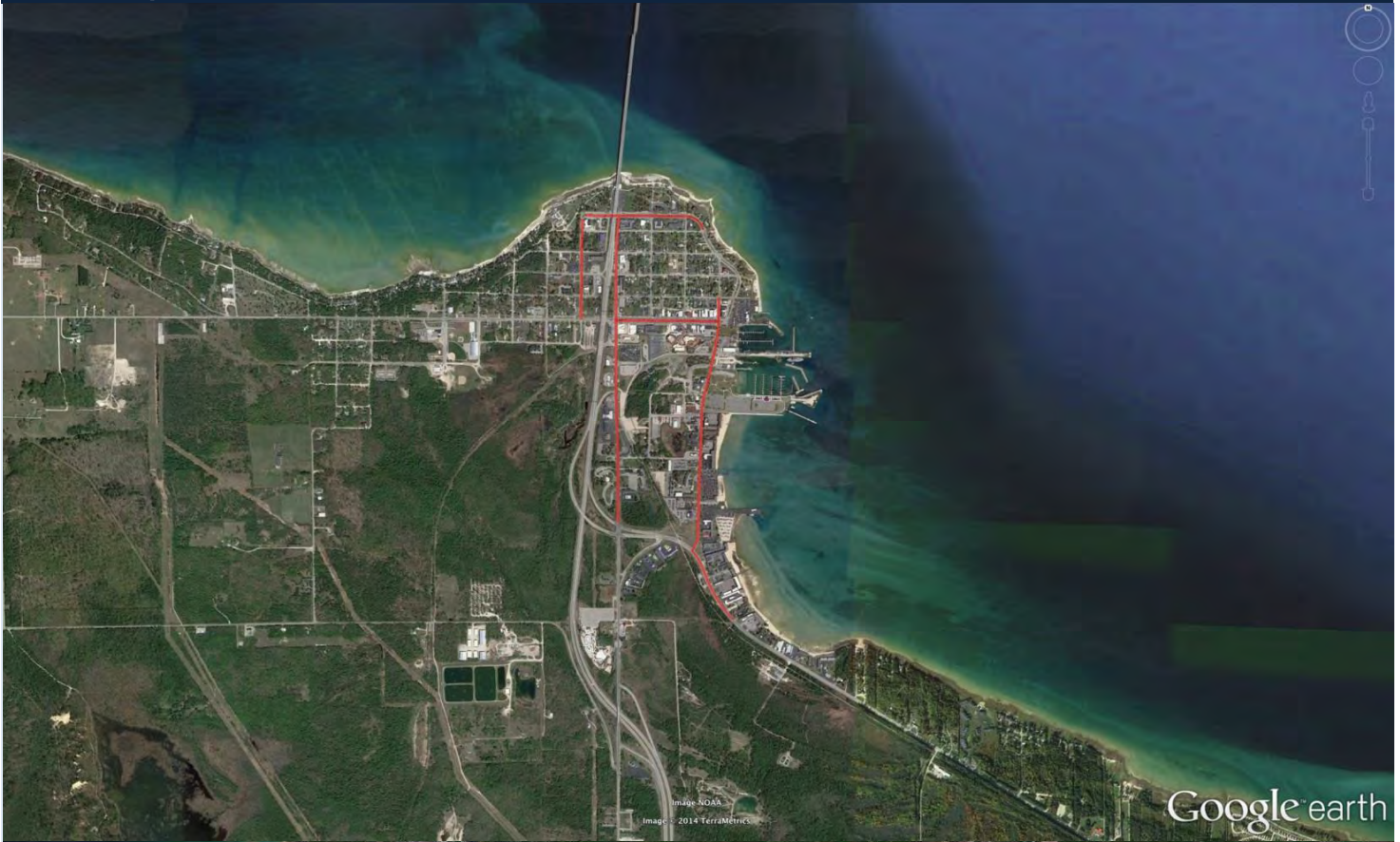
**G&I Area**

27.14 sq. miles

**Core Place**

3.38 sq. miles

**Aerial Map with Commercial Corridors**



**4 Commercial Corridors Identified**

<b>Highest Corridor Traffic Count (Annual Average Daily Traffic)</b>	6,263	<i>2013 Data Year</i>
<b>Population Density Range of G&amp;I Area Corridors (per acre)</b>	0.8 - 2.0	<i>Density calculations a derived from the area within a 1/4 mile of Corridor (Corridor Study Area)</i>
<b>Gross Neighborhood Density Range of G&amp;I Area Corridors (per acre)</b>	0.7 - 1.9	
<b>Job Density Range of G&amp;I Area Corridors (per acre)</b>	0.3 - 2.9	
<b>Worker Density Range of G&amp;I Area Corridors (per acre)</b>	0.2 - 0.5	

**Retail**

<b>Total Sales</b>	\$19,623,291	<b>Classification:</b>	Local Retail Hub
<b>Potential Sales</b>	\$13,710,952	<b>Seasonal Housing:</b>	34.3% of G&I Area Housing
<b>Leakage</b>	(\$5,912,339)		

**Sprawl**

*Percentage of Housing in the Core Place is Growing by 2.9%*

**Population**

**2000-2010:** *Declining at -6.3% with the Core Place Declining at -6.2%*  
**Average Age:** 47.5 [*+8.9% change from 2000 Census* ]  
**Demographic Shifts:** *Generation X had the largest % gain (up 16.8%); Millennial Generation had the largest % loss (down -29.7%)*

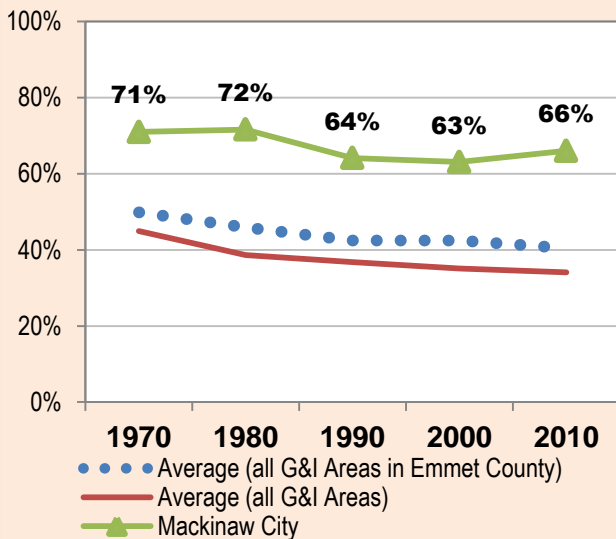
**Jobshed**

*Worker Importer – Number of Jobs exceeds Resident Worker population by 108%*

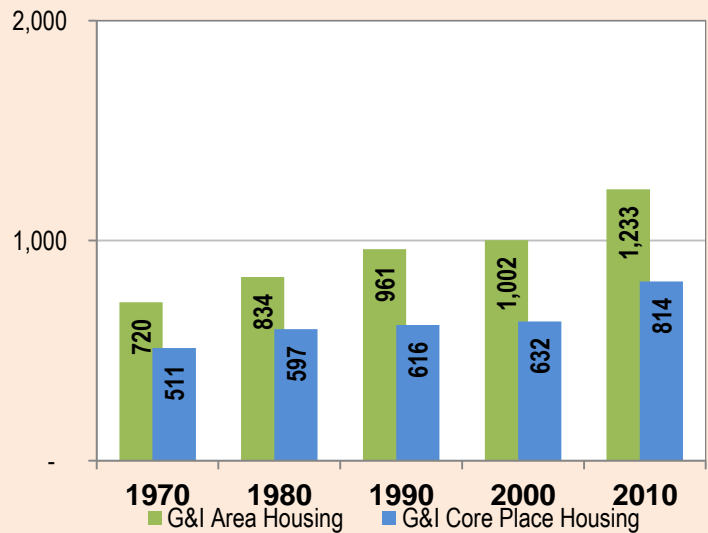
Population & Housing Trends

Census Data	Core Place	G&I Area
	Village of Mackinaw City	Village of Mackinaw City, Wawatam Township, Mackinaw Township
<b>Total Population (2010)</b>	<b>806</b>	<b>1,200</b>
Percentage Change from 2000	<b>-6.2%</b>	<b>-6.3%</b>
People per Acre	0.37	0.07
People per Square Mile	238	44
Average Age [% Change from 2000]	<b>46.7 [ +8.2% ]</b>	<b>47.5 [ +8.9% ]</b>
<b>Total Housing (2010)</b>	<b>814</b>	<b>1,233</b>
Percentage Change from 2000	<b>28.8%</b>	<b>23.1%</b>
Gross Neighborhood Density (per acre)	0.38	0.07
<b>Total Households (2010)</b>	<b>413</b>	<b>593</b>
Percentage of Households without Children (under 18)	78%	77%
<b>Study Area Size (Land Cover)</b>		
Acres	2,163.20	17,369.60
Square Miles	3.38	27.14

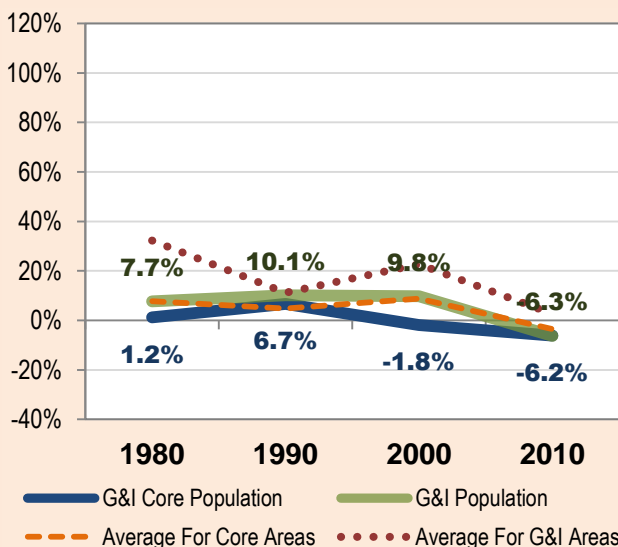
Housing in Core Place as a Percentage of Total Growth & Investment Area



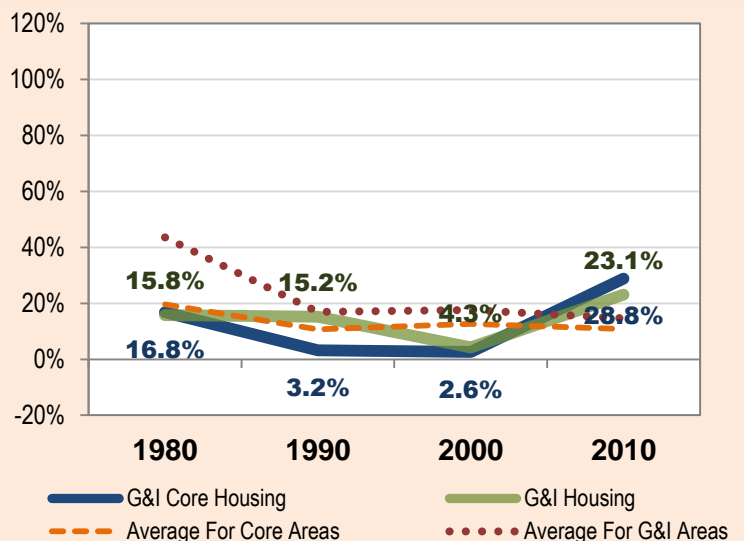
Housing Units in G&I Area and Core Place



Percentage Change in Population in G&I Area and Core Place



Percentage Change in Housing Units in G&I Area and Core Place



## Growth &amp; Investment Readiness Assessment

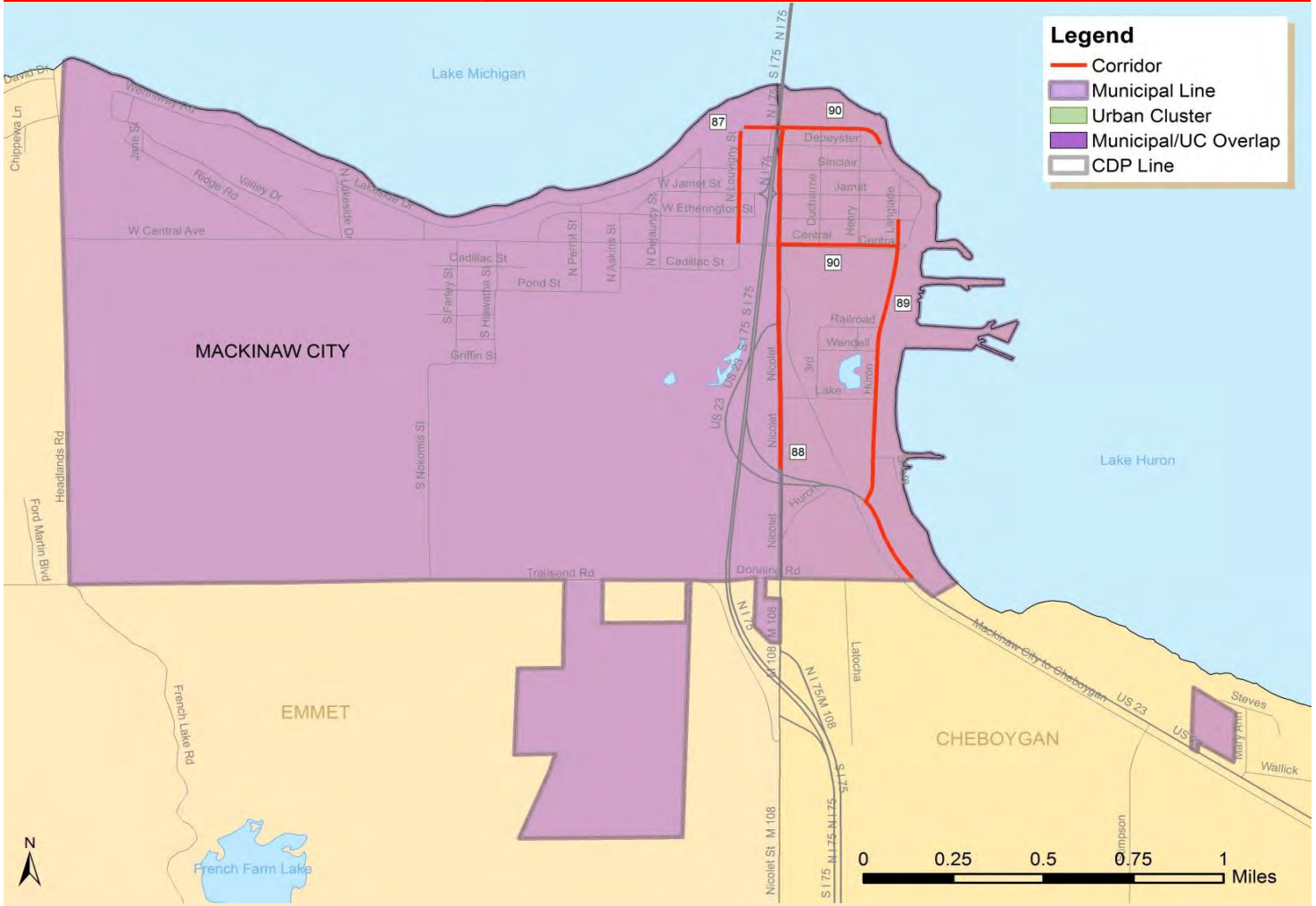
## Criteria Status

		Criteria Status	
Initial Selection Criteria	1	Municipal Water	Yes
	2	Municipal Sewer	Yes
	3	Government Staff	Yes
	4	Master Plan Includes Higher Density Center	Yes
	5	Zoning Ordinance Supporting Master Plan Density Center	Yes
Census Data	6	Core Place Population Increasing	No
	7	Housing Growth Rate Over 15% (2000-2010 Census)	Yes
	8	Core Place Housing Growth Increasing Faster than Surrounding Area	Yes
	9	Census Class (Rural, Urban Cluster, Urbanized Area, MSA)	Rural
	10	Job Density Over 75 Jobs Per Acre in Commercial Corridors	No
	11	50% of Workers Living within 5 miles	No
Zoning Policy	12	Zoned Densities Greater Than 30 Dwellings/Acre in Commercial Corridors	No
	13	Zoning Allows Mixed-Use by Right in Commercial Corridors	Yes
	14	Zoning Allows Multi-Family Residential by Right in Commercial Corridors	Yes
	15	Building Height Limits Greater than 35 feet in Commercial Corridors	Yes
	16	No On Site Parking Requirement in Central Business District	Qualified Yes
	17	Density Bonuses Offered for Contributions Towards Public Policy Goals	Yes
Placemaking	18	4 Key Placemaking Elements in Corridors	Yes
	19	Retail Hub	Yes - Local
	20	Educational Institutions (Trade Schools, Community Colleges, Universities)	No
	21	Contain Medical Centers	No
	23	Walkable Density CBD or Commercial Corridors (20-30 Dwellings per Acre)	No
Opportunity	24	Community Identified Development Opportunities	Yes
	25	Marketing Redevelopment & Infill Sites	Yes
	22	Fixed Route Transit (Headways 15 mins or less)	No
	30	Commercial Corridors with High Traffic Count AADT (Over 10k, Over 25k)	No
Infrastructure	26	Additional Water Capacity	Yes
	27	Additional Sewer Capacity	Yes
	28	Broadband Service over 1 Gbps Available	No
	29	Municipal WiFi	Yes

Commercial Corridors

ID	Name	Corridor Length (feet)	Population Density (People per acre)	Housing Density (Dwellings per acre)	Job Density (Jobs per acre)	Worker Density (Workers per acre)
87	Mackinaw City Louvigny Street	1,787	1.9	2.0	2.9	0.5
88	Mackinaw City Nicolet Street	5,422	1.1	1.3	1.4	0.3
89	Mackinaw City South Huron Avenue	5,475	0.7	0.8	0.3	0.2
90	Mackinaw City CBD	4,459	1.4	1.5	2.2	0.4

Growth & Investment Core Place Map with Commercial Corridors



Housing Data

Census-ACS Data	Core Place Village of Mackinaw City	G&I Area Village of Mackinaw City, Wawatam Township, Mackinaw Township
<b>Housing Efficiency Rating (Average HERS)</b> <i>Efficiency compared to 2012 DOE Challenge Home (30 HERS)</i>	<b>293</b> 263% Less Efficient	<b>274</b> 244% Less Efficient
<b>Percentage Built by Year</b>		
Before 1940	32%	23%
1940-1949	7%	7%
1950-1959	8%	9%
1960-1969	7%	11%
1970-1979	13%	13%
1980-1989	12%	11%
1990-1999	14%	17%
2000-2009	6%	10%
Later than 2010	0%	0%
<b>Average Age</b>	<b>1957</b>	<b>1964</b>
<b>Median Value</b>	<b>\$152,700</b>	
Village of Mackinaw City	\$152,700	
Mackinaw Township	\$157,500	
Wawatam Township	\$162,500	
<b>Home Heating Fuel</b>		
Percent of Homes Natural Gas	74%	58%
Percent of Homes Using Propane	<b>9%</b>	<b>24%</b>
Percent of Homes Using Wood	2%	4%
Percent of Homes Using Solar Energy	0%	0%

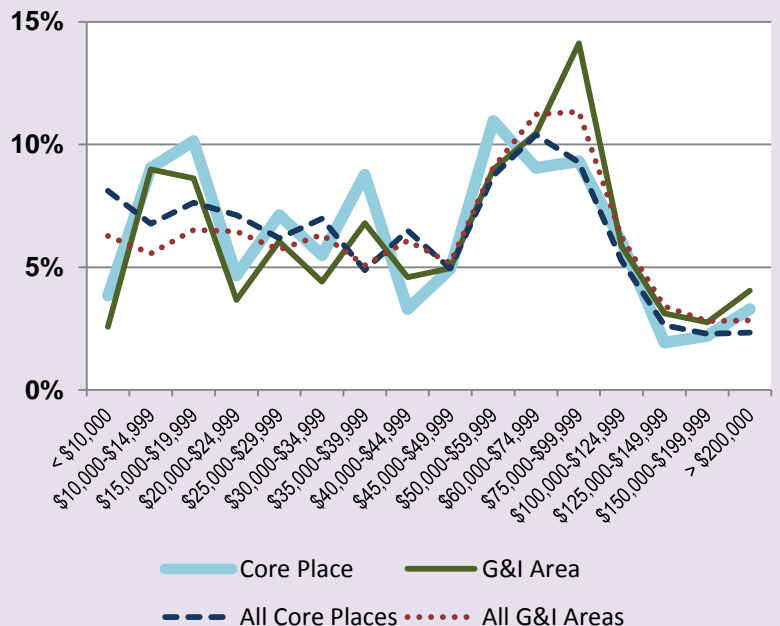
Personal Income

Census-ACS Data (2008-2012 5 Year Summary File)

Median Household Income (2012 Dollars)

Core Place	\$40,972
Village of Mackinaw City	\$40,972
G&I Area	
Village of Mackinaw City	\$40,972
Mackinaw Township	\$50,750
Wawatam Township	\$48,958

Household Income Distribution



Per Capita Annual Income (2012 Dollars)

Core Place	\$25,838
G&I Area	\$28,284

**Policy**

Data Source: Commercial Corridor Inventory Interview	Core Place Units of Government Interviewed			
	Village of Mackinaw City			
<b>Year of Master Plan Approval</b>	<b>2011</b>			
<i>Master Plan Update</i>	NA			
<b>Community Economic Strategy</b>	<b>Yes</b>			
<i>Economic Strategy Coordinates with Regional Strategy</i>	Yes			
<b>Growth &amp; Investment Strategy</b>	<b>Yes</b>			
<i>Identify Areas of Focus for Growth &amp; Investment Strategy</i>	Yes			
<i>Active G&amp;I Strategy Development Discussions</i>	NA			
<i>Planning Zoning Benchmarks</i>	Yes			
<b>Development Opportunities on Corridor</b>	<b>Yes</b>			
<i>Redevelopment Priorities Identified</i>	Yes			
<i>Redevelopment Resources Identified</i>	Yes			
<i>Market Potential Development Sites</i>	Yes			
<b>Guides and Resources</b>				
<i>Publish Development Guide</i>	Yes			
<i>Zoning Orientation Package Provided to Staff &amp; Committees</i>	Yes			
<i>Zoning Training Funding</i>	Yes			
<b>Community Marketing Strategy</b>	<b>Yes</b>			
<b>Area Plans</b>				
<i>Downtown Plan</i>	<b>Yes</b>			
<i>Downtown Development Authority</i>	DDA Established 1985			
<i>Corridor Improvement Plan</i>	<b>No</b>			
<i>Corridor Improvement Authority</i>				

**Zoning**

Zoning Authority with Identified Commercial Corridors	Districts in Identified Commercial Corridors	Max Dwelling Density for Districts in Corridors	% of Districts in Corridors where Mixed Use is allowed by Right	% of Districts in Corridors where Multi-Family Use is allowed by Right	Max Building Height Allowed in Corridors
Village of Mackinaw City	R1   R4   B1   B2   B3   B4   BC   MC	15	25%	25%	45 ft



**Infrastructure**

Data Source: Commercial Corridor Inventory Interviews	Units of Government Interviewed			
	Village of Mackinaw City			

<b>Municipal Water Service</b>	<b>Yes</b>
Additional Capacity	Yes
Water Reliability Study	Yes
Wellhead Protection Plan	Yes

<b>Municipal Sewer Service</b>	<b>Yes</b>
Additional Capacity	Yes
Waste Water Master Plan	Yes

Broadband	Available In Core Place
<i>Available Technologies</i>	
Fiber (non FTTH)	Yes
Cable	Yes
DSL	Yes
4G Wireless	Yes
Municipal WiFi	Yes
Fixed Wireless Broadband	Yes
<i>Available Speeds</i>	
Ultra - Greater than 1 Gigabit Per Second (Gbps)	No
High - 100 Mbps to less than 1 Gbps	Yes

Energy	Available In Core Place
Natural Gas	Yes
Underground Electric Service	Yes
Renewable Energy Generation	Yes

**Commercial Corridor Placemaking Elements**

ID	Name	Placemaking Elements Supporting Walkability				Job / Population Ratio
		Theaters & Entertainment Venues	Grocery Stores	Parks & Pocket Parks	Pedestrian Connections	
87	Mackinaw City Louvigny Street	No	No	Yes	Yes	1.552
88	Mackinaw City Nicolet Street	No	Yes	Yes	Yes	1.255
89	Mackinaw City South Huron Avenue	Yes	No	Yes	Yes	0.439
90	Mackinaw City CBD	Yes	Yes	Yes	Yes	1.523

## Talent Jobshed

Census Data	Core Place	G&I Area
	Village of Mackinaw City	Village of Mackinaw City, Wawatam Township, Mackinaw Township
<b>Workers Living within Study Area</b>	<b>216</b>	<b>321</b>
Worker Density (per acre)	0.10	0.02
<b>Worker's Earnings</b>		
% with earnings \$1250/month or less	30%	32%
% with earnings \$1251/month to \$3333/month	44%	40%
% with earnings greater than \$3333/month	26%	28%
<b>Jobs Located in Area</b>	<b>659</b>	<b>667</b>
Job Density (per acre)	0.30	0.04

## Commute Data for Workers Employed in Core Place

Commuting data for workers residing from 2 - 175 miles from G&amp;I Area

<b>Commuting Workers</b>	<b>413</b>	<b>6% Commuting 5 Miles or Less</b>
<b>Total Daily One Way Commute for all Commuters</b>		
Route Distance (Miles)	13,098	
Commute Time (Minutes)	16,153	
<b>Total Annual Commute for all Commuters</b>		
Distance (Miles)	6,876,432	
Time (Hours)	<b>141,343</b>	
<b>Annual Commuting Costs</b>		
Total Fuel Cost	1,046,414	
Total Cost (IRS 2014 Standard Mileage Rate)	<b>\$3,850,802</b>	
<b>Average Per Worker Commute</b>	<b>Daily (2-Way)</b>	<b>Annual</b>
Distance (Miles)	63	16,650
Time (Hours)	1.3	342
Cost (IRS Standard Mileage Rate)	<b>\$36</b>	<b>\$9,324</b>

## Retail Activity

	Core Place Activity	G&I Area Activity	County Activity
<b>Total Retail Sales</b>	\$18,583,432	<b>\$19,623,291</b>	\$450,773,091
<b>Total Potential Retail Sales</b>	\$9,660,807	<b>\$13,710,952</b>	\$359,281,470
<b>Leakage</b>	(\$8,922,625)	<b>(\$5,912,339)</b>	(\$91,491,621)

Classification: **Local Retail Hub**

Mackinaw City area businesses are capturing sales from the residents of Mackinaw City as well as the surrounding area.

Sales by Retail Store Type	Core Place Sales	Potential G&I Area Sales	Core Place Sales / Potential G&I Sales
Food & Beverage Stores	\$2,916,208	<b>\$1,736,068</b>	168%
Health/Personal Care Stores	\$0	<b>\$1,178,086</b>	0%
Clothing & Accessories Stores	\$1,848,556	<b>\$576,492</b>	321%
Sport/Hobby/Book/Music Stores	\$391,131	<b>\$316,054</b>	124%
General Merchandise Stores	\$0	<b>\$2,854,683</b>	0%
Food & Beverage Establishments	\$7,340,261	<b>\$1,132,653</b>	648%
E-Shopping/Mail-Order	\$0	<b>\$705,909</b>	0%

**Corridor Street Name(s):** Louvigny Street from Straits Avenue to W Central Avenue

**Corridor Classification:** Commercial

**Unit(s) of Government:** Village of Mackinaw City

**Length:** 0.34 miles

**Street Classification:** Major Collector

**2013 Traffic Volume(AADT):** NA

**Number of Traffic Lanes:** 2, Bi-Directional Traffic with Turn/Passing Lanes

**Parking:** No Street Parking

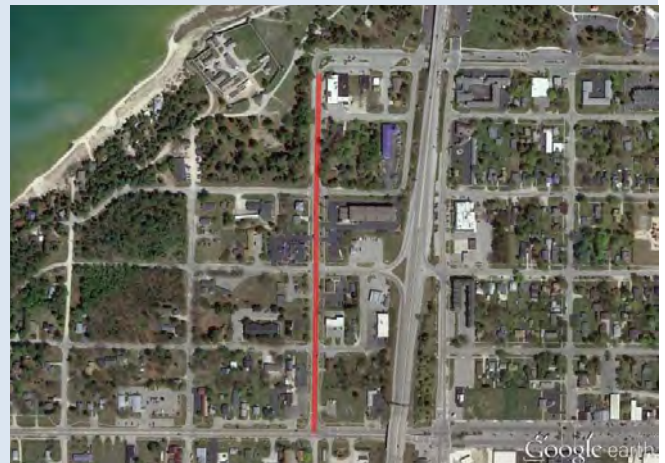
**Transit Service:** Straits Regional Ride - Flexible Route

**Bike Lane:** No

**Entertainment Venues:** No

**Pedestrian Amenities:** Sidewalks, Crosswalks

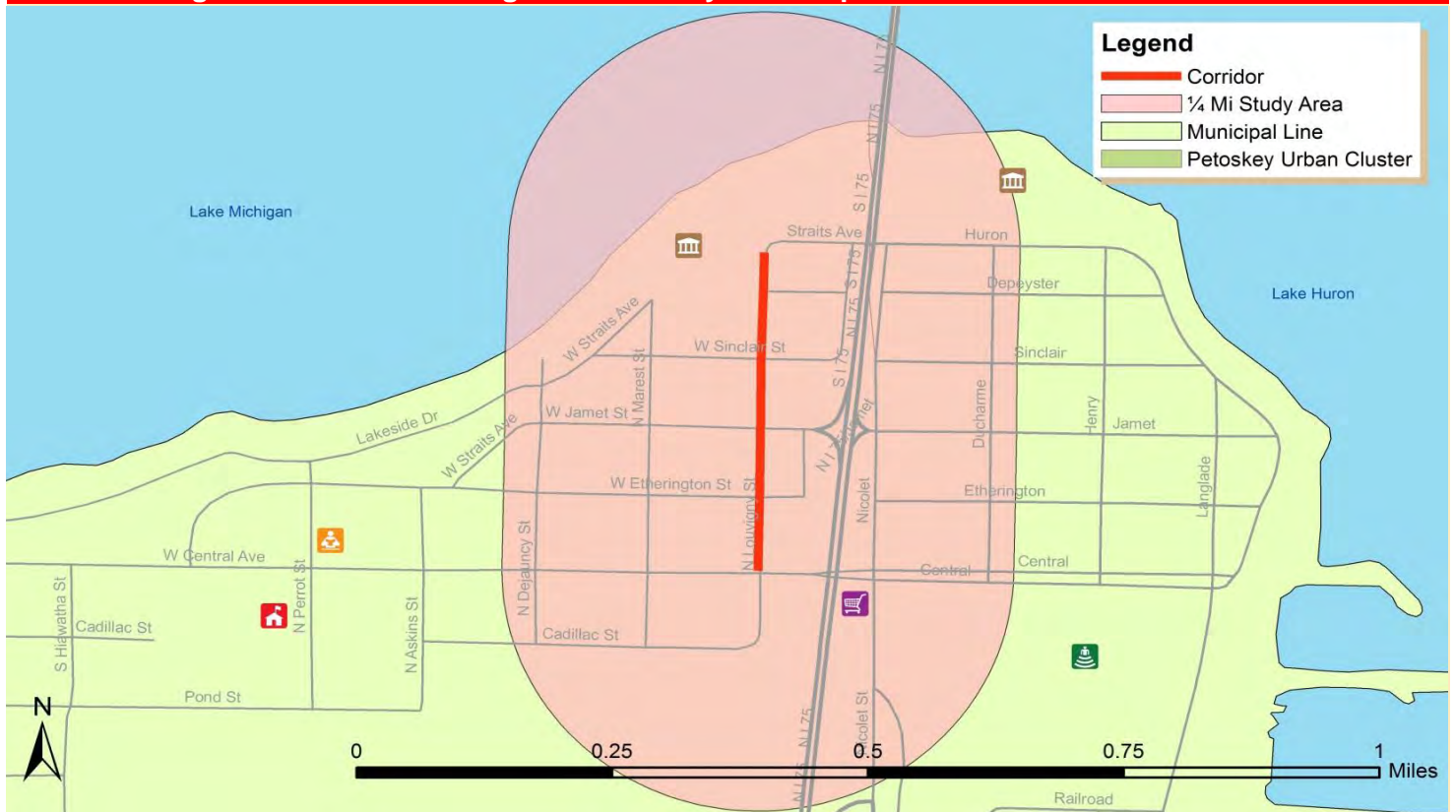
**Walk Score:** 71



### Corridor Overview

Running immediately to the east of and parallel to Interstate 75 is the Louvigny Street Corridor. It contains lodging, restaurant and other commercial activity. The Mackinaw Bridge and Fort Michilimackinac are located at the north end of the corridor.

### Corridor Segment and Surrounding 1/4 Mile Study Area Map



### Economic Development

Community policies or activities assisting economic development (Village of Mackinaw City)

<b>Growth &amp; Investment Strategy</b>	Yes	<b>Community Economic Strategy</b>	Yes
<b>Identify Areas of Focus for G&amp;I</b>	Yes	<b>Community Marketing Strategy</b>	Yes
<b>Development Opportunities</b>	Yes	<b>Market Potential Development Sites</b>	Yes
<b>Publish Development Guide</b>	Yes	<b>Capital Improvement Plan</b>	Yes

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Mackinaw City Louvigny Street	Village of Mackinaw City	Mackinaw City
<b>Total Population (2010)</b>	<b>377</b>	<b>806</b>	<b>1,200</b>
People per Acre	1.87	0.37	0.07
People per Square Mile	1,199	238	44
<b>Total Housing (2010)</b>	<b>393</b>	<b>814</b>	<b>1,233</b>
Gross Neighborhood Density (per acre)	1.95	0.38	0.07
<b>Study Area Size (Land Cover)</b>			
Acres	201.31	2,163.20	17,369.60
Square Miles	0.31	3.38	27.14
<b>Workers Living within Study Area</b>			
% with earnings \$1250/month or less	25%	30%	32%
% with earnings \$1251/month to \$3333/month	46%	44%	40%
% with earnings greater than \$3333/month	29%	26%	28%
<b>Jobs Located within Study Area</b>			
Job Density (per acre)	2.91	0.30	0.04

Zoning

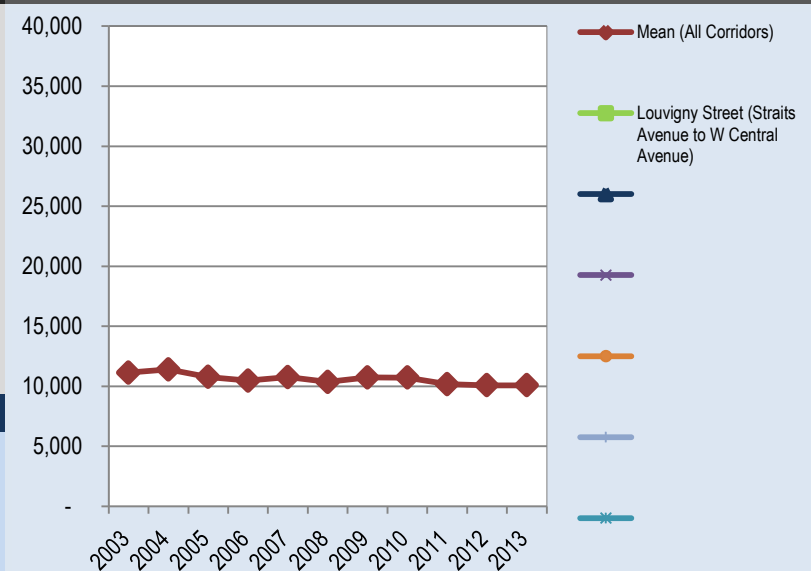
District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	
R1   B1   B4	100%	33%	33%	5.8	14.5	45 ft

Infrastructure

<b>Public Utilities</b>		
Sewer	Yes	<i>Additional Capacity</i>
Water	Yes	<i>Additional Capacity</i>
<b>Energy Utilities</b>		
Underground Electric	Yes	
Renewable Energy Production	No	
Natural Gas	Yes	
<b>Broadband</b>	Yes - 6 Technologies <i>(Fiber, Cable, DSL, WiFi, 4G, Fixed Wireless)</i>	

Traffic Counts

(Data Unavailable for Corridor)



Policy

<b>Downtown Plan</b>	No
<i>Outside DDA</i>	
<b>Corridor Improvement Plan</b>	No

Placemaking Elements

<b>Theaters/Entertainment Venues</b>	No	<b>Grocery Stores</b>	No
		<b>Restaurants</b>	Yes
		<b>Sidewalk Cafés</b>	No
		<b>Parks</b>	Yes
<b>Iconic Buildings</b>	Yes	<b>Pocket Parks</b>	Yes
<i>Colonial Michilimackinac</i>		<b>Public Art Installations</b>	Yes
		<b>Wayfinding</b>	Yes
		<b>Pedestrian Connections</b>	Yes

**Corridor Street Name(s):** Nicolet Street from N Huron Avenue to US23

**Corridor Classification:** Commercial

**Unit(s) of Government:** Village of Mackinaw City

**Length:** 1.03 miles

**Street Classification:** Major Collector

**2013 Traffic Volume(AADT):** NA

**Number of Traffic Lanes:** 2, Bi-Directional Traffic with Turn/Passing Lanes

**Parking:** Parallel

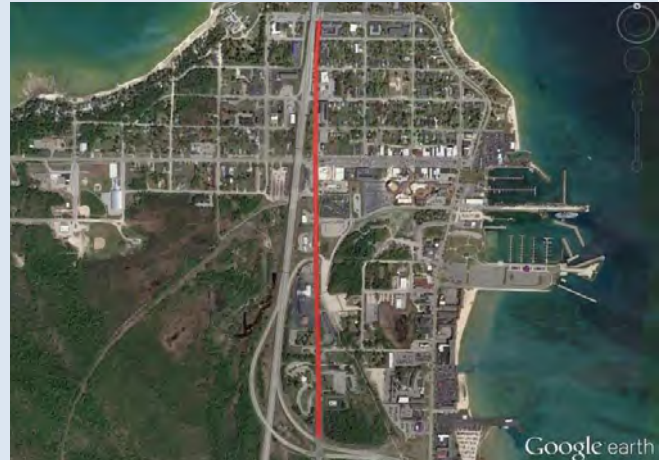
**Transit Service:** Straits Regional Ride - Flexible Route

**Bike Lane:** No

**Entertainment Venues:** No

**Pedestrian Amenities:** Sidewalks, Crosswalks

**Walk Score:** 57



**Corridor Overview**

Running immediately to the east of and parallel to Interstate 75 is the Nicolet Street Corridor. It contains tourism focused lodging, restaurant and other commercial activities. It is bounded on the north by the Mackinaw Bridge and Old Mackinac Point Light and on the south by US-23.

**Corridor Segment and Surrounding 1/4 Mile Study Area Map**



**Economic Development**

Community policies or activities assisting economic development (Village of Mackinaw City)

<b>Growth &amp; Investment Strategy</b>	Yes	<b>Community Economic Strategy</b>	Yes
<b>Identify Areas of Focus for G&amp;I</b>	Yes	<b>Community Marketing Strategy</b>	Yes
<b>Development Opportunities</b>	Yes	<b>Market Potential Development Sites</b>	Yes
<b>Publish Development Guide</b>	Yes	<b>Capital Improvement Plan</b>	Yes

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Mackinaw City Nicolet Street	Village of Mackinaw City	Mackinaw City
<b>Total Population (2010)</b>	<b>474</b>	<b>806</b>	<b>1,200</b>
People per Acre	1.11	0.37	0.07
People per Square Mile	708	238	44
<b>Total Housing (2010)</b>	<b>541</b>	<b>814</b>	<b>1,233</b>
Gross Neighborhood Density (per acre)	1.26	0.38	0.07
<b>Study Area Size (Land Cover)</b>			
Acres	428.29	2,163.20	17,369.60
Square Miles	0.67	3.38	27.14
<b>Workers Living within Study Area</b>	<b>132</b>	<b>216</b>	<b>321</b>
% with earnings \$1250/month or less	28%	30%	32%
% with earnings \$1251/month to \$3333/month	47%	44%	40%
% with earnings greater than \$3333/month	25%	26%	28%
<b>Jobs Located within Study Area</b>	<b>595</b>	<b>659</b>	<b>667</b>
Job Density (per acre)	1.39	0.30	0.04

Zoning

District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	

B1   B3   BC	100%	67%	67%	14.5	14.5	45 ft
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Infrastructure

Public Utilities

Sewer	Yes	Additional Capacity
Water	Yes	Additional Capacity

Energy Utilities

Underground Electric	Yes
Renewable Energy Production	Yes
( )	
Natural Gas	Yes

Broadband

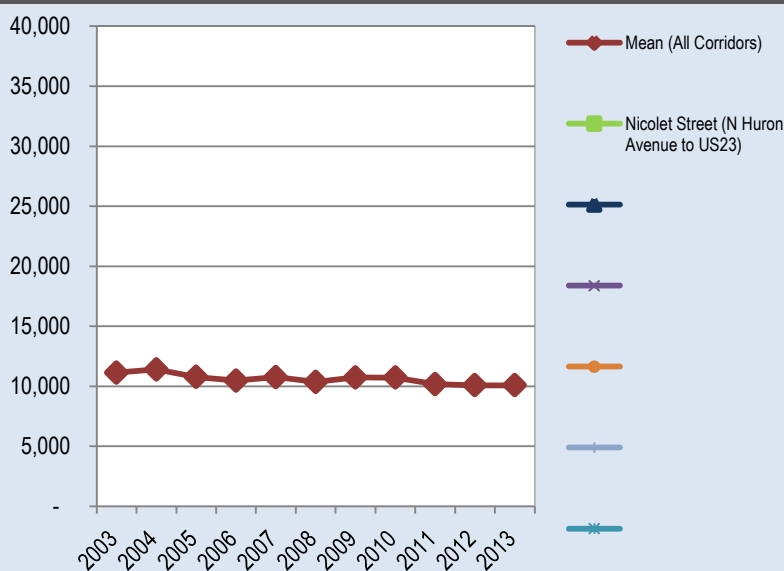
Yes - 6 Technologies  
(Fiber, Cable, DSL, WiFi, 4G, Fixed Wireless)

Policy

Downtown Plan	Yes
DDA	
Corridor Improvement Plan	No

Traffic Counts

(Data Unavailable for Corridor)



Placemaking Elements

<b>Theaters/Entertainment Venues</b>	No	<b>Grocery Stores</b>	Yes
		<b>Restaurants</b>	Yes
		<b>Sidewalk Cafés</b>	No
		<b>Parks</b>	Yes
<b>Iconic Buildings</b>	Yes	<b>Pocket Parks</b>	Yes
<i>Mackinaw Bridge</i>		<b>Public Art Installations</b>	Yes
		<b>Wayfinding</b>	Yes
		<b>Pedestrian Connections</b>	Yes

**Corridor Street Name(s):** South Huron Avenue/US23 from E Central Avenue to S Village Limits

**Corridor Classification:** Commercial

**Unit(s) of Government:** Village of Mackinaw City

**Length:** 1.04 miles

**Street Classification:** Principal Arterial - Other

**2013 Traffic Volume(AADT):** 6,263 Source: MDOT

**Number of Traffic Lanes:** 2, Bi-Directional Traffic with Turn/Passing Lanes

**Parking:** Diagonal

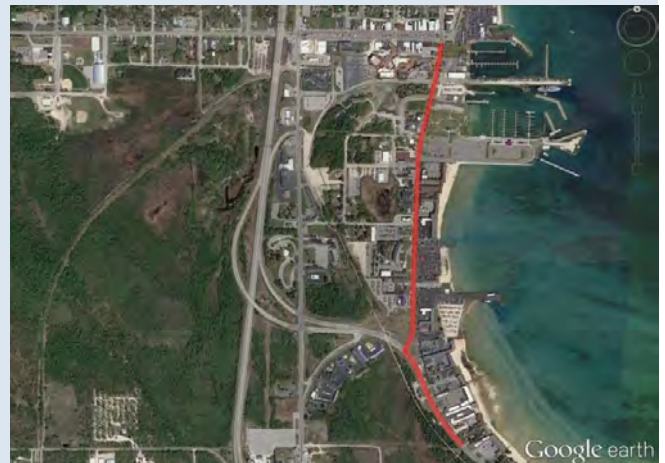
**Transit Service:** Straits Regional Ride - Flexible Route

**Bike Lane:** No

**Entertainment Venues:** Yes

**Pedestrian Amenities:** Sidewalks, Crosswalks

**Walk Score:** 58



### Corridor Overview

The South Huron Avenue Corridor for its entire length within Mackinaw City is a gateway corridor, providing a first view of Mackinaw City for many visitors who have taken either the first exit from I-75 or are arriving on US 23 from Cheboygan. It contains a large portion of the Village's tourism lodging and dock facilities for Mackinaw Island ferry operations as well as marinas.

### Corridor Segment and Surrounding 1/4 Mile Study Area Map



### Economic Development

Community policies or activities assisting economic development (Village of Mackinaw City)

<b>Growth &amp; Investment Strategy</b>	Yes	<b>Community Economic Strategy</b>	Yes
<b>Identify Areas of Focus for G&amp;I</b>	Yes	<b>Community Marketing Strategy</b>	Yes
<b>Development Opportunities</b>	Yes	<b>Market Potential Development Sites</b>	Yes
<b>Publish Development Guide</b>	Yes	<b>Capital Improvement Plan</b>	Yes

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Mackinaw City South Huron Avenue	Village of Mackinaw City	Mackinaw City
<b>Total Population (2010)</b>	<b>244</b>	<b>806</b>	<b>1,200</b>
People per Acre	0.68	0.37	0.07
People per Square Mile	434	238	44
<b>Total Housing (2010)</b>	<b>273</b>	<b>814</b>	<b>1,233</b>
Gross Neighborhood Density (per acre)	0.76	0.38	0.07
<b>Study Area Size (Land Cover)</b>			
Acres	359.76	2,163.20	17,369.60
Square Miles	0.56	3.38	27.14
<b>Workers Living within Study Area</b>	<b>55</b>	<b>216</b>	<b>321</b>
% with earnings \$1250/month or less	22%	30%	32%
% with earnings \$1251/month to \$3333/month	49%	44%	40%
% with earnings greater than \$3333/month	29%	26%	28%
<b>Jobs Located within Study Area</b>	<b>107</b>	<b>659</b>	<b>667</b>
Job Density (per acre)	0.30	0.30	0.04

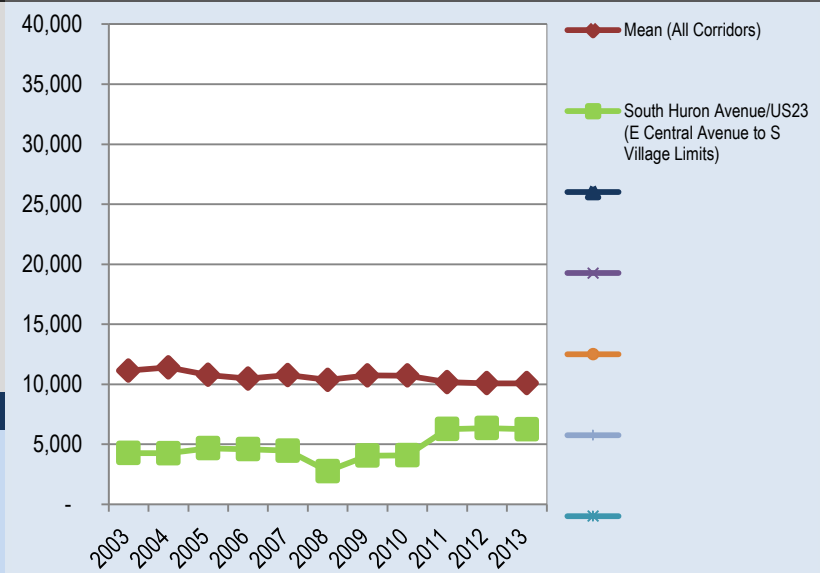
Zoning

District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	
B2   B3   B4   BC   MC	80%	20%	20%	6.7	14.5	45 ft

Infrastructure

<b>Public Utilities</b>		
Sewer	Yes	<i>Additional Capacity</i>
Water	Yes	<i>Additional Capacity</i>
<b>Energy Utilities</b>		
Underground Electric	Yes	
Renewable Energy Production	No	
Natural Gas	Yes	
<b>Broadband</b>	Yes - 6 Technologies <i>(Fiber, Cable, DSL, WiFi, 4G, Fixed Wireless)</i>	

Traffic Counts



Policy

<b>Downtown Plan</b>	Yes
DDA	
<b>Corridor Improvement Plan</b>	No

Placemaking Elements

<b>Theaters/Entertainment Venues</b>	Yes	<b>Grocery Stores</b>	No
<i>Courtyard Cinema</i>		<b>Restaurants</b>	Yes
		<b>Sidewalk Cafés</b>	No
		<b>Parks</b>	Yes
<b>Iconic Buildings</b>	Yes	<b>Pocket Parks</b>	Yes
<i>Sheplers Gate</i>		<b>Public Art Installations</b>	Yes
		<b>Wayfinding</b>	Yes
		<b>Pedestrian Connections</b>	Yes



**Corridor Street Name(s):** East Central Avenue from Nicolet Street to S Huron Avenue; Langlade Street from E Central Avenue to E Etherington Street; Straits/N Huron Avenues from Louvigny Street to E Depeyster Street

**Corridor Classification:** Central Business District

**Unit(s) of Government:** Village of Mackinaw City

**Length:** 0.84 miles

**Street Classification:** Major Collector, Local

**2013 Traffic Volume(AADT):** NA

**Number of Traffic Lanes:** 2-4, Bi-Directional Traffic with Turn/Passing Lanes

**Parking:** Diagonal

**Transit Service:** Straits Regional Ride - Flexible Route

**Bike Lane:** No

**Entertainment Venues:** Yes

**Pedestrian Amenities:** Sidewalks, Crosswalks, Mid-Block Crosswalks

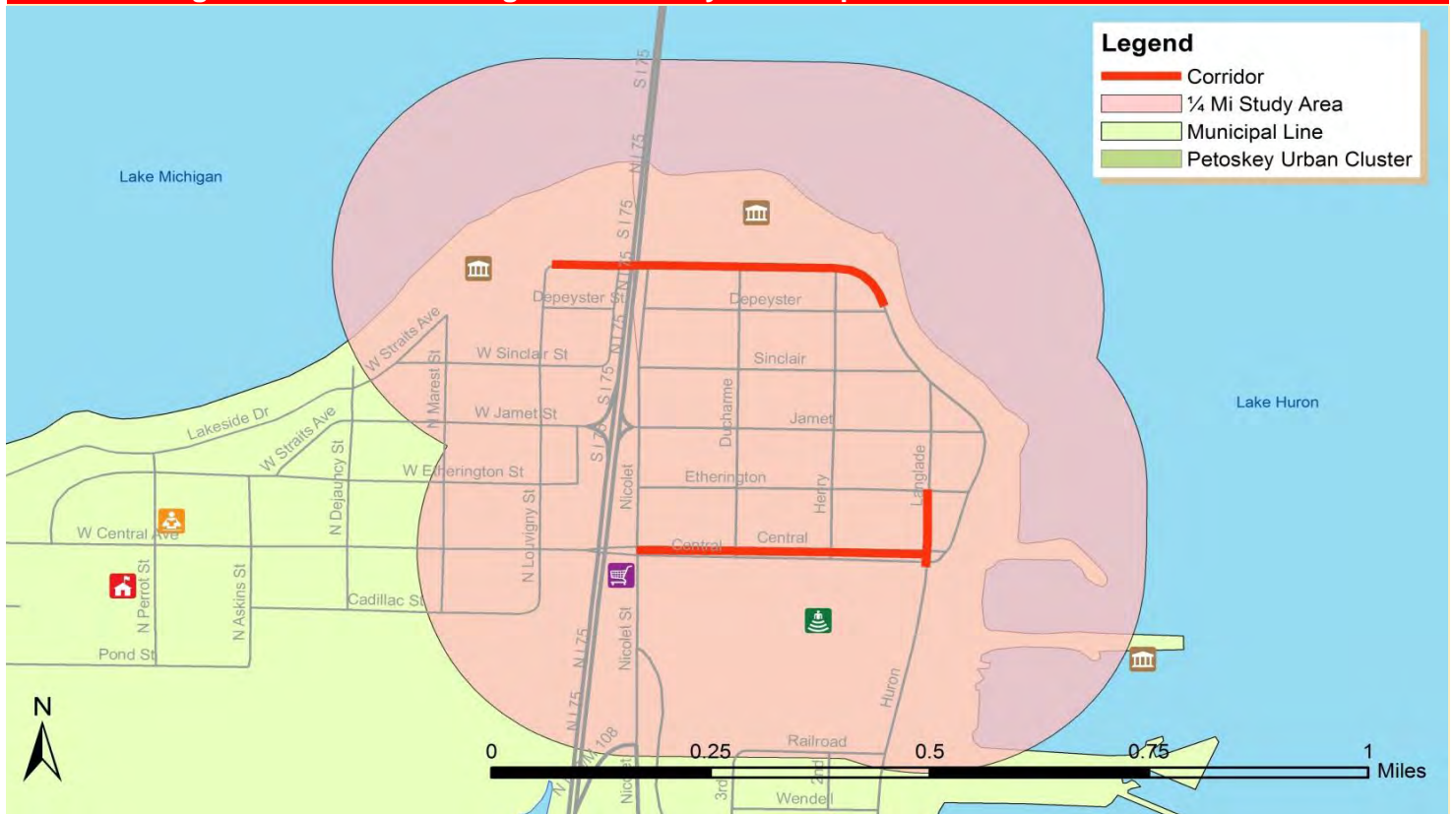
**Walk Score:** 65



### Corridor Overview

The heart of the tourism activity in Mackinaw City is centered in the CBD's eastern most two blocks of East Central Avenue, Mackinaw Crossings pedestrian mall, and the first block of Langlade. This area has a variety of uses that are appropriate and compatible, but most are retail. Other compatible uses are office space for businesses that support tourism, restaurants, taverns, arts and crafts galleries, museums, and amusement attractions. Pedestrian access to the stores should be considered the primary mode of transportation in the downtown.

### Corridor Segment and Surrounding 1/4 Mile Study Area Map



### Economic Development

Community policies or activities assisting economic development (Village of Mackinaw City)

<b>Growth &amp; Investment Strategy</b>	Yes	<b>Community Economic Strategy</b>	Yes
<b>Identify Areas of Focus for G&amp;I</b>	Yes	<b>Community Marketing Strategy</b>	Yes
<b>Development Opportunities</b>	Yes	<b>Market Potential Development Sites</b>	Yes
<b>Publish Development Guide</b>	Yes	<b>Capital Improvement Plan</b>	Yes

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Mackinaw City CBD	Village of Mackinaw City	Mackinaw City
<b>Total Population (2010)</b>	<b>430</b>	<b>806</b>	<b>1,200</b>
People per Acre	1.42	0.37	0.07
People per Square Mile	906	238	44
<b>Total Housing (2010)</b>	<b>455</b>	<b>814</b>	<b>1,233</b>
Gross Neighborhood Density (per acre)	1.50	0.38	0.07
<b>Study Area Size (Land Cover)</b>			
Acres	303.80	2,163.20	17,369.60
Square Miles	0.47	3.38	27.14
<b>Workers Living within Study Area</b>	<b>124</b>	<b>216</b>	<b>321</b>
% with earnings \$1250/month or less	26%	30%	32%
% with earnings \$1251/month to \$3333/month	48%	44%	40%
% with earnings greater than \$3333/month	27%	26%	28%
<b>Jobs Located within Study Area</b>	<b>655</b>	<b>659</b>	<b>667</b>
Job Density (per acre)	2.16	0.30	0.04

Zoning

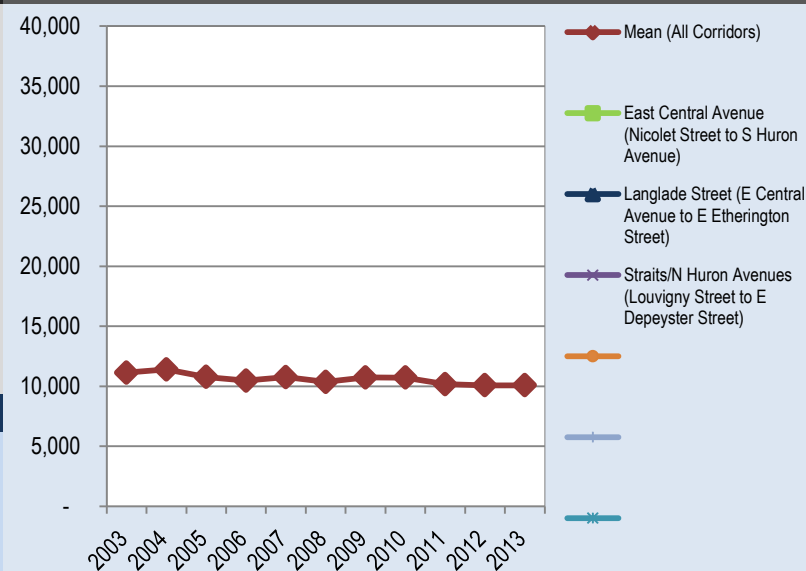
District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	
R1   R4   B1   B3   B4	100%	20%	20%	5.8	14.5	45 ft

Infrastructure

<b>Public Utilities</b>		
Sewer	Yes	Additional Capacity
Water	Yes	Additional Capacity
<b>Energy Utilities</b>		
Underground Electric	Yes	
Renewable Energy Production	No	
Natural Gas	Yes	
<b>Broadband</b>	Yes - 6 Technologies	
<i>(Fiber, Cable, DSL, WiFi, 4G, Fixed Wireless)</i>		

Traffic Counts

(Data Unavailable for Corridor)



Policy

<b>Downtown Plan</b>	Yes
DDA	
<b>Corridor Improvement Plan</b>	No

Placemaking Elements

<b>Theaters/Entertainment Venues</b>	Yes	<b>Grocery Stores</b>	Yes
<i>Courtyard Cinema</i>		<b>Restaurants</b>	Yes
		<b>Sidewalk Cafés</b>	No
		<b>Parks</b>	Yes
<b>Iconic Buildings</b>	Yes	<b>Pocket Parks</b>	Yes
<i>Mackinaw Bridge, Colonial Michilimackinac, Old Mackinaw</i>		<b>Public Art Installations</b>	Yes
<i>Point Lighthouse, The Crossings</i>		<b>Wayfinding</b>	Yes
		<b>Pedestrian Connections</b>	Yes

**Growth & Investment Area Unit(s) of Government:**

*City of Petoskey, Bear Creek Township, Resort Township*

**Core Place Census Areas:**

*City of Petoskey, Bay View CDP*

**County**

*Emmet*

**Census Class**

*Urban Cluster*

**Land Area**

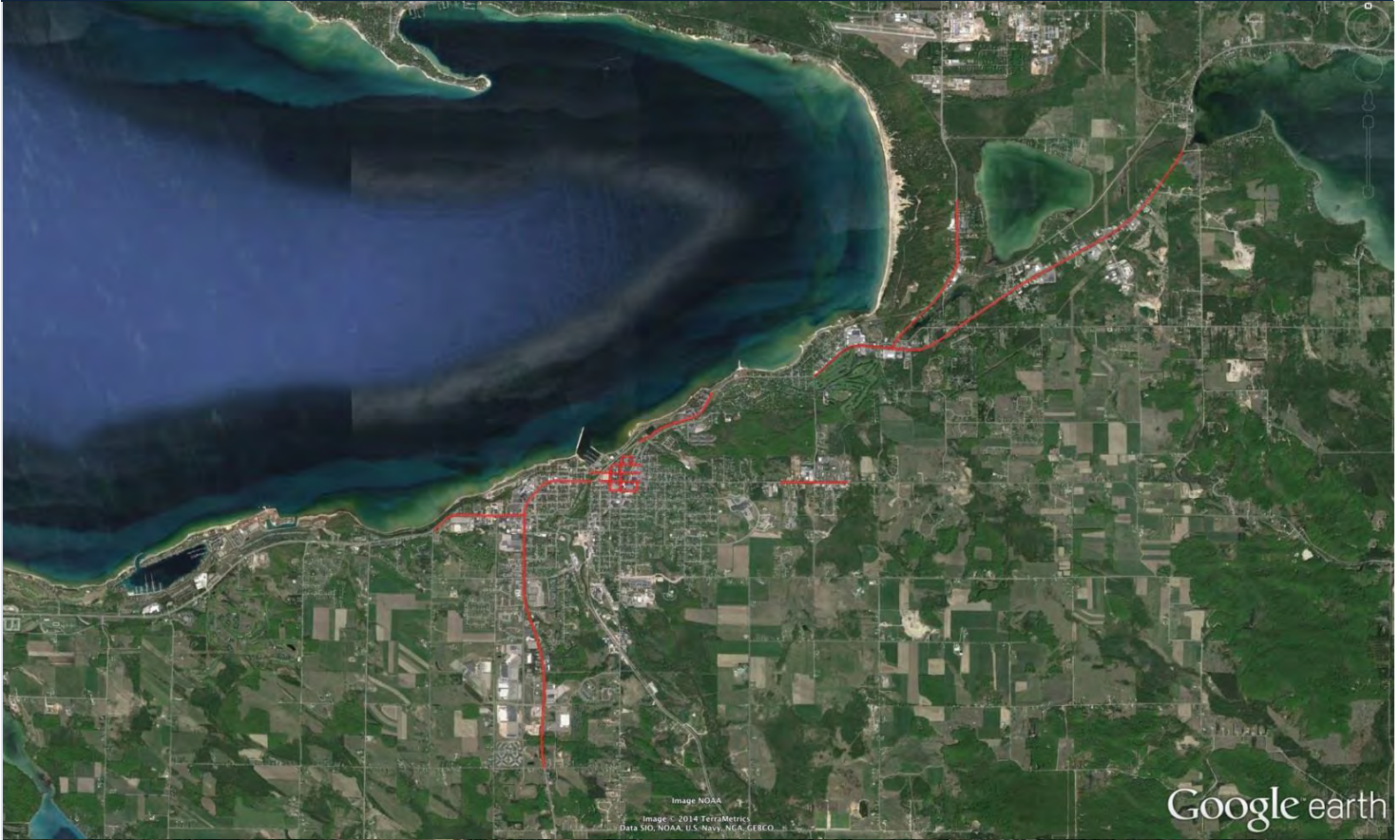
**G&I Area**

63.79 sq. miles

**Core Place**

5.46 sq. miles

**Aerial Map with Commercial Corridors**



**8 Commercial Corridors Identified**

<b>Highest Corridor Traffic Count (Annual Average Daily Traffic)</b>	30,568	<i>2013 Data Year</i>
<b>Population Density Range of G&amp;I Area Corridors (per acre)</b>	0.6 - 4.5	<i>Density calculations a derived from the area within a 1/4 mile of Corridor (Corridor Study Area)</i>
<b>Gross Neighborhood Density Range of G&amp;I Area Corridors (per acre)</b>	0.6 - 7.9	
<b>Job Density Range of G&amp;I Area Corridors (per acre)</b>	1.0 - 14.4	
<b>Worker Density Range of G&amp;I Area Corridors (per acre)</b>	0.2 - 3.1	

**Retail**

<b>Total Sales</b>	\$375,933,519	<b>Classification:</b>	Regional Retail Hub
<b>Potential Sales</b>	\$168,444,675		
<b>Leakage</b>	(\$207,488,844)	<b>Seasonal Housing:</b>	19.5% of G&I Area Housing

**Sprawl**

*Percentage of Housing in the Core Place is Declining by -5.7%*

**Population**

**2000-2010:** *Growing at 5.4% with the Core Place Declining at -7.3%*  
**Average Age:** 40.3 [*+5.2% change from 2000 Census* ]  
**Demographic Shifts:** *Generation X had the largest % gain (up 5.9%); Silent Generation had the largest % loss (down -13.8%)*

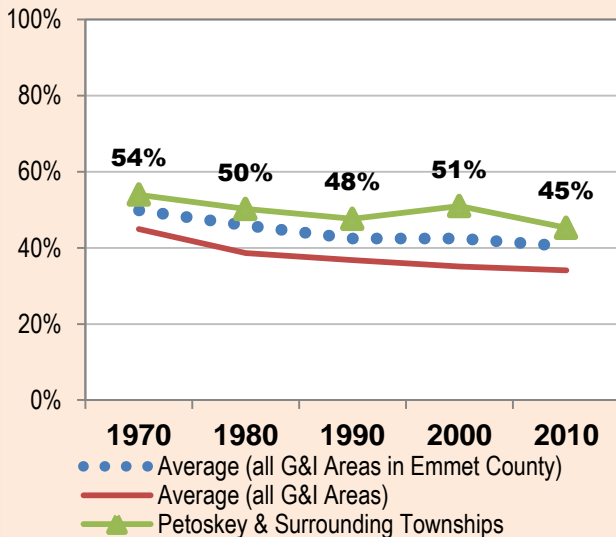
**Jobshed**

*Worker Importer – Number of Jobs exceeds Resident Worker population by 109%*

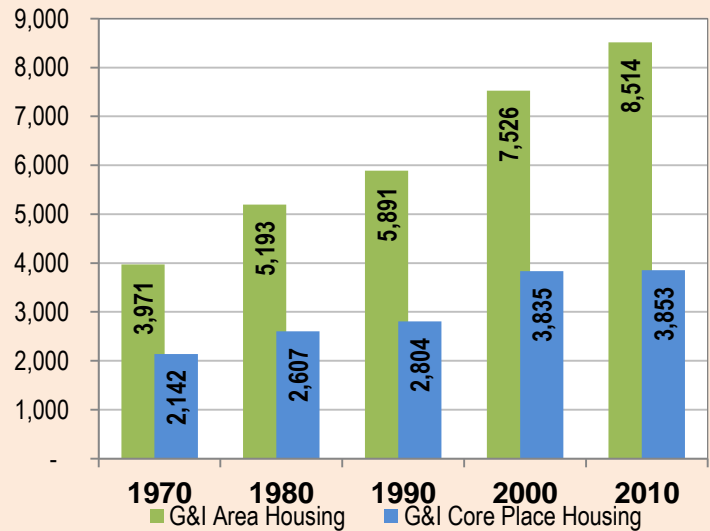
Population & Housing Trends

Census Data	Core Place	G&I Area
	City of Petoskey, Bay View CDP	City of Petoskey, Resort Township, Bear Creek Township
<b>Total Population (2010)</b>	<b>5,803</b>	<b>14,568</b>
Percentage Change from 2000	<b>-7.3%</b>	<b>+5.4%</b>
People per Acre	1.66	0.36
People per Square Mile	1,063	228
Average Age [% Change from 2000]	<b>NA</b>	<b>40.3 [ +5.2% ]</b>
<b>Total Housing (2010)</b>	<b>3,853</b>	<b>8,514</b>
Percentage Change from 2000	<b>0.5%</b>	<b>13.1%</b>
Gross Neighborhood Density (per acre)	1.10	0.21
<b>Total Households (2010)</b>	<b>2,597</b>	<b>6,130</b>
Percentage of Households without Children (under 18)	71%	67%
<b>Study Area Size (Land Cover)</b>		
Acres	3,494.40	40,825.60
Square Miles	5.46	63.79

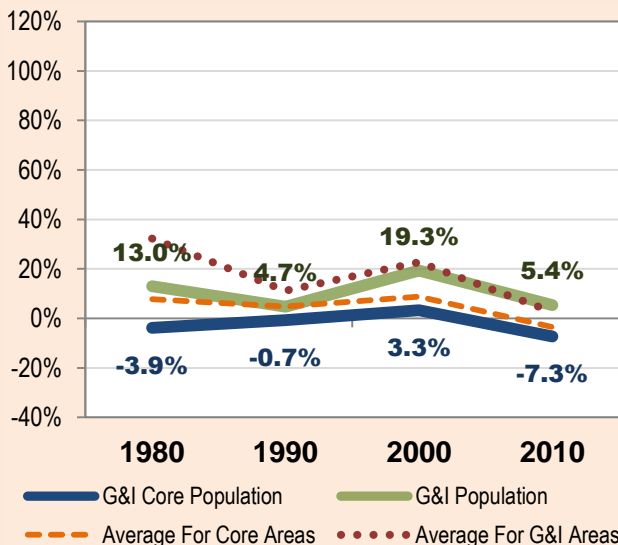
Housing in Core Place as a Percentage of Total Growth & Investment Area



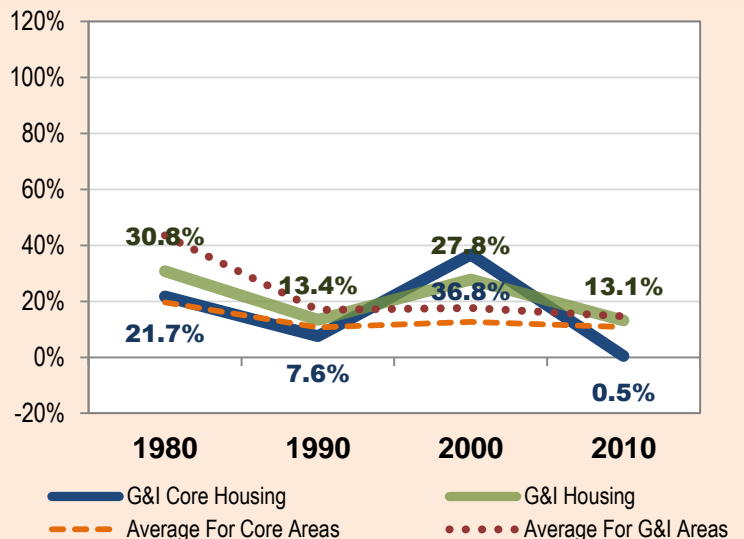
Housing Units in G&I Area and Core Place



Percentage Change in Population in G&I Area and Core Place



Percentage Change in Housing Units in G&I Area and Core Place



**Growth & Investment Readiness Assessment**

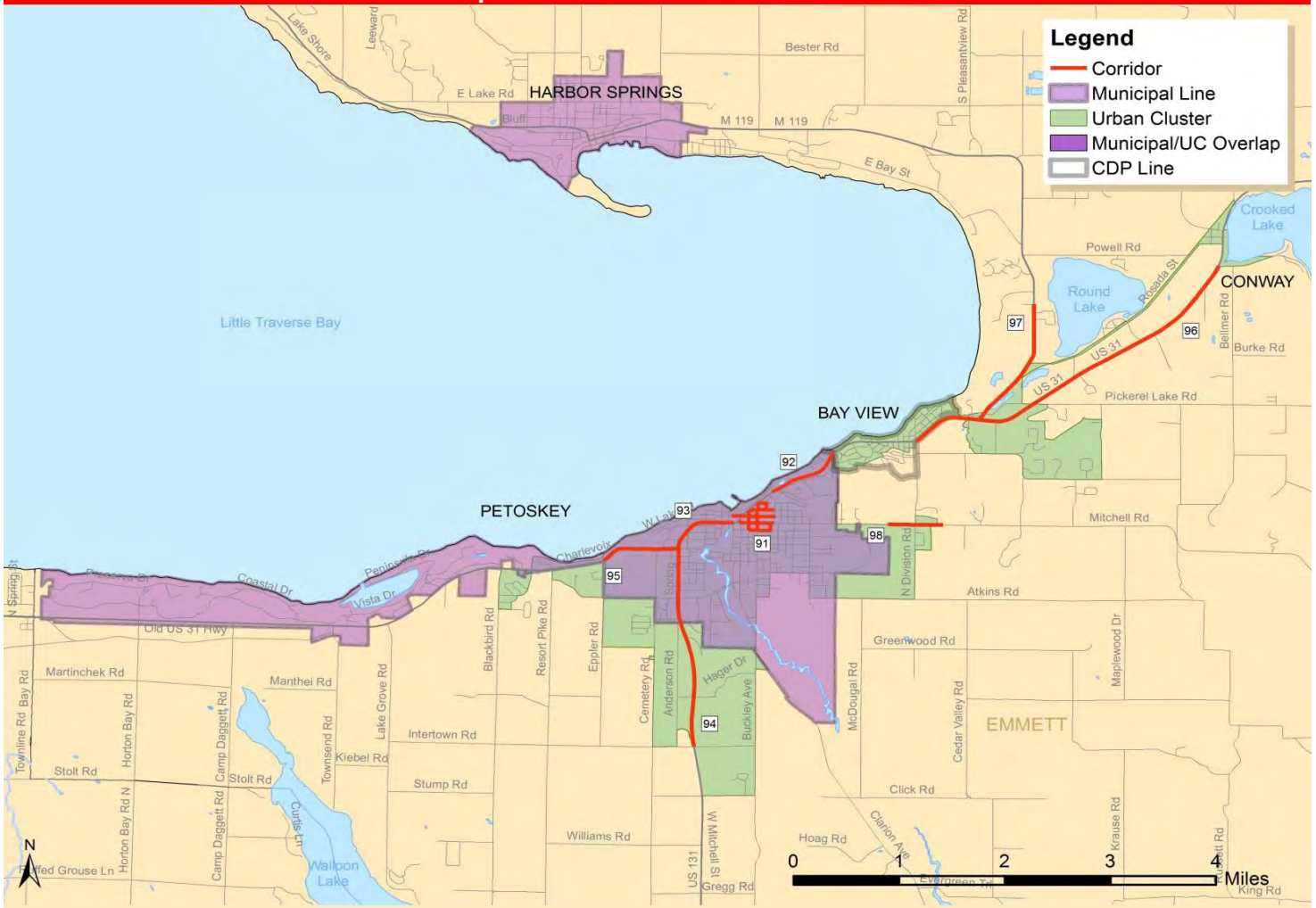
**Criteria Status**

		Criteria Status	
Initial Selection Criteria	1	Municipal Water	Yes
	2	Municipal Sewer	Yes
	3	Government Staff	Yes
	4	Master Plan Includes Higher Density Center	Yes
	5	Zoning Ordinance Supporting Master Plan Density Center	Yes
Census Data	6	Core Place Population Increasing	No
	7	Housing Growth Rate Over 15% (2000-2010 Census)	No
	8	Core Place Housing Growth Increasing Faster than Surrounding Area	No
	9	Census Class (Rural, Urban Cluster, Urbanized Area, MSA)	Urban Cluster
	10	Job Density Over 75 Jobs Per Acre in Commercial Corridors	No
	11	50% of Workers Living within 5 miles	No
Zoning Policy	12	Zoned Densities Greater Than 30 Dwellings/Acre in Commercial Corridors	Yes
	13	Zoning Allows Mixed-Use by Right in Commercial Corridors	Yes
	14	Zoning Allows Multi-Family Residential by Right in Commercial Corridors	Yes
	15	Building Height Limits Greater than 35 feet in Commercial Corridors	Yes
	16	No On Site Parking Requirement in Central Business District	Yes
	17	Density Bonuses Offered for Contributions Towards Public Policy Goals	No
Placemaking	18	4 Key Placemaking Elements in Corridors	Yes
	19	Retail Hub	Yes - Regional
	20	Educational Institutions (Trade Schools, Community Colleges, Universities)	Yes
	21	Contain Medical Centers	Yes
	23	Walkable Density CBD or Commercial Corridors (20-30 Dwellings per Acre)	No
Opportunity	24	Community Identified Development Opportunities	Yes
	25	Marketing Redevelopment & Infill Sites	No
	22	Fixed Route Transit (Headways 15 mins or less)	No
	30	Commercial Corridors with High Traffic Count AADT (Over 10k, Over 25k)	Yes > 25,000
Infrastructure	26	Additional Water Capacity	Yes
	27	Additional Sewer Capacity	Yes
	28	Broadband Service over 1 Gbps Available	No
	29	Municipal WiFi	Yes

Commercial Corridors

ID	Name	Corridor Length (feet)	Population Density (People per acre)	Housing Density (Dwellings per acre)	Job Density (Jobs per acre)	Worker Density (Workers per acre)
91	Petoskey CBD	11,312	7.9	4.5	14.4	3.1
92	Petoskey U31 MacDonald Corridor	3,914	3.8	2.9	3.3	1.3
93	Petoskey West Mitchell Street Corridor	3,605	3.8	2.5	12.7	1.8
94	Petoskey Spring Street US131 Corridor	10,803	3.4	2.0	6.0	1.4
95	Petoskey US31-Charlevoix Corridor	4,015	1.9	1.3	8.7	0.8
96	Bear Creek US31 Corridor	18,892	0.7	0.7	1.0	0.2
97	Bear Creek M119 Corridor	7,240	0.6	0.6	1.8	0.2
98	Bear Creek East Mitchell/South Division Corridor	2,813	3.2	1.6	1.3	1.3

Growth & Investment Core Place Map with Commercial Corridors



Housing Data

Census-ACS Data

Core Place

City of Petoskey, Bay View CDP

G&I Area

City of Petoskey, Resort Township, Bear Creek Township

Housing Efficiency Rating (Average HERS)

Efficiency compared to 2012 DOE Challenge Home (30 HERS)

**292**

262% Less Efficient

**252**

222% Less Efficient

Percentage Built by Year

Before 1940	37%	20%
1940-1949	6%	4%
1950-1959	8%	7%
1960-1969	5%	7%
1970-1979	8%	13%
1980-1989	11%	12%
1990-1999	14%	20%
2000-2009	11%	17%
Later than 2010	0%	0%

Average Age

**1956**

**1970**

Median Value

City of Petoskey	\$190,800
Bear Creek Township	\$182,400
Resort Township	\$207,700

Home Heating Fuel

Percent of Homes Natural Gas	82%	67%
Percent of Homes Using Propane	<b>0%</b>	<b>16%</b>
Percent of Homes Using Wood	5%	7%
Percent of Homes Using Solar Energy	0%	0%

Personal Income

Census-ACS Data (2008-2012 5 Year Summary File)

Median Household Income (2012 Dollars)

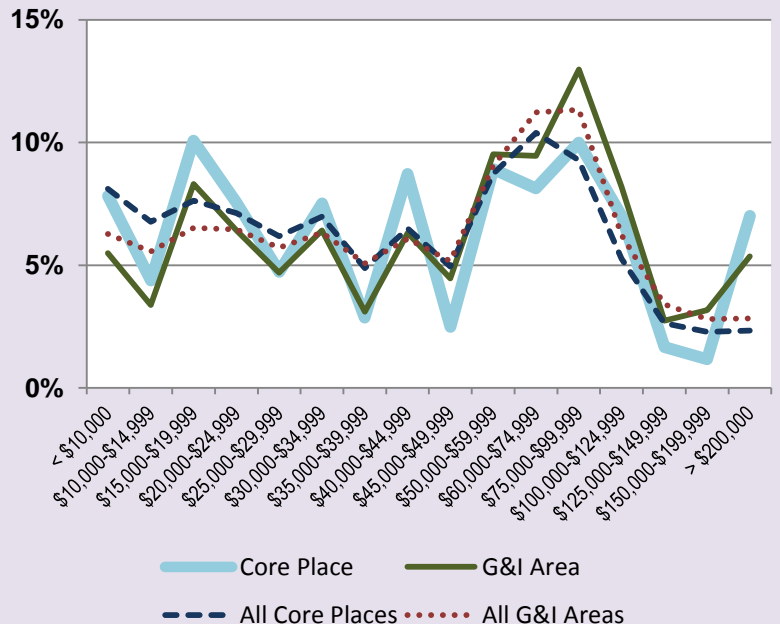
Core Place

City of Petoskey	\$42,056
Bay View CDP	\$76,154

G&I Area

City of Petoskey	\$42,056
Bear Creek Township	\$52,930
Resort Township	\$70,000

Household Income Distribution



Per Capita Annual Income (2012 Dollars)

Core Place	<b>\$36,773</b>
G&I Area	<b>\$32,288</b>

## Policy

Data Source: Commercial Corridor Inventory Interview	Core Place Units of Government Interviewed	
	City of Petoskey	Bear Creek Township
<b>Year of Master Plan Approval</b>	<b>2006</b>	<b>2012</b>
<i>Master Plan Update</i>	2012	NA
<b>Community Economic Strategy</b>	<b>No</b>	<b>Yes</b>
<i>Economic Strategy Coordinates with Regional Strategy</i>	NA	No
<b>Growth &amp; Investment Strategy</b>	<b>Yes</b>	<b>No</b>
<i>Identify Areas of Focus for Growth &amp; Investment Strategy</i>	Yes	No
<i>Active G&amp;I Strategy Development Discussions</i>	NA	Yes
<i>Planning Zoning Benchmarks</i>	NA	NA
<b>Development Opportunities on Corridor</b>	<b>Yes</b>	<b>Yes</b>
<i>Redevelopment Priorities Identified</i>	Yes	Yes
<i>Redevelopment Resources Identified</i>	Yes	Yes
<i>Market Potential Development Sites</i>	No	No
<b>Guides and Resources</b>		
<i>Publish Development Guide</i>	No	Yes
<i>Zoning Orientation Package Provided to Staff &amp; Committees</i>	Yes	No
<i>Zoning Training Funding</i>	Yes	Yes
<b>Community Marketing Strategy</b>	<b>No</b>	<b>No</b>
<b>Area Plans</b>		
<i>Downtown Plan</i>	<b>Yes</b>	<b>No</b>
<i>Downtown Development Authority</i>	TIFA Established 1985	
<i>Corridor Improvement Plan</i>	<b>No</b>	<b>Yes</b>
<i>Corridor Improvement Authority</i>		

## Zoning

Zoning Authority with Identified Commercial Corridors	Districts in Identified Commercial Corridors	Max Dwelling Density for Districts in Corridors	% of Districts in Corridors where Mixed Use is allowed by Right	% of Districts in Corridors where Multi-Family Use is allowed by Right	Max Building Height Allowed in Corridors
City of Petoskey	R-1   RM-1   RM-2   B-1   B-2   B-3   B-3A   B-3B   O-S   I-1   PUD   PR	145	58%	83%	40 ft
Bear Creek Township	R-1A   R-1B   R-2A   R-2B   R-2C   RR-1   B-1   B-2   I-1   FF-1	11	0%	30%	30 ft





## Talent Jobshed

Census Data	Core Place	G&I Area
	City of Petoskey, Bay View CDP	City of Petoskey, Resort Township, Bear Creek Township
<b>Workers Living within Study Area</b>	<b>2,272</b>	<b>5,816</b>
Worker Density (per acre)	0.65	0.14
<b>Worker's Earnings</b>		
% with earnings \$1250/month or less	29%	28%
% with earnings \$1251/month to \$3333/month	42%	40%
% with earnings greater than \$3333/month	30%	33%
<b>Jobs Located in Area</b>	<b>8,675</b>	<b>12,129</b>
Job Density (per acre)	2.48	0.30

## Commute Data for Workers Employed in Core Place

Commuting data for workers residing from 2 - 175 miles from G&amp;I Area

<b>Commuting Workers</b>	<b>7,105</b>	<b>21% Commuting 5 Miles or Less</b>
<b>Total Daily One Way Commute for all Commuters</b>		
Route Distance (Miles)	218,191	
Commute Time (Minutes)	278,144	
<b>Total Annual Commute for all Commuters</b>		
Distance (Miles)	114,550,045	
Time (Hours)	<b>2,433,761</b>	
<b>Annual Commuting Costs</b>		
Total Fuel Cost	17,431,529	
Total Cost (IRS 2014 Standard Mileage Rate)	<b>\$64,148,025</b>	
<b>Average Per Worker Commute</b>	<b>Daily (2-Way)</b>	<b>Annual</b>
Distance (Miles)	61	16,122
Time (Hours)	1.3	343
Cost (IRS Standard Mileage Rate)	<b>\$34</b>	<b>\$9,029</b>

## Retail Activity

	Core Place Activity	G&I Area Activity	County Activity
<b>Total Retail Sales</b>	\$195,115,536	<b>\$375,933,519</b>	\$450,773,091
<b>Total Potential Retail Sales</b>	\$66,638,354	<b>\$168,444,675</b>	\$359,281,470
<b>Leakage</b>	(\$128,477,182)	<b>(\$207,488,844)</b>	(\$91,491,621)

Classification: **Regional Retail Hub**

*Petoskey & Surrounding Townships area businesses are capturing sales from the residents of Petoskey & Surrounding Townships area as well as areas inside and outside Emmet County.*

Sales by Retail Store Type	Core Place Sales	Potential G&I Area Sales	Core Place Sales / Potential G&I Sales
Food & Beverage Stores	\$21,688,085	<b>\$21,155,968</b>	103%
Health/Personal Care Stores	\$15,639,551	<b>\$13,157,549</b>	119%
Clothing & Accessories Stores	\$12,277,045	<b>\$8,471,446</b>	145%
Sport/Hobby/Book/Music Stores	\$6,632,750	<b>\$4,084,079</b>	162%
General Merchandise Stores	\$47,561,678	<b>\$35,275,855</b>	135%
Food & Beverage Establishments	\$19,727,754	<b>\$15,843,581</b>	125%
E-Shopping/Mail-Order	\$0	<b>\$8,391,599</b>	0%

<b>Corridor Street Name(s):</b>	East Lake Street from Quaintance Avenue to Division Street; Bay/Petoskey Streets from Division Street to Michigan Street; Howard/Rose/Lewis Streets from Bay Street to Michigan Street ; E. Mitchell Street from US31 to Division Street; Michigan Street/Waukazoo Avenue from Petoskey Street to E. Mitchell Street
<b>Corridor Classification:</b>	Central Business District
<b>Unit(s) of Government:</b>	City of Petoskey
<b>Length:</b>	2.14 miles
<b>Street Classification:</b>	Major Collector, Minor Arterial
<b>2013 Traffic Volume(AADT):</b>	NA
<b>Number of Traffic Lanes:</b>	2, Bi-Directional Traffic with Turn/Passing Lanes
<b>Parking</b>	Parallel, Diagonal
<b>Transit Service:</b>	Friendship Centers of Emmet County - Senior Trans
<b>Bike Lane:</b>	No
<b>Entertainment Venues:</b>	Yes
<b>Pedestrian Amenities:</b>	Sidewalks, Crosswalks, Mid-Block Crosswalks
<b>Walk Score</b>	<b>100</b>



### Corridor Overview

The Central Business District is a pedestrian-oriented shopping and commercial services area of historic downtown Petoskey. The physical building form and land uses are regulated to reflect the urban character of the historic commercial center of the community and to perpetuate the pedestrian-oriented business district by requiring street level commercial uses and permitting a mix of upper floor uses.

### Corridor Segment and Surrounding 1/4 Mile Study Area Map



### Economic Development

Community policies or activities assisting economic development (City of Petoskey)

<b>Growth &amp; Investment Strategy</b>	Yes	<b>Community Economic Strategy</b>	No
<b>Identify Areas of Focus for G&amp;I</b>	Yes	<b>Community Marketing Strategy</b>	No
<b>Development Opportunities</b>	Yes	<b>Market Potential Development Sites</b>	No
<b>Publish Development Guide</b>	No	<b>Capital Improvement Plan</b>	Yes

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Petoskey CBD	City of Petoskey, Bay View CDP	Petoskey & Surrounding Townships
<b>Total Population (2010)</b>	<b>2,434</b>	<b>5,803</b>	<b>14,568</b>
People per Acre	7.91	1.66	0.36
People per Square Mile	5,065	1,063	228
<b>Total Housing (2010)</b>	<b>1,385</b>	<b>3,853</b>	<b>8,514</b>
Gross Neighborhood Density (per acre)	4.50	1.10	0.21
<b>Study Area Size (Land Cover)</b>			
Acres	307.55	3,494.40	40,825.60
Square Miles	0.48	5.46	63.79
<b>Workers Living within Study Area</b>	<b>953</b>	<b>2,272</b>	<b>5,816</b>
% with earnings \$1250/month or less	29%	29%	28%
% with earnings \$1251/month to \$3333/month	40%	42%	40%
% with earnings greater than \$3333/month	30%	30%	33%
<b>Jobs Located within Study Area</b>	<b>4,434</b>	<b>8,675</b>	<b>12,129</b>
Job Density (per acre)	14.42	2.48	0.30

Zoning

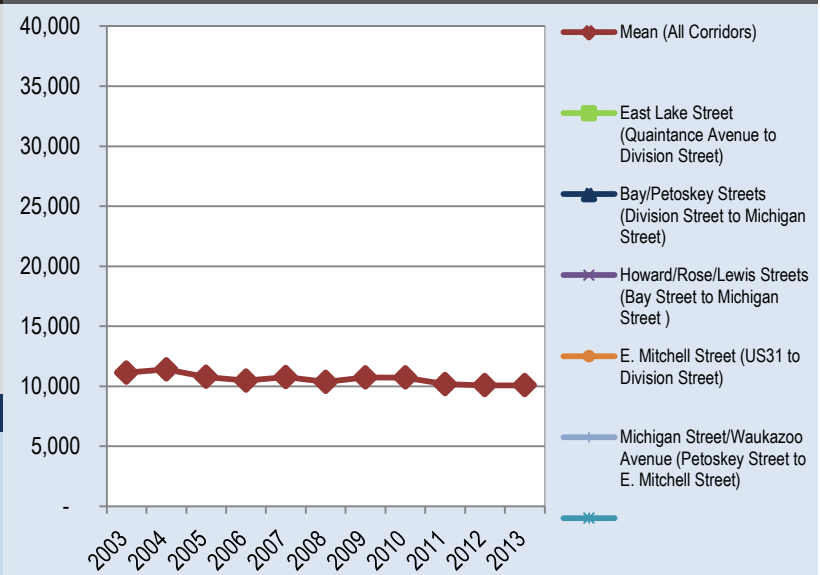
District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	
R-1   RM-2   B-1   B-2   B-3   O-S   PUD   PR	88%	75%	63%	5.2	145.2	40 ft

Infrastructure

<b>Public Utilities</b>		
Sewer	Yes	Additional Capacity
Water	Yes	Additional Capacity
<b>Energy Utilities</b>		
Underground Electric	Yes	
Renewable Energy Production	Yes	
	( )	
Natural Gas	Yes	
<b>Broadband</b>	Yes - 6 Technologies	
	(Fiber, Cable, DSL, WiFi, 4G, Fixed Wireless)	

Traffic Counts

(Data Unavailable for Corridor)



Policy

<b>Downtown Plan</b>	Yes
DDA	
<b>Corridor Improvement Plan</b>	No

Placemaking Elements

<b>Theaters/Entertainment Venues</b>	Yes	<b>Grocery Stores</b>	Yes
Little Traverse Civic Theater		<b>Restaurants</b>	Yes
		<b>Sidewalk Cafés</b>	Yes
		<b>Parks</b>	Yes
<b>Iconic Buildings</b>	Yes	<b>Pocket Parks</b>	Yes
Crooked Tree Art Center, Chesapeake & Ohio Railway Station, Perry Hotel, Petoskey Public Library, St Francis Xavier Parish		<b>Public Art Installations</b>	Yes
		<b>Wayfinding</b>	Yes
		<b>Pedestrian Connections</b>	Yes

**Corridor Street Name(s):** Bay View Road (US31) from Boulder Lane to Lewis Street

**Corridor Classification:** Commercial

**Unit(s) of Government:** City of Petoskey

**Length:** 0.74 miles

**Street Classification:** Principal Arterial - Other

**2013 Traffic Volume(AADT):** 20,075 Source: MDOT

**Number of Traffic Lanes:** 2, Bi-Directional Traffic with Turn/Passing Lanes

**Parking:** No Street Parking

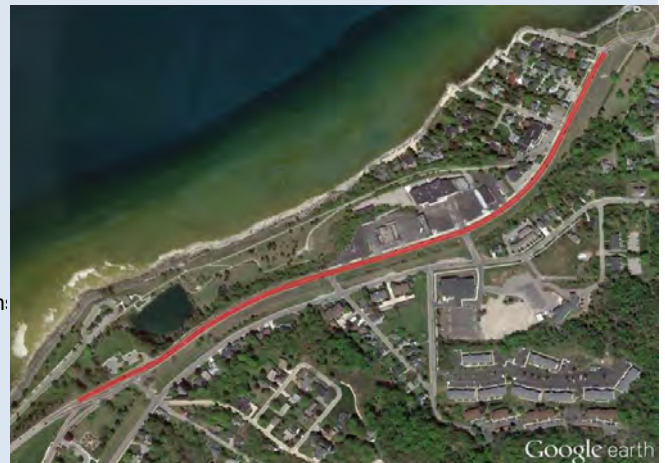
**Transit Service:** Friendship Centers of Emmet County - Senior Tran

**Bike Lane:** Yes

**Entertainment Venues:** No

**Pedestrian Amenities:** Sidewalks, Crosswalks

**Walk Score** 60



### Corridor Overview

The US31 MacDonald Corridor is located on US-31 and links the historic downtown CBD to destinations to the north including the Bay View Association, the Bear Creek US-31 Commercial Corridor, and M119 to Harbor Springs. The corridor consists of a mix of retail and multi-family residential development.

### Corridor Segment and Surrounding 1/4 Mile Study Area Map



### Economic Development

Community policies or activities assisting economic development (City of Petoskey)

<b>Growth &amp; Investment Strategy</b>	Yes	<b>Community Economic Strategy</b>	No
<b>Identify Areas of Focus for G&amp;I</b>	Yes	<b>Community Marketing Strategy</b>	No
<b>Development Opportunities</b>	Yes	<b>Market Potential Development Sites</b>	No
<b>Publish Development Guide</b>	No	<b>Capital Improvement Plan</b>	Yes

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Petoskey U31 MacDonald Corridor	City of Petoskey, Bay View CDP	Petoskey & Surrounding Townships
<b>Total Population (2010)</b>	<b>989</b>	<b>5,803</b>	<b>14,568</b>
People per Acre	3.85	1.66	0.36
People per Square Mile	2,463	1,063	228
<b>Total Housing (2010)</b>	<b>749</b>	<b>3,853</b>	<b>8,514</b>
Gross Neighborhood Density (per acre)	2.92	1.10	0.21
<b>Study Area Size (Land Cover)</b>			
Acres	256.94	3,494.40	40,825.60
Square Miles	0.40	5.46	63.79
<b>Workers Living within Study Area</b>			
% with earnings \$1250/month or less	26%	29%	28%
% with earnings \$1251/month to \$3333/month	40%	42%	40%
% with earnings greater than \$3333/month	35%	30%	33%
<b>Jobs Located within Study Area</b>			
Job Density (per acre)	3.31	2.48	0.30

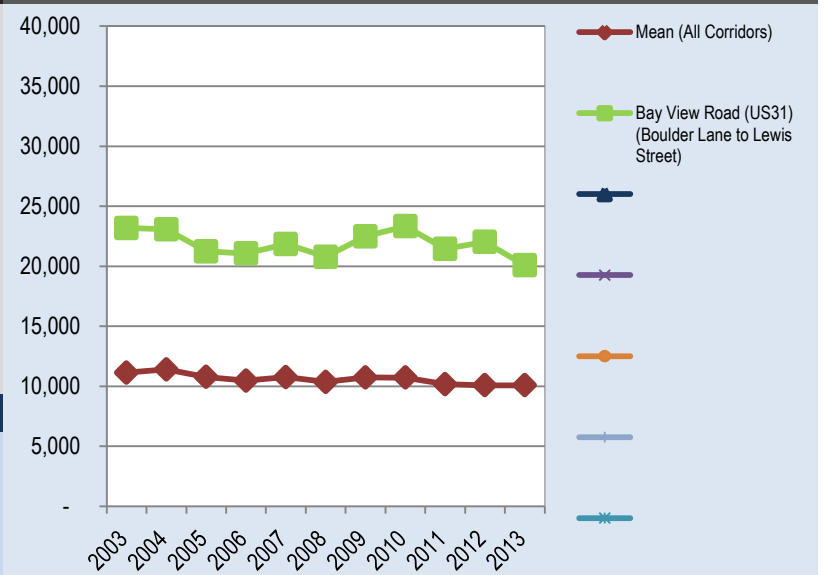
Zoning

District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	
R-1   RM-2   B-3   PR	75%	50%	25%	5.2	26.7	33 ft

Infrastructure

<b>Public Utilities</b>		
Sewer	Yes	<i>Additional Capacity</i>
Water	Yes	<i>Additional Capacity</i>
<b>Energy Utilities</b>		
Underground Electric	Yes	
Renewable Energy Production	No	
Natural Gas	Yes	
<b>Broadband</b>	Yes - 5 Technologies <i>(Fiber, Cable, DSL, 4G, Fixed Wireless)</i>	

Traffic Counts



Policy

<b>Downtown Plan</b>	No
<i>Outside DDA</i>	
<b>Corridor Improvement Plan</b>	No

Placemaking Elements

<b>Theaters/Entertainment Venues</b>	No	<b>Grocery Stores</b>	No
		<b>Restaurants</b>	No
		<b>Sidewalk Cafés</b>	No
		<b>Parks</b>	Yes
<b>Iconic Buildings</b>	No	<b>Pocket Parks</b>	No
		<b>Public Art Installations</b>	No
		<b>Wayfinding</b>	Yes
		<b>Pedestrian Connections</b>	Yes

**Corridor Street Name(s):** W. Mitchell/Spring Streets (US31) from Elizabeth Street to Charlevoix Avenue

**Corridor Classification:** Commercial

**Unit(s) of Government:** City of Petoskey

**Length:** 0.68 miles

**Street Classification:** Principal Arterial - Other

**2013 Traffic Volume(AADT):** 28,229 Source: MDOT

**Number of Traffic Lanes:** 4, Bi-Directional Traffic with Turn/Passing Lanes

**Parking:** Parking Structure(s)

**Transit Service:** Friendship Centers of Emmet County - Senior Tran

**Bike Lane:** No

**Entertainment Venues:** No

**Pedestrian Amenities:** Sidewalks, Crosswalks

**Walk Score** 80



### Corridor Overview

The West Mitchell Street Corridor is located on US-31 and links the auto-oriented commercial areas of Spring Street to the historic downtown CBD. McLaren Northern Michigan Hospital is located on the corridor as well as a complement of retail, restaurant, and other commercial service businesses.

### Corridor Segment and Surrounding 1/4 Mile Study Area Map



### Economic Development

Community policies or activities assisting economic development (City of Petoskey)

<b>Growth &amp; Investment Strategy</b>	Yes	<b>Community Economic Strategy</b>	No
<b>Identify Areas of Focus for G&amp;I</b>	Yes	<b>Community Marketing Strategy</b>	No
<b>Development Opportunities</b>	Yes	<b>Market Potential Development Sites</b>	No
<b>Publish Development Guide</b>	No	<b>Capital Improvement Plan</b>	Yes

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Petoskey West Mitchell Street Corridor	City of Petoskey, Bay View CDP	Petoskey & Surrounding Townships
<b>Total Population (2010)</b>	<b>1,219</b>	<b>5,803</b>	<b>14,568</b>
People per Acre	3.83	1.66	0.36
People per Square Mile	2,454	1,063	228
<b>Total Housing (2010)</b>	<b>807</b>	<b>3,853</b>	<b>8,514</b>
Gross Neighborhood Density (per acre)	2.54	1.10	0.21
<b>Study Area Size (Land Cover)</b>			
Acres	317.95	3,494.40	40,825.60
Square Miles	0.50	5.46	63.79
<b>Workers Living within Study Area</b>	<b>578</b>	<b>2,272</b>	<b>5,816</b>
% with earnings \$1250/month or less	30%	29%	28%
% with earnings \$1251/month to \$3333/month	43%	42%	40%
% with earnings greater than \$3333/month	27%	30%	33%
<b>Jobs Located within Study Area</b>	<b>4,052</b>	<b>8,675</b>	<b>12,129</b>
Job Density (per acre)	12.74	2.48	0.30

Zoning

District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	

R-1   RM-2   B-3	100%	67%	33%	5.2	26.7	33 ft
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Infrastructure

Public Utilities

Sewer	Yes	Additional Capacity
Water	Yes	Additional Capacity

Energy Utilities

Underground Electric	Yes
Renewable Energy Production	No

Natural Gas	Yes
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Broadband

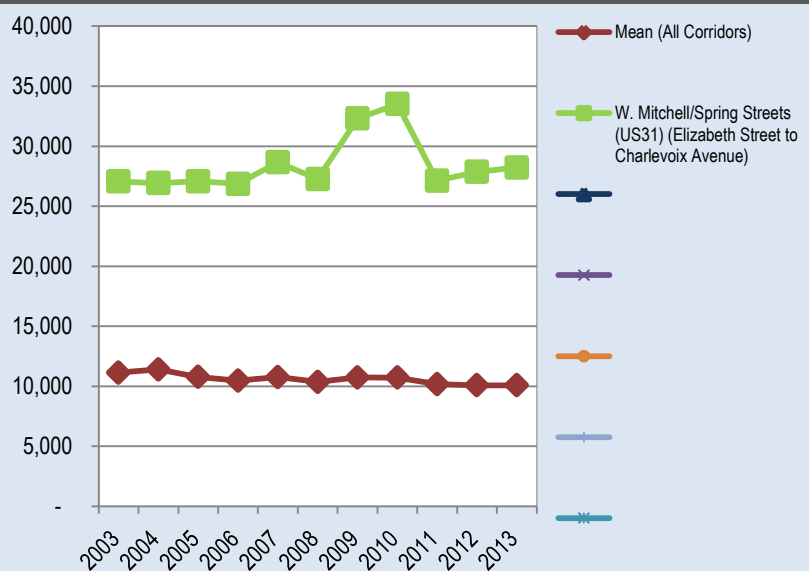
Yes - 5 Technologies  
(Fiber, Cable, DSL, 4G, Fixed Wireless)

Policy

<b>Downtown Plan</b>	No
<i>Outside DDA</i>	

<b>Corridor Improvement Plan</b>	Yes
<i>Construction in 2014</i>	

Traffic Counts



Placemaking Elements

<b>Theaters/Entertainment Venues</b>	No	<b>Grocery Stores</b>	No
		<b>Restaurants</b>	Yes
		<b>Sidewalk Cafés</b>	No
		<b>Parks</b>	Yes
<b>Iconic Buildings</b>	Yes	<b>Pocket Parks</b>	No
<i>West Mitchell Street Bridge</i>		<b>Public Art Installations</b>	No
		<b>Wayfinding</b>	No
		<b>Pedestrian Connections</b>	Yes



**Corridor Street Name(s):** Spring Street (US131) from Charlevoix Avenue to La Chaumiere; US131 from La Chaumiere to Intertown Road

**Corridor Classification:** Commercial

**Unit(s) of Government:** City of Petoskey, Bear Creek Township

**Length:** 2.05 miles

**Street Classification:** Principal Arterial - Other

**2013 Traffic Volume(AADT):** 21,037 Source: MDOT

**Number of Traffic Lanes:** 2-4, Bi-Directional Traffic with Turn/Passing Lanes

**Parking:** No Street Parking

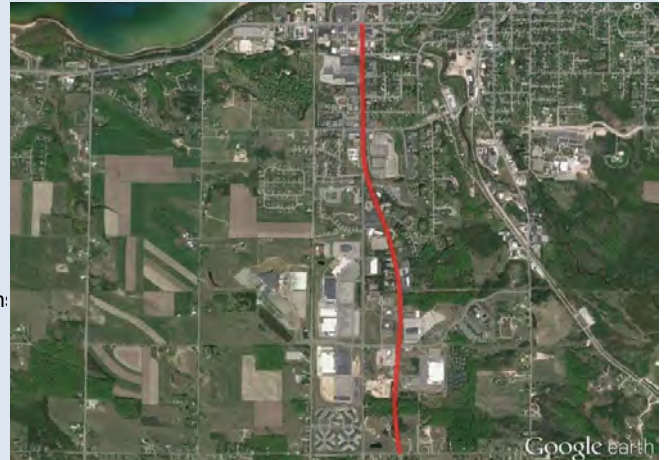
**Transit Service:** Friendship Centers of Emmet County - Senior Tran

**Bike Lane:** No

**Entertainment Venues:** Yes

**Pedestrian Amenities:** Sidewalks, Crosswalks

**Walk Score:** 52



### Corridor Overview

The Spring Street US131 Corridor is a major regional route that provides a southern connection and links Kalkaska and Cadillac to Petoskey and provides a mix of regional and resort commercial businesses as well as residential development in multiple family and mixed-use buildings. While the areas are sidewalk-accessible, the businesses are predominantly automobile-oriented and larger scale due to their regional nature. Several Large big box retailers are located on the corridor.

### Corridor Segment and Surrounding 1/4 Mile Study Area Map



### Economic Development

Community policies or activities assisting economic development (City of Petoskey or Bear Creek Township)

<b>Growth &amp; Investment Strategy</b>	Yes	<b>Community Economic Strategy</b>	Yes
<b>Identify Areas of Focus for G&amp;I</b>	Yes	<b>Community Marketing Strategy</b>	No
<b>Development Opportunities</b>	Yes	<b>Market Potential Development Sites</b>	No
<b>Publish Development Guide</b>	Yes	<b>Capital Improvement Plan</b>	Yes

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Petoskey Spring Street US131 Corridor	City of Petoskey, Bay View CDP	Petoskey & Surrounding Townships
<b>Total Population (2010)</b>	<b>2,593</b>	<b>5,803</b>	<b>14,568</b>
People per Acre	3.37	1.66	0.36
People per Square Mile	2,155	1,063	228
<b>Total Housing (2010)</b>	<b>1,571</b>	<b>3,853</b>	<b>8,514</b>
Gross Neighborhood Density (per acre)	2.04	1.10	0.21
<b>Study Area Size (Land Cover)</b>			
Acres	770.03	3,494.40	40,825.60
Square Miles	1.20	5.46	63.79
<b>Workers Living within Study Area</b>	<b>1,116</b>	<b>2,272</b>	<b>5,816</b>
% with earnings \$1250/month or less	29%	29%	28%
% with earnings \$1251/month to \$3333/month	43%	42%	40%
% with earnings greater than \$3333/month	28%	30%	33%
<b>Jobs Located within Study Area</b>	<b>4,635</b>	<b>8,675</b>	<b>12,129</b>
Job Density (per acre)	6.02	2.48	0.30

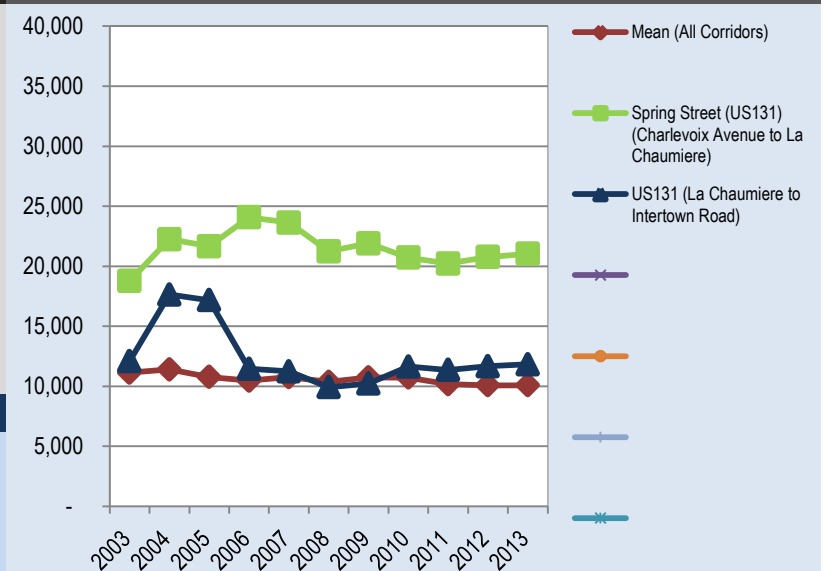
Zoning

District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	
City of Petoskey: RM-1   B-3   B-3A   I-1   PUD	100%	100%	60%	15.2	26.7	25 ft
Bear Creek Township: R-1B   R-2B   R-2C   B-2   FF-1	80%	40%	0%	1.0	10.9	30 ft

Infrastructure

<b>Public Utilities</b>		
Sewer	Yes	<i>Additional Capacity</i>
Water	Yes	<i>Limited Additional Capacity</i>
<b>Energy Utilities</b>		
Underground Electric	Yes	
Renewable Energy Production	No	
Natural Gas	Yes	
<b>Broadband</b>	Yes - 5 Technologies <i>(Fiber, Cable, DSL, 4G, Fixed Wireless)</i>	

Traffic Counts



Policy

<b>Downtown Plan</b>	No
<i>Outside DDA</i>	
<b>Corridor Improvement Plan</b>	No

Placemaking Elements

<b>Theaters/Entertainment Venues</b>	Yes	<b>Grocery Stores</b>	Yes
<i>Petoskey Cinema</i>		<b>Restaurants</b>	Yes
		<b>Sidewalk Cafés</b>	No
		<b>Parks</b>	Yes
<b>Iconic Buildings</b>	No	<b>Pocket Parks</b>	No
		<b>Public Art Installations</b>	No
		<b>Wayfinding</b>	No
		<b>Pedestrian Connections</b>	Yes

**Corridor Street Name(s):** Charlevoix Avenue (US31) from Eppler Road to US131

**Corridor Classification:** Commercial

**Unit(s) of Government:** City of Petoskey

**Length:** 0.76 miles

**Street Classification:** Principal Arterial - Other

**2013 Traffic Volume(AADT):** 15,722 Source: MDOT

**Number of Traffic Lanes:** 4, Bi-Directional Traffic

**Parking:** No Street Parking

**Transit Service:** Friendship Centers of Emmet County - Senior Trans

**Bike Lane:** No

**Entertainment Venues:** No

**Pedestrian Amenities:** Sidewalks, Crosswalks

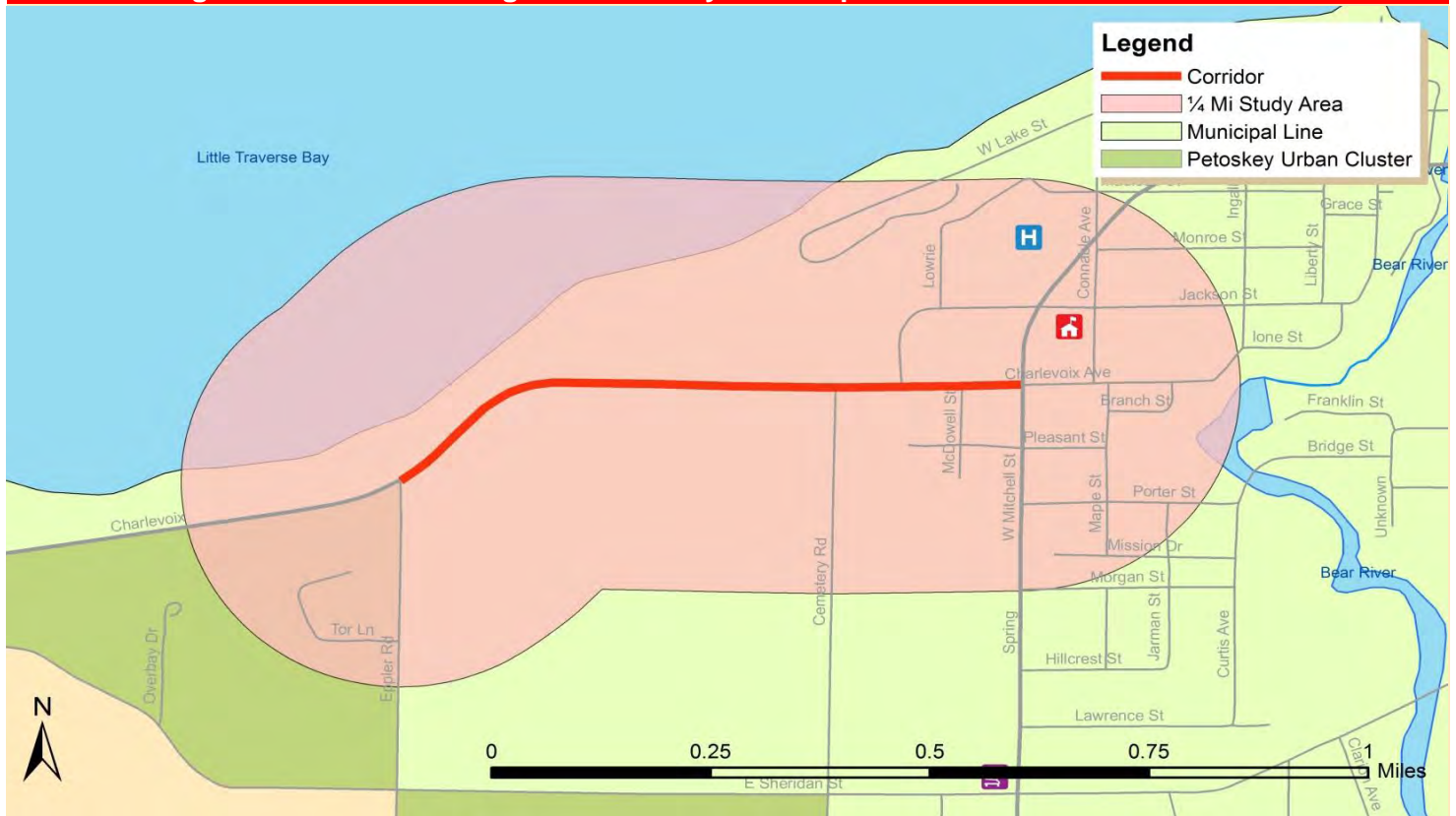
**Walk Score:** 38



### Corridor Overview

The US31 Charlevoix Corridor is located on US-31, which links Petoskey to destinations to the south and west including Bay Harbor and the City of Charlevoix. The corridor consists of a mix of auto-oriented retail, auto dealerships, commercial service businesses, and the Emmet County Fairgrounds.

### Corridor Segment and Surrounding 1/4 Mile Study Area Map



### Economic Development

Community policies or activities assisting economic development (City of Petoskey)

<b>Growth &amp; Investment Strategy</b>	Yes	<b>Community Economic Strategy</b>	No
<b>Identify Areas of Focus for G&amp;I</b>	Yes	<b>Community Marketing Strategy</b>	No
<b>Development Opportunities</b>	Yes	<b>Market Potential Development Sites</b>	No
<b>Publish Development Guide</b>	No	<b>Capital Improvement Plan</b>	Yes

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Petoskey US31-Charlevoix Corridor	City of Petoskey, Bay View CDP	Petoskey & Surrounding Townships
<b>Total Population (2010)</b>	<b>577</b>	<b>5,803</b>	<b>14,568</b>
People per Acre	1.90	1.66	0.36
People per Square Mile	1,215	1,063	228
<b>Total Housing (2010)</b>	<b>409</b>	<b>3,853</b>	<b>8,514</b>
Gross Neighborhood Density (per acre)	1.35	1.10	0.21
<b>Study Area Size (Land Cover)</b>			
Acres	304.05	3,494.40	40,825.60
Square Miles	0.48	5.46	63.79
<b>Workers Living within Study Area</b>	<b>231</b>	<b>2,272</b>	<b>5,816</b>
% with earnings \$1250/month or less	27%	29%	28%
% with earnings \$1251/month to \$3333/month	48%	42%	40%
% with earnings greater than \$3333/month	25%	30%	33%
<b>Jobs Located within Study Area</b>	<b>2,656</b>	<b>8,675</b>	<b>12,129</b>
Job Density (per acre)	8.74	2.48	0.30

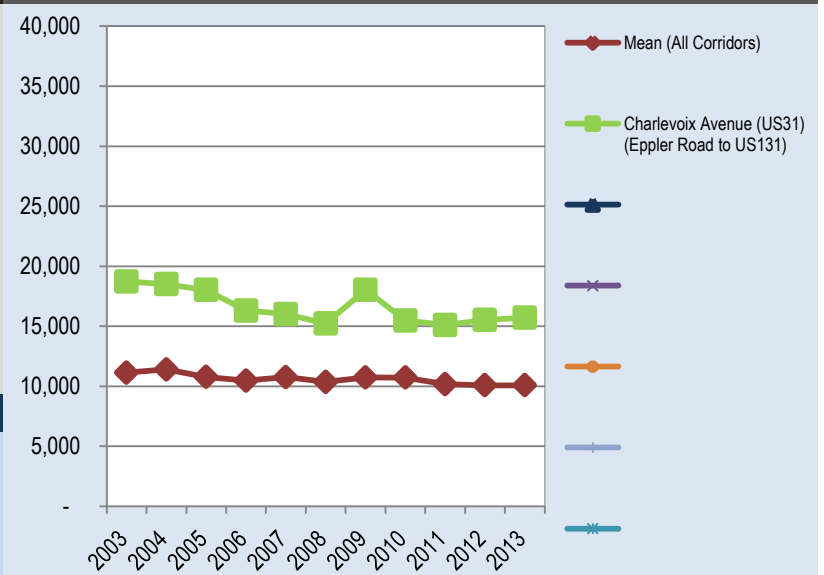
Zoning

District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	
R-1   B-3   B-3B	100%	67%	67%	5.2	26.7	25 ft

Infrastructure

<b>Public Utilities</b>		
Sewer	Yes	<i>Additional Capacity</i>
Water	Yes	<i>Additional Capacity</i>
<b>Energy Utilities</b>		
Underground Electric	Yes	
Renewable Energy Production	No	
Natural Gas	Yes	
<b>Broadband</b>	Yes - 5 Technologies <i>(Fiber, Cable, DSL, 4G, Fixed Wireless)</i>	

Traffic Counts



Policy

<b>Downtown Plan</b>	No
<i>Outside DDA</i>	
<b>Corridor Improvement Plan</b>	No

Placemaking Elements

<b>Theaters/Entertainment Venues</b>	No	<b>Grocery Stores</b>	No
		<b>Restaurants</b>	Yes
		<b>Sidewalk Cafés</b>	No
		<b>Parks</b>	Yes
<b>Iconic Buildings</b>	No	<b>Pocket Parks</b>	No
		<b>Public Art Installations</b>	No
		<b>Wayfinding</b>	No
		<b>Pedestrian Connections</b>	Yes

**Corridor Street Name(s):** US31 from Graham Road to Division Road

**Corridor Classification:** Commercial

**Unit(s) of Government:** Bear Creek Township

**Length:** 3.58 miles

**Street Classification:** Principal Arterial - Other

**2013 Traffic Volume(AADT):** 30,568 Source: MDOT

**Number of Traffic Lanes:** 2-4, Bi-Directional Traffic with Turn/Passing Lanes

**Parking:** No Street Parking

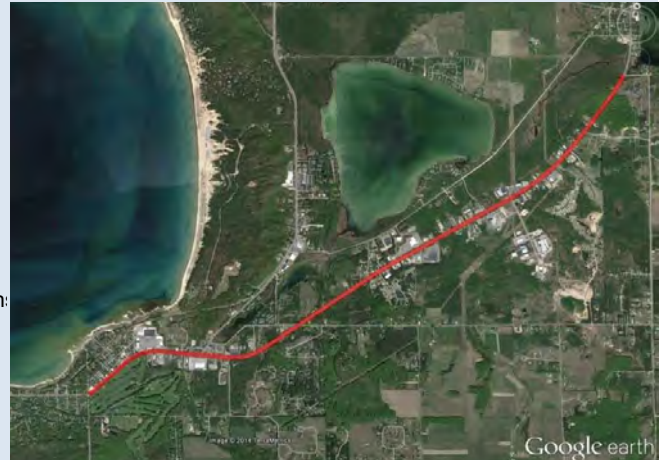
**Transit Service:** Friendship Centers of Emmet County - Senior Trans

**Bike Lane:** No

**Entertainment Venues:** No

**Pedestrian Amenities:** Sidewalks

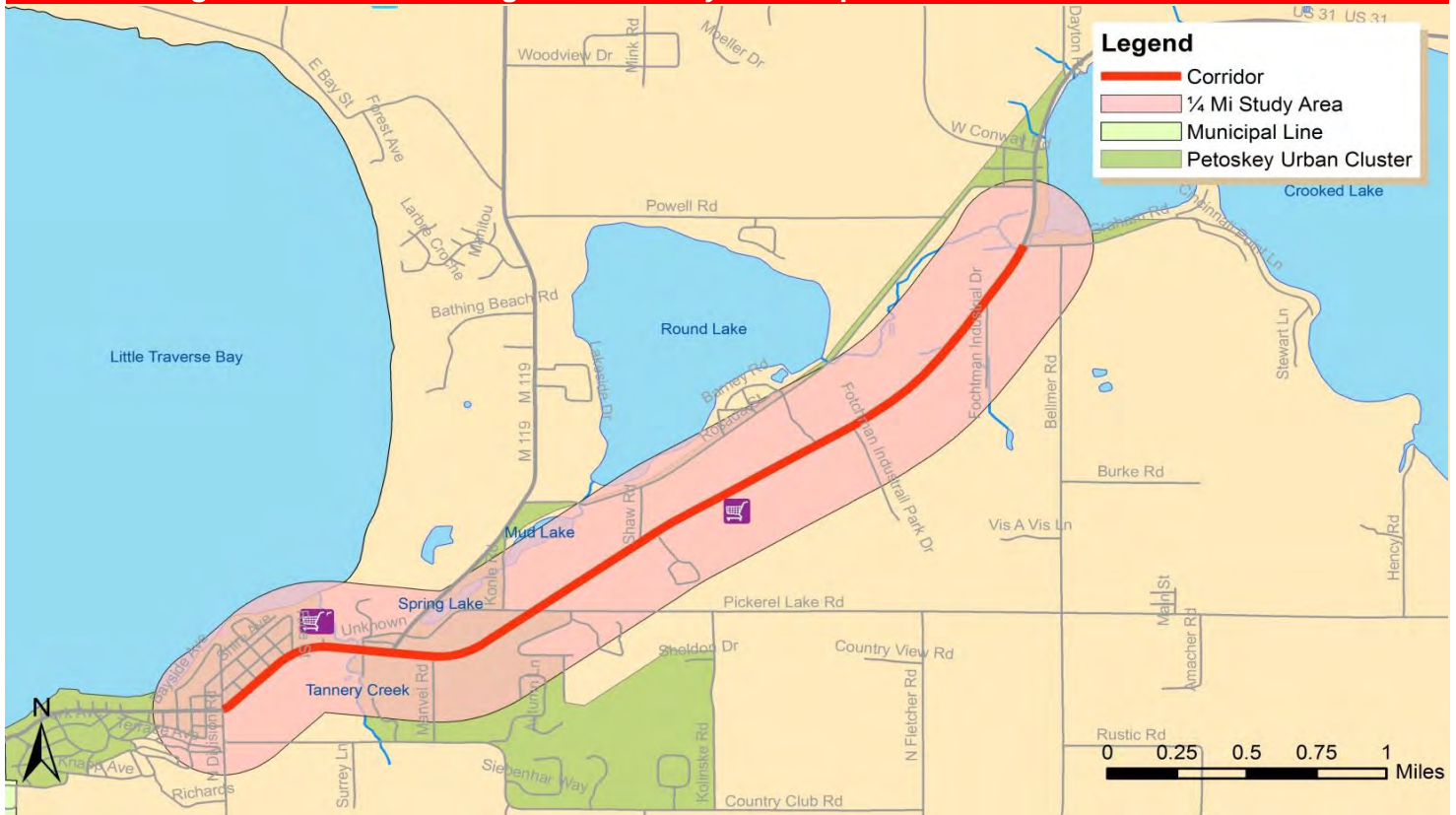
**Walk Score:** 23



### Corridor Overview

The US 31 Corridor contains two main areas of more intense commercial development along the highway. This intensity decreases in some areas where the terrain is steep. But further north, the intensity increases with several smaller type businesses mixed with larger sized commercial operations. This is an area targeted for future commercial growth due to the existing infrastructure. This area has seen increased commercial development including a large grocery store, strip development, as well as auto dealerships. It is bounded on the southwest by the Bay View Association and Conway to the north.

### Corridor Segment and Surrounding 1/4 Mile Study Area Map



### Economic Development

Community policies or activities assisting economic development (Bear Creek Township)

<b>Growth &amp; Investment Strategy</b>	No	<b>Community Economic Strategy</b>	Yes
<b>Identify Areas of Focus for G&amp;I</b>	No	<b>Community Marketing Strategy</b>	No
<b>Development Opportunities</b>	Yes	<b>Market Potential Development Sites</b>	No
<b>Publish Development Guide</b>	Yes	<b>Capital Improvement Plan</b>	No

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Bear Creek US31 Corridor	City of Petoskey, Bay View CDP	Petoskey & Surrounding Townships
<b>Total Population (2010)</b>	<b>850</b>	<b>5,803</b>	<b>14,568</b>
People per Acre	0.70	1.66	0.36
People per Square Mile	448	1,063	228
<b>Total Housing (2010)</b>	<b>824</b>	<b>3,853</b>	<b>8,514</b>
Gross Neighborhood Density (per acre)	0.68	1.10	0.21
<b>Study Area Size (Land Cover)</b>			
Acres	1,215.57	3,494.40	40,825.60
Square Miles	1.90	5.46	63.79
<b>Workers Living within Study Area</b>	<b>286</b>	<b>2,272</b>	<b>5,816</b>
% with earnings \$1250/month or less	29%	29%	28%
% with earnings \$1251/month to \$3333/month	39%	42%	40%
% with earnings greater than \$3333/month	33%	30%	33%
<b>Jobs Located within Study Area</b>	<b>1,234</b>	<b>8,675</b>	<b>12,129</b>
Job Density (per acre)	1.02	2.48	0.30

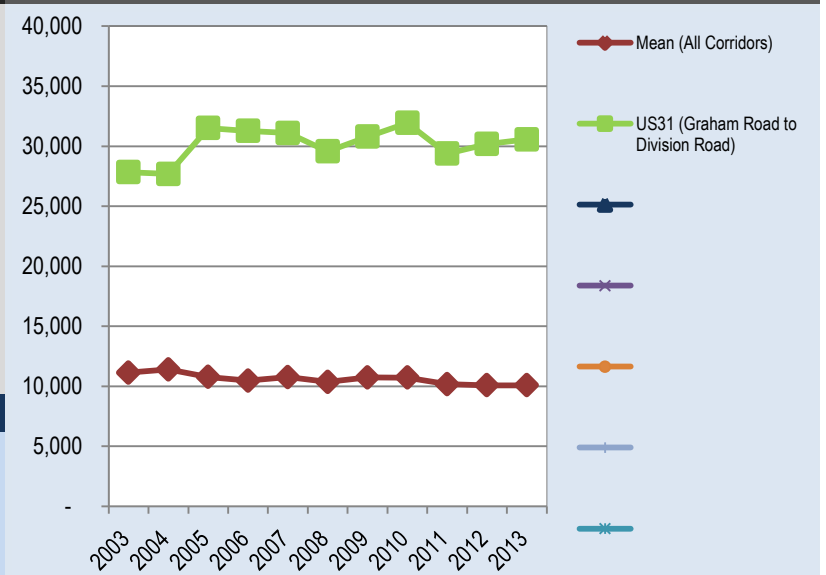
Zoning

District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	
R-1A   R-1B   R-2B   B-1   B-2   I-1	50%	17%	0%	3.6	7.3	30 ft

Infrastructure

Public Utilities		
Sewer	Yes	Additional Capacity
Water	No	N/A
Energy Utilities		
Underground Electric	No	
Renewable Energy Production	No	
Natural Gas	Yes	
Broadband		
Yes - 5 Technologies (Fiber, Cable, DSL, 4G, Fixed Wireless)		

Traffic Counts



Policy

Downtown Plan	No
Corridor Improvement Plan	No

Placemaking Elements

<b>Theaters/Entertainment Venues</b>	No	<b>Grocery Stores</b>	Yes
		<b>Restaurants</b>	Yes
		<b>Sidewalk Cafés</b>	No
		<b>Parks</b>	No
<b>Iconic Buildings</b>	No	<b>Pocket Parks</b>	No
		<b>Public Art Installations</b>	Yes
		<b>Wayfinding</b>	Yes
		<b>Pedestrian Connections</b>	Yes

**Corridor Street Name(s):** Harbor Springs-Petoskey Road (M119) from Chesters Chalets to US31

**Corridor Classification:** Commercial/Industrial

**Unit(s) of Government:** Bear Creek Township

**Length:** 1.37 miles

**Street Classification:** Minor Arterial

**2013 Traffic Volume(AADT):** 14,872 Source: MDOT

**Number of Traffic Lanes:** 2, Bi-Directional Traffic with Turn/Passing Lanes

**Parking:** No Street Parking

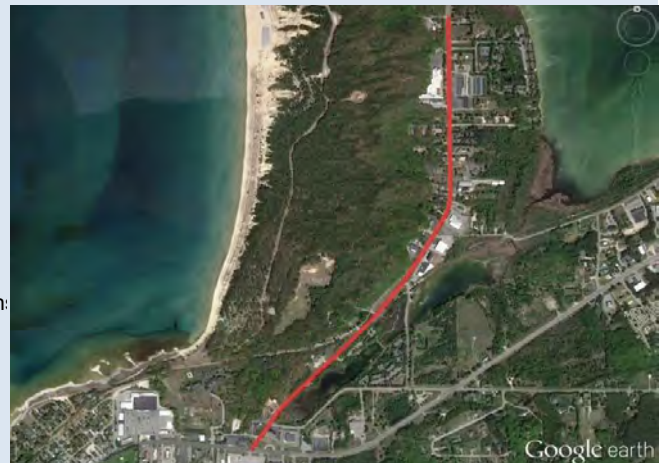
**Transit Service:** Friendship Centers of Emmet County - Senior Tran

**Bike Lane:** Yes

**Entertainment Venues:** No

**Pedestrian Amenities:** Sidewalks

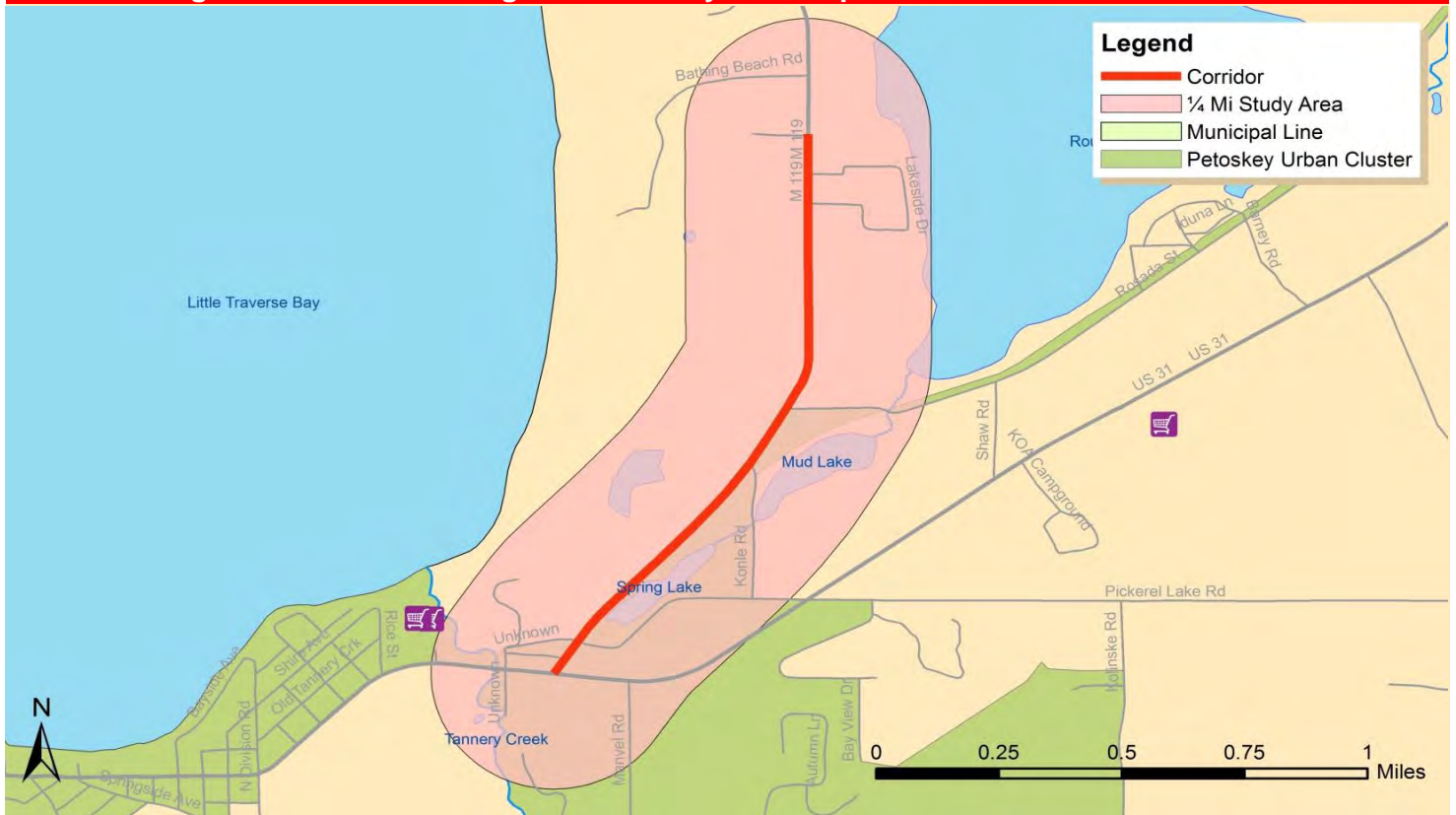
**Walk Score:** 42



### Corridor Overview

The M119 Corridor links Petoskey to Harbor Springs. The corridor consists of a mix of commercial service businesses, small strip developments, a craft brewery, and the Petoskey State Park.

### Corridor Segment and Surrounding 1/4 Mile Study Area Map



### Economic Development

Community policies or activities assisting economic development (Bear Creek Township)

<b>Growth &amp; Investment Strategy</b>	No	<b>Community Economic Strategy</b>	Yes
<b>Identify Areas of Focus for G&amp;I</b>	No	<b>Community Marketing Strategy</b>	No
<b>Development Opportunities</b>	Yes	<b>Market Potential Development Sites</b>	No
<b>Publish Development Guide</b>	Yes	<b>Capital Improvement Plan</b>	No

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Bear Creek M119 Corridor	City of Petoskey, Bay View CDP	Petoskey & Surrounding Townships
<b>Total Population (2010)</b>	<b>291</b>	<b>5,803</b>	<b>14,568</b>
People per Acre	0.56	1.66	0.36
People per Square Mile	357	1,063	228
<b>Total Housing (2010)</b>	<b>324</b>	<b>3,853</b>	<b>8,514</b>
Gross Neighborhood Density (per acre)	0.62	1.10	0.21
<b>Study Area Size (Land Cover)</b>			
Acres	522.30	3,494.40	40,825.60
Square Miles	0.82	5.46	63.79
<b>Workers Living within Study Area</b>	<b>86</b>	<b>2,272</b>	<b>5,816</b>
% with earnings \$1250/month or less	40%	29%	28%
% with earnings \$1251/month to \$3333/month	28%	42%	40%
% with earnings greater than \$3333/month	33%	30%	33%
<b>Jobs Located within Study Area</b>	<b>962</b>	<b>8,675</b>	<b>12,129</b>
Job Density (per acre)	1.84	2.48	0.30

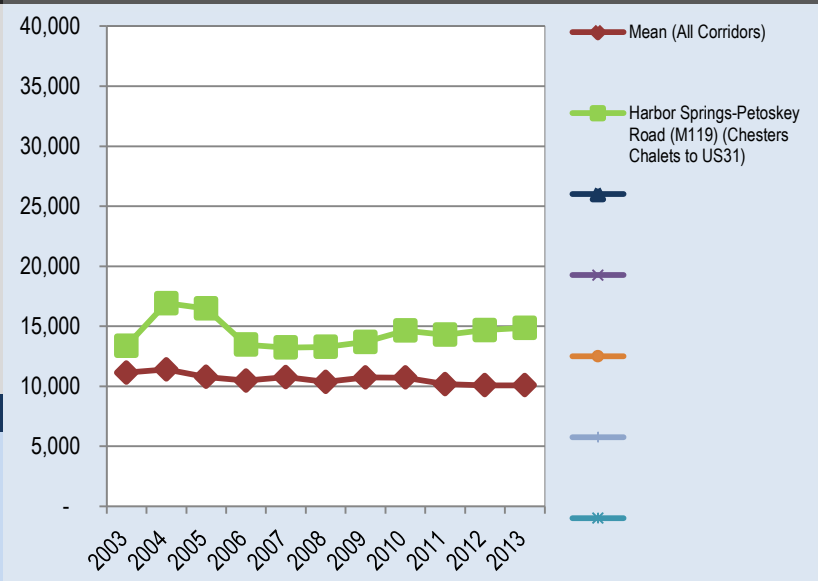
Zoning

District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	
R-2A   R-2B   RR-1   B-2   I-1	60%	40%	0%	3.6	7.3	30 ft

Infrastructure

<b>Public Utilities</b>		
Sewer	Yes	<i>Additional Capacity</i>
Water	No	<i>N/A</i>
<b>Energy Utilities</b>		
Underground Electric	No	
Renewable Energy Production	No	
Natural Gas	Yes	
<b>Broadband</b>	Yes - 5 Technologies <i>(Fiber, Cable, DSL, 4G, Fixed Wireless)</i>	

Traffic Counts



Policy

<b>Downtown Plan</b>	No
<b>Corridor Improvement Plan</b>	No

Placemaking Elements

<b>Theaters/Entertainment Venues</b>	No	<b>Grocery Stores</b>	No
		<b>Restaurants</b>	Yes
		<b>Sidewalk Cafés</b>	No
		<b>Parks</b>	Yes
<b>Iconic Buildings</b>	Yes	<b>Pocket Parks</b>	No
<i>Old Brewery</i>		<b>Public Art Installations</b>	Yes
		<b>Wayfinding</b>	Yes
		<b>Pedestrian Connections</b>	Yes



**Corridor Street Name(s):** E. Mitchell Road from Valley Ridge Road to Creekside Drive

**Corridor Classification:** Commercial/Industrial

**Unit(s) of Government:** Bear Creek Township

**Length:** 0.53 miles

**Street Classification:** Minor Arterial

**2013 Traffic Volume(AADT):** NA

**Number of Traffic Lanes:** 2, Bi-Directional Traffic with Turn/Passing Lanes

**Parking:** No Street Parking

**Transit Service:** Friendship Centers of Emmet County - Senior Tran

**Bike Lane:** No

**Entertainment Venues:** No

**Pedestrian Amenities:** None

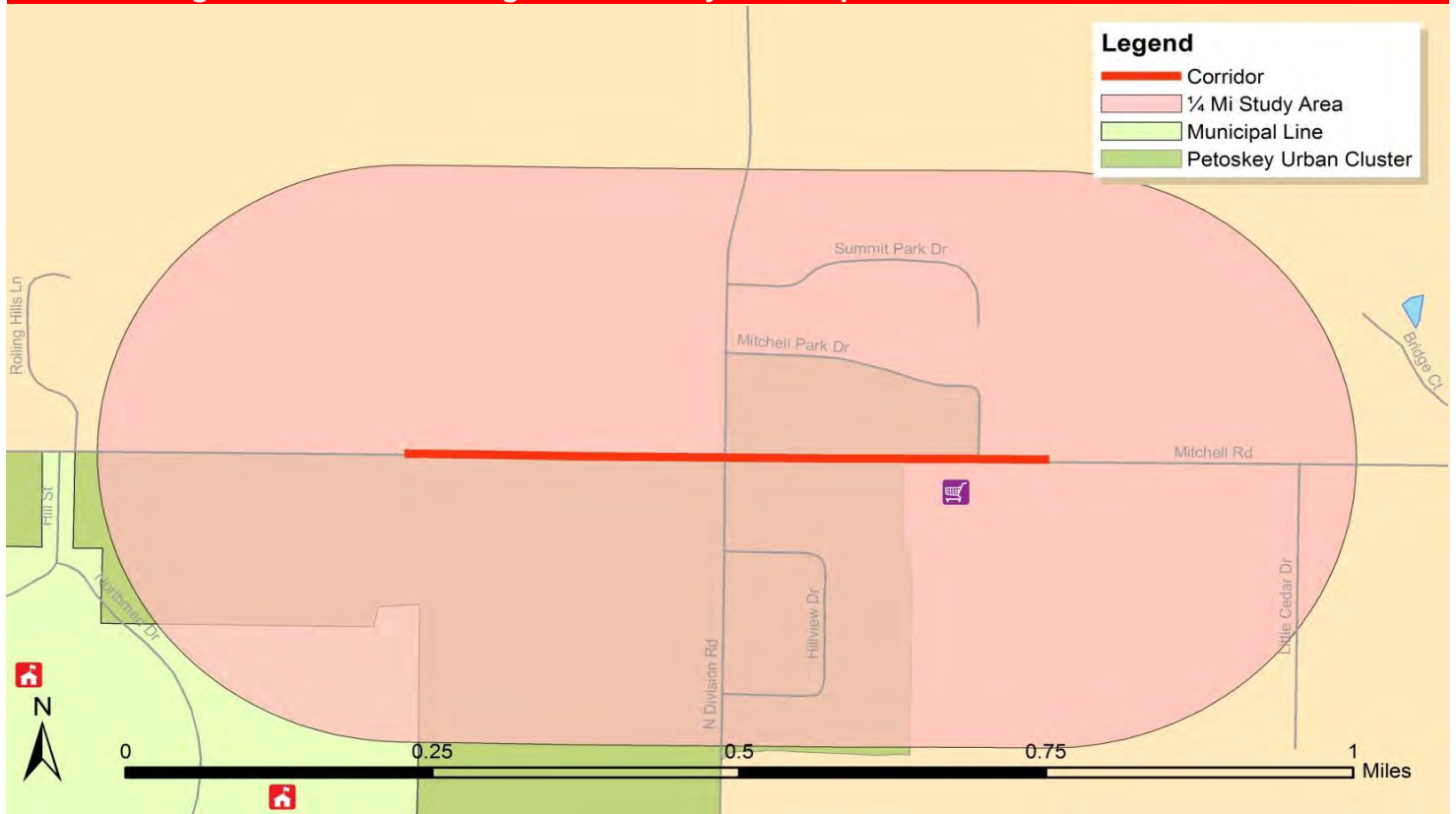
**Walk Score:** 20



### Corridor Overview

The East Mitchell/South Division Corridor consists of a mix of commercial service businesses, auto-oriented retail, offices, and residential development.

### Corridor Segment and Surrounding 1/4 Mile Study Area Map



### Economic Development

Community policies or activities assisting economic development (Bear Creek Township)

<b>Growth &amp; Investment Strategy</b>	No	<b>Community Economic Strategy</b>	Yes
<b>Identify Areas of Focus for G&amp;I</b>	No	<b>Community Marketing Strategy</b>	No
<b>Development Opportunities</b>	Yes	<b>Market Potential Development Sites</b>	No
<b>Publish Development Guide</b>	Yes	<b>Capital Improvement Plan</b>	No

Study Area Summary for 1/4 Mile Area Surrounding the Corridor

Census Data	Corridor Segment	G&I Core Place	G&I Area
	Bear Creek East Mitchell/South Division Corridor	City of Petoskey, Bay View CDP	Petoskey & Surrounding Townships
<b>Total Population (2010)</b>	<b>945</b>	<b>5,803</b>	<b>14,568</b>
People per Acre	3.22	1.66	0.36
People per Square Mile	2,061	1,063	228
<b>Total Housing (2010)</b>	<b>463</b>	<b>3,853</b>	<b>8,514</b>
Gross Neighborhood Density (per acre)	1.58	1.10	0.21
<b>Study Area Size (Land Cover)</b>			
Acres	293.39	3,494.40	40,825.60
Square Miles	0.46	5.46	63.79
<b>Workers Living within Study Area</b>	<b>387</b>	<b>2,272</b>	<b>5,816</b>
% with earnings \$1250/month or less	27%	29%	28%
% with earnings \$1251/month to \$3333/month	44%	42%	40%
% with earnings greater than \$3333/month	29%	30%	33%
<b>Jobs Located within Study Area</b>	<b>376</b>	<b>8,675</b>	<b>12,129</b>
Job Density (per acre)	1.28	2.48	0.30

Zoning

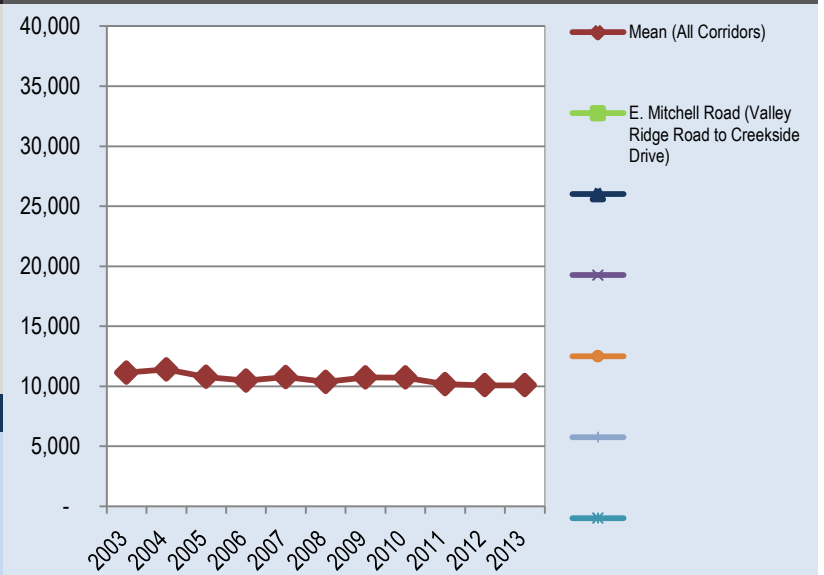
District(s)	% of Districts That Allow Residential Use	% of Districts That Allow Multi-Family by Right	% of Districts That Allow Mixed Use By Right	Max Residential Site Density		Max Building Height
				Lowest Density District	Highest Density District	
R-2B   R-2C   B-1   B-2	50%	50%	0%	7.3	10.9	30 ft

Infrastructure

<b>Public Utilities</b>		
Sewer	Yes	<i>Additional Capacity</i>
Water	Yes	<i>Additional Capacity</i>
<b>Energy Utilities</b>		
Underground Electric	No	
Renewable Energy Production	No	
Natural Gas	Yes	
<b>Broadband</b>	Yes - 5 Technologies <i>(Fiber, Cable, DSL, 4G, Fixed Wireless)</i>	

Traffic Counts

(Data Unavailable for Corridor)



Policy

<b>Downtown Plan</b>	No
<b>Corridor Improvement Plan</b>	No

Placemaking Elements

<b>Theaters/Entertainment Venues</b>	No	<b>Grocery Stores</b>	Yes
		<b>Restaurants</b>	No
		<b>Sidewalk Cafés</b>	No
		<b>Parks</b>	No
<b>Iconic Buildings</b>	No	<b>Pocket Parks</b>	No
		<b>Public Art Installations</b>	No
		<b>Wayfinding</b>	No
		<b>Pedestrian Connections</b>	No

## Growth & Investment Area Study

### Census Class Definitions

#### *2010 Census Urban and Rural Classification and Urban Area Criteria*

The Census Bureau's urban-rural classification is fundamentally a delineation of geographical areas, identifying both individual urban areas and the rural areas of the nation. The Census Bureau's urban areas represent densely developed territory, and encompass residential, commercial, and other non-residential urban land uses.

For the 2010 Census, an urban area will comprise a densely settled core of census tracts and/or census blocks that meet minimum population density requirements, along with adjacent territory containing non-residential urban land uses as well as territory with low population density included to link outlying densely settled territory with the densely settled core. To qualify as an urban area, the territory identified according to criteria must encompass at least 2,500 people, at least 1,500 of which reside outside institutional group quarters. The Census Bureau identifies two types of urban areas:

Urbanized Areas (UAs) of 50,000 or more people;

Urban Clusters (UCs) of at least 2,500 and less than 50,000 people.

"Rural" encompasses all population, housing, and territory not included within an urban area.

Source: <https://www.census.gov/geo/reference/ua/urban-rural-2010.html>

#### *About Metropolitan and Micropolitan Statistical Areas*

The United States Office of Management and Budget (OMB) delineates metropolitan and micropolitan statistical areas according to published standards that are applied to Census Bureau data. The general concept of a metropolitan or micropolitan statistical area is that of a core area containing a substantial population nucleus, together with adjacent communities having a high degree of economic and social integration with that core. Currently delineated metropolitan and micropolitan statistical areas are based on application of 2010 standards [PDF] (which appeared in the Federal Register on June 2010) to 2010 Census and 2006-2010 American Community Survey data. Current metropolitan and micropolitan statistical area delineations were announced by OMB effective February 2013.

Standard delineations of metropolitan areas were first issued in 1949 by the then Bureau of the Budget (predecessor of OMB), under the designation "standard metropolitan area" (SMA). The term was changed to "standard metropolitan statistical area" (SMSA) in 1959, and to "metropolitan statistical area" (MSA) in 1983. The term "metropolitan area" (MA) was adopted in 1990 and referred collectively to metropolitan statistical areas (MSAs), consolidated metropolitan statistical areas (CMSAs), and primary metropolitan statistical areas (PMSAs). The term "core based statistical area" (CBSA) became effective in 2000 and refers collectively to metropolitan and micropolitan statistical areas.

OMB has been responsible for the official metropolitan areas since they were first delineated, except for the period 1977 to 1981, when they were the responsibility of the Office of Federal Statistical Policy and Standards, Department of Commerce. The standards for delineating metropolitan areas were modified in 1958, 1971, 1975, 1980, 1990, 2000, and 2010.

#### *Delineating Metropolitan and Micropolitan Statistical Areas*

The 2010 standards provide that each CBSA must contain at least one urban area of 10,000 or more population. Each metropolitan statistical area must have at least one urbanized area of 50,000 or more inhabitants. Each micropolitan statistical area must have at least one urban cluster of at least 10,000 but less than 50,000 population.

Under the standards, the county (or counties) in which at least 50 percent of the population resides within urban areas of 10,000 or more population, or that contain at least 5,000 people residing within a single urban area of 10,000 or more population, is identified as a "central county" (counties). Additional "outlying counties" are included in the CBSA if they meet specified requirements of commuting to or from the central counties. Counties or equiva-

lent entities form the geographic "building blocks" for metropolitan and micropolitan statistical areas throughout the United States and Puerto Rico.

If specified criteria are met, a metropolitan statistical area containing a single core with a population of 2.5 million or more may be subdivided to form smaller groupings of counties referred to as "metropolitan divisions."

As of February 2013, there are 381 metropolitan statistical areas and 536 micropolitan statistical areas in the United States. In addition, there are 7 metropolitan statistical areas and 5 micropolitan statistical areas in Puerto Rico.

Source: <http://www.census.gov/population/metro/about/>

## Land Area

### *Data Source*

*2010 Census TIGER (Topologically Integrated Geographic Encoding and Referencing) File Data for County Subdivisions and Census Places.*

## Traffic Count Data

### *AADT Data sources*

Traffic count data was sourced from the Michigan Department of Transportation's (MDOT) Traffic Monitoring Information System (TMIS) for state trunklines or from local municipalities if available. All counts utilize the Annual Average Daily Traffic (AADT) counts, which in most cases are an annual average estimate of daily traffic based on an adjustment of a sample conducted for a short period of time (short count). For short-count sites, counts are estimated by factoring a short count using seasonal and day-of-week adjustment factors. For continuous sites, counts are calculated by summing the Annual Average Days of the Week and dividing by seven.

For the purpose of this report, if the identified commercial corridor has more than one AADT count, the largest count was utilized.

## Corridor Study Areas

### *Population Density*

*Population Density* information contain in this report is based on the 2010 US Census and is calculated by taking the total number of individual as reported for the geographic area reported and dividing it by the number of miles or acres of land area.

### *Max Dwelling Density for Districts in Corridors*

*Max Dwelling Density for Districts in Corridors* is based on parcel or site density. Used by builders/developers and controlled by the zoning ordinance within jurisdictions that have zoning, site density is determined by the total dwelling/housing units divided by the total parcel size. For determining Max Dwelling Density, the zoning ordinance was reviewed for current permitted maximum site density. In cases were no specific maximum dwelling limits is explicitly stated, a review of the ordinance was undertaken and a theoretical maximum was calculated taking into account maximum coverages, parking requirements, buffer areas, building height and story limits, and any other code restricting dwelling permitting. The actual permissible density would be based on the specific site constraints and determined by completion of a land use permit process conducted under the respected zoning authority. **The calculated theoretical maximums contained in this report should in no way be relied upon for the determination of actual permissible site dwelling density.**

### *Gross Neighborhood Density*

*Gross neighborhood Density* is the total dwelling/housing unit count over the total land area being considered. Parcel or site density will in most cases be greater than gross neighborhood density because it does not include land uses such as streets, parks, and other public land uses that dilute gross neighborhood density. While parcel or site density is important for zoning, gross neighborhood density is important for determining public services, transportation infrastructure, transit, and economic activity potential.

### Job & Worker Density

*Job Density* is based on 2012 data contained in the LEHD (Longitudinal Employer-Household Dynamics) Origin-Destination Employment Statistics (LODES) from the US Census Bureau. Job count data by location is provided at the Census Block level by LODES, which is then used by culling the data based on which Census Blocks are contained by the geographical extent of the specific data being presented.

*Worker Density* is based on 2012 data contained in the LEHD (Longitudinal Employer-Household Dynamics) Origin-Destination Employment Statistics (LODES) from the US Census Bureau. Worker count data (those individuals currently employed and residing in the area of study) is provided at the Census Block level by LODES, which is then used by culling the data based on which Census Blocks are contained by the geographical extent of the specific data being presented.

## Retail Sales

### Data Source

*Retail data was sourced from Environmental Systems Research Institute, Inc. (Esri) by the purchase of a Complete State Retail MarketPlace Data License for the State of Michigan by all levels of geography.*

#### Whitepaper Statement from Esri

Esri has combined the latest Consumer Expenditure Surveys (CEX), 2006–2007, from the Bureau of Labor Statistics (BLS) to estimate current spending patterns. The continuing surveys include a Diary Survey for daily purchases and an Interview Survey for general purchases. The Diary Survey represents record keeping by consumer units for two consecutive weeklong periods. This component of the CEX collects data on small, daily purchases that could be overlooked by the quarterly Interview Survey. The Interview Survey collects expenditure data from consumers in five interviews conducted every three months. Esri integrates data from both surveys to provide a comprehensive database on all consumer expenditures. To compensate for the relatively small CEX survey bases and the variability of single-year data, expenditures are averaged from the 2006–2007 surveys.

Esri computes Market Potential by combining 2011 Tapestry™ Segmentation data with Doublebase® 2009 data from GfK MRI. Doublebase 2009 is an integration of information from four consumer surveys. Each survey respondent can be identified by Tapestry segment, so a rate of consumption by Tapestry segment can be determined for a product or service for any area.

The Expected Number of Consumers (households or adults) for a product or service in an area is computed by applying the consumption rate for Tapestry market segment "n" to households or adults in the area belonging to Tapestry segment "n," and summing across 65 Tapestry segments.

$$\text{Expected Number of Consumers} = \sum_{n=1}^{65} (\text{Count}_n \times \text{Consumption Rate}_n)$$

The *Local Consumption Rate* for a product or service for an area is computed as the ratio of the expected number of consumers for a product or service in the area to the total households or adults in the area.

$$\text{Local Consumption Rate} = \frac{\text{Expected Number of Consumers}}{\text{Base Count}}$$

The *Market Potential Index* for a product or service for an area is the ratio of the local consumption rate for a product or service for the area to the US consumption rate for the product or service, multiplied by 100.

$$\text{Market Potential Index} = \frac{\text{Local Consumption Rate}}{\text{US Consumption Rate}} \times 100$$

Esri's Market Potential database includes data for more than 2,200 items, organized into 35 categories, representing goods, services, attitudes, and activities collected from GfK MRI surveys. Unless otherwise noted, each item refers to consumer spending or behavior in a 12-month period. The a or h following the five-digit product code denotes a consumer base of adults or households, respectively.

Products and services, such as apparel items, types of digital cameras, video game systems, financial accounts and services, health-related items, Internet activities, satellite TV providers, personal care services, and detailed information about cell phones/PDAs (brands, service providers, average monthly bills, and purchase locations), are included. A product description was revised since the last Market Potential update if a product change was made by GfK MRI, if ranges had to be collapsed, or if more clarification was required. A product was dropped since the last Market Potential update if it did not pass a sample size test, became outdated or unnecessary, or no longer exists in the GfK MRI database.

### ***Retail Classification:***

*Leakage* is defined as the Potential Sales less the Total Sales. All inputs are as reported by Esri.

For the purposes of determining the *Retail Classification*, Sales, Potential Sales, and Leakage are taken from the Growth & Investment Area. A Retail Hub is defined in this study as having a negative retail leakage. If the Retail Sales for the Growth & Investment Area are greater than Potential Sales in the county in which it is located and the county's leakage is negative, then the Retail Hub is classified as a Regional Hub. In the absence of these two conditions, then the Retail Hub is classified as a Local Hub.

### ***Seasonal Housing:***

The Seasonal Housing percentage is determined by the dividing the Data Dictionary Reference Name H0050006 "For seasonal, recreational, or occasional use" of the H5 Table "Vacancy Status, Universe: Vacant housing units Total:" of the 2010 Census Summary File 1 by the total number of Housing Units.

The U.S. Census Bureau's 2010 Census Summary File 1. Summary File 1 tables provide the most detailed counts available so far from the 2010 Census, including cross-tabulations of age, sex, households, families, relationship to householder, housing units, detailed race and Hispanic or Latino origin groups, and group quarters. The statistics are available for a variety of geographic areas, with most tables available down to the block or census tract level.

Summary File 1 (SF 1) contains the data compiled from the questions asked of all people and about every housing unit. Population items include sex, age, race, Hispanic or Latino origin, household relationship, household type, household size, family type, family size, and group quarters. Housing items include occupancy status, vacancy status, and tenure (whether a housing unit is owner-occupied or renter-occupied).

There are 177 population tables (identified with a "P") and 58 housing tables (identified with an "H") shown down to the block level; 82 population tables (identified with a "PCT") and 4 housing tables (identified with an "HCT") shown down to the census tract level; and 10 population tables (identified with a "PCO") shown down to the county level, for a total of 331 tables. The SF 1 Urban/Rural Update added 2 PCT tables, increasing the total number to 333 tables. There are 14 population tables and 4 housing tables shown down to the block level and 5 population tables shown down to the census tract level that are repeated by the major race and Hispanic or Latino groups.

SF 1 includes population and housing characteristics for the total population, population totals for an extensive list of race (American Indian and Alaska Native tribes, Asian, and Native Hawaiian and Other Pacific Islander) and Hispanic or Latino groups, and population and housing characteristics for a limited list of race and Hispanic or Latino groups. Population and housing items may be cross-tabulated. Selected aggregates and medians also are provided. A complete listing of subjects in this file is found in the "Subject Locator" chapter of the 2010 Census Summary File 1 Technical Documentation

Summary File 1 (SF 1) is released as individual files for each of the 50 states, the District of Columbia, and Puerto Rico, and for the United States. The tables (matrices) are identical for all files, but the geographic coverage differs. SF 1 for states was released from June–August 2011.

## **Sprawl**

The Sprawl Assessment is based the ratio of Core Place Housing Units to the total Growth & Investment Area Housing Units as reported by the 2010 Census minus the ratio of Core Place Housing Units to the total Growth & Investment Area Housing Units as reported by the 2000 Census.

2010 Core Place Housing Units	2000 Core Place Housing Units
2010 Growth & Investment Housing Units	2000 Growth & Investment Housing Units

Other methods of quantifying sprawl such as using satellite spectral data to indicate changes in impervious surface over time, maybe investigated for future study. However, were beyond the scope of this project.

## Population

### 2000-2010:

The P1 "TOTAL POPULATION" table of the 2000 and 2010 Census's Summary File 1 provided the data to calculate the Growth & Investment Area and Core Place population change.

### Average Age:

PCT12 "SEX BY AGE" table of the 2000 and 2010 Census's Summary File 1 provided the data to calculate the average age for the Growth & Investment Area and Core Place populations and the percentage change from 2000-2010.

### Demographic Shifts:

Demographic Shifts used the PCT12 "SEX BY AGE" table of the 2000 and 2010 Census's Summary File 1 to determine the population of the six current generational cohorts (living at the time of the 2010 census) for both 2000 and 2010 and then calculating the percentage change in each generational cohorts population. Generational cohorts' birth by year range can fluctuate depending on the source. Table 1 lists the generational cohort and the corresponding range for the year of birth used for this study. (Novak n.d.)

Generational Cohorts	Born Between	
GI Generation (Greatest)	1901	1926
Silent Generation	1927	1945
Baby Boomers	1946	1964
Generation X	1965	1980
Millennial Generation	1981	2000
Generation Z	2001	Present

The study targeted the Silent Generation, Baby Boomers, Generation X, and the Millennial Generation for changes in cohort population. The Generation Z was not alive at the time of the 2000 census and the percentage change could not be calculated and the GI Generation population was less the 3% for the total 2010 Northwest Michigan population and was not included in the targeted cohorts.

## Talent Jobshed

### Data Source

All Jobshed information utilized data from LEHD (Longitudinal Employer-Household Dynamics) Origin-Destination Employment Statistics (LODES) from the US Census Bureau. Data files are state-based and organized into three types: Origin-Destination (OD), Residence Area Characteristics (RAC), and Workplace Area Characteristics (WAC), all at census block geographic detail. Data is available for most states for the years 2002–2011.

*Workers Living within Study Area, Worker's Earnings, and Jobs Located in Area* and their resultant density calculations utilized data from the Michigan RAC and WAC databases. The Origin-Destination database file for Michigan was not available at the time the *Commuting Data* was analyzed, so the OnTheMap application was used to download data sets for each of the Census Places and County Subdivisions that comprise the Growth & Investment Areas. The available data from OnTheMap locates the worker's residence within a 2010 Census Block. The centroid, as established by the Census Tiger Files, was used to calculate the start location of the commute route distance and time. Without the individual employment locations within the Growth & Investment being contained in the OnTheMap datasets, the end location for the commute route distance and time was determined by using a point along a major commercial corridor of the Census Places and County Subdivisions that comprise the Growth

& Investment Areas. The data was filtered to utilize only workers living in Michigan as workers living out of the state would have low propensity for daily commutes. The start and end locations for filtered worker commutes was then processed by a Visual Basic for Applications routine that used the Google Distance Matrix API to calculate route distance and time for 35,524 pairs.

The Google Distance Matrix API is a service that provides travel distance and time for a matrix of origins and destinations. The information returned is based on the recommended route between start and end points, as calculated by the Google Maps API, and consists of rows containing duration and distance values for each pair.

LEHD Origin-Destination Employment Statistics (LODES)<sup>1</sup> are the job data that are delivered in the OnTheMap application. This document describes the contents of the LODES Version 7 dataset in the context of the OnTheMap application.

U.S. Census Bureau. 2013. LODES Data. Longitudinal-Employer Household Dynamics Program.  
<http://lehd.ces.census.gov/applications/help/onthemap.html>

U.S. Census Bureau. 2013. OnTheMap Application. Longitudinal-Employer Household Dynamics Program.  
<http://onthemap.ces.census.gov/>

### Overview

As with previous versions of data released in OnTheMap, LODES Version 7 is a partially synthetic dataset that describes geographic patterns of jobs by their employment locations and residential locations as well as the connections between the two locations. These data and marginal summaries are tabulated by several categorical variables. More detailed information on the variables and scope of the data follows.

### Job Definition

In the context of LODES and OnTheMap, a job is counted if a worker is employed with positive earnings during the reference quarter as well as in the quarter prior to the reference quarter. This is called a “beginning of quarter” job because the assumption is that the worker was employed on the first day of the reference quarter.

### Years

LODES Version 7 includes data for 2002-2011, for which Quarter 2 (April – June) is the reference period in each year. Not all states have data available for each year and not every variable is available in each year.

### Geographical Vintage

LODES Version 7 and OnTheMap use 2010 census blocks, defined for the 2010 Decennial Census, as their base geography. Data released in previous versions of LODES and OnTheMap used 2000 census blocks as the geographical base. For data previously released in 2000 census blocks, the LODES data has been “crosswalked” or “transformed” into the base of 2010 census blocks. Further information on how OnTheMap and LODES implement the 2010 census blocks can be found in OnTheMap: Updating the Base Geography

### Data Structure

The overall file structure of LODES Version 7 remains similar to that of previous versions. The origin-destination (OD) matrix is made available by 10 different “labor market segments.” The area characteristic (AC) data – summary margins by residence block and workplace block – contain additional variables including age, earnings, and industry plus the newer variables outlined below.

In OnTheMap, the OD data are used to produce the Destination, Distance/Direction, Inflow/Outflow, and Paired Area analyses. The AC data are used to produce the Area Profile and Area Comparison analyses.



## Population & Housing Trends

### *Data Source*

**Population and Housing Data:** The 2000 and 2010 Census Summary File 1 data tables provide the most detailed information available so far from the 2000 Census and 2010 Census about a community's entire population, including cross-tabulations of age, sex, households, families, relationship to householder, housing units, detailed race and Hispanic or Latino origin groups, and group quarters. For Census Designated Places (CDPs) that were first established in 2010, the 2010 Census Block Relationship files were utilized to process the 2000 Census Summary File 1 block data to calculate the 2000 data for these CDPs.

The 2010 Census Block Relationship files are provided as a tool to help data users compare the universe of Census 2000 blocks to the universe of 2010 Census blocks. From these files, data users may determine how 2000 blocks now relate to 2010 Census blocks and vice versa.

**Geographic Areas:** 2010 Census TIGER (Topologically Integrated Geographic Encoding and Referencing) File Data for County Subdivisions and Census Places.

### *Core Place and G&I Area Geographic Extents*

The Core Place and G&I Area geographic extents were determined to provide the maximum continuity across differing datasets from governmental and private sources. In cases where CDPs were utilized, data years of predating the establishment of the CDP were unavailable causing gaps in total counts and percentage changes.

### *Gross Neighborhood Density*

*Gross neighborhood Density* is the total dwelling/housing unit count over the total land area being considered. Parcel or site density will in most cases be greater than gross neighborhood density because it does not include land uses such as streets, parks, and other public land uses that dilute gross neighborhood density. While parcel or site density is important for zoning, gross neighborhood density is important for determining public services, transportation infrastructure, transit, and economic activity potential.

### *Total Households*

The Percentage of Households without Children (under 18) was calculated by adding "Nonfamily households:" Table P0180007 together with "2-or-more-person household: Family households: Husband-wife family: No own children under 18 years" Table P0190009 from the 2010 Census Summary File 1 and then dividing by the total number of households.

## Commercial Corridors

### *Corridor Length*

Corridor Lengths were determined by plotting the described commercial corridor from the Commercial Corridor Inventory Interviews with local units of government into the Google Earth desktop application, exporting the KML files for import to ArcMAP and projecting them to calculate the linear extent of the defined corridor in feet.

### *Population & Housing Density*

To calculate Population and Housing density, the TIGER/Line® with Selected Demographic and Economic Data Shapefiles for the 2010 Census were used for Census Block level data. A ¼ mile circumference buffer was created from the KML defined Commercial Corridor delineation. The buffer was then used to pull population and housing data for any Census Block either fully or partially contained within the buffer.

### *Job & Worker Density*

To calculate Job and Worker density, All Job and Worker information utilized data from LEHD (Longitudinal Employer-Household Dynamics) Origin-Destination Employment Statistics (LODES) from the US Census Bureau. The 2011 (latest year available) Residence Area Characteristics (RAC) and Workplace Area Characteristics (WAC) data files were used at the Census Block level. A ¼ mile circumference buffer was created from the KML defined Commercial Corridor delineation. The buffer was then used to pull job and worker data for any Census Block either fully or partially contained within the buffer.

### ***Growth & Investment Core Place Map with Commercial Corridors***

The map of commercial corridors were defined by entering public road center points (latitude and longitude coordinates) along the extent provided by the Commercial Corridor Inventory Interviews into Google Earth with the Add Path tool. A sufficient number of points were used to maintain road radius conformity. The full 10 county commercial corridors studies contained 1,722 individual latitude and longitude coordinates. The Google Earth paths were then exported into a KML file for import into ArcMap. The corridors were combined with data from the 2010 TIGER/Line® Shapefiles of Census Places and Counties and road geographic features data from the Michigan Department of Technology, Management, & Budget's Geographic Data Library Catalog.

## **Housing Data**

Housing data, other than counts provided by the 2010 Census, is sourced from the US Census Bureau's American Community Survey (ACS) 2008-2012 5 Year Detailed Tables.

The American Community Survey (ACS) is a part of the U.S. Census Bureau's Decennial Census Program and is designed to provide more current demographic, social, economic, and housing estimates throughout the decade. The ACS provides information on more than 40 topics, including education, language ability, the foreign-born, marital status, migration and many more. Each year the survey randomly samples around 3.5 million addresses and produces statistics that cover 1-year, 3-year, and 5-year periods for geographic areas in the United States and Puerto Rico. The 5-year estimates are available for many distinct geographies including the nation, all 50 states, DC, Puerto Rico, counties, places, census tracts, and block groups. ACS tables are published on the Census Bureau's American FactFinder (AFF) website, [factfinder2.census.gov](http://factfinder2.census.gov), and are available for download in several forms. (US Census Bureau 2014)

Since the Detailed Tables contain a large number of cells, the tables are stored in a series of files with only the data from the tables, without such information as the title of the tables, the description of the rows, and the names of the geographic areas. That information is in other files that the user must merge with the data files to reproduce the tables. This study created a data search tool to pull detailed table data from the assembly of the Michigan ASCII data files for each sequence number files containing the subject data (Sequences: 58, 62, 63, 64, 104, 105, 106, 107, 108).

The ACS estimates are based on data from a sample of housing units and people in the population, not the full population. For this reason, ACS estimates have a degree of uncertainty associated with them, called sampling error. This study does not list the sampling error for each data point due to the statistical complexity of combining margins of error in Growth & Investment Areas containing multiple municipalities.

### ***Housing Efficiency Rating (Average HERS)***

The Home Energy Rating System (HERS) Index is the industry standard by which a home's energy efficiency is measured. It's also the nationally recognized system for inspecting and calculating a home's energy performance. It was developed by the Residential Energy Services Network (RESNET) an independent, non-profit organization to help homeowners reduce the cost of their utility bills by making their homes more energy efficient. To calculate a home's HERS Index Score, a certified RESNET HERS Rater does an energy rating on your home and compares the data against a 'reference home'— a designed-model home of the same size and shape as the actual home, so your score is always relative to the size, shape and type of house you live in.

To calculate the Average HERS score for homes in the specified geography the Total Built by Year was used together with an average HERS rating for the respective vintage of home construction to calculate an overall Average HERS score. (Hodgson 2008)

$$\text{Average HERS} = \frac{\sum_{i=1}^9 \text{Number of Vintage Homes} \times \text{Average HERS Rating by Vintage}}{\text{Total Homes}}$$

### ***Percentage Built by Year & Average Year***

Sequence file 104 of the ACS 2008-2012 5 Year Detailed Table was used to provide total counts of housing units by vintage year. The housing counts were then combined in cases of multiple municipalities or used separately to calculate the *Percentage Built by Year*.

**Median Value**

Sequence file 106 of the ACS 2008-2012 5 Year Detailed Table was used to provide median value for each of the municipalities comprising the Growth & Investment Area. If the Core Place or G&I Area consists of a single municipality, then a Median Value is given for these geographies.

**Home Heating Fuel**

Sequence file 104 of the ACS 2008-2012 5 Year Detailed Table was used to provide total counts of housing units by fuel used in heating. The counts were then combined in cases of multiple municipalities or used separately to calculate the *Percentage of Homes Using Natural Gas*, *Percentage of Homes Using Propane*, *Percentage of Homes Using Wood*, and *Percentage of Homes Using Solar Energy*.

**Personal Income**

Personal Income data is sourced from the US Census Bureau's American Community Survey (ACS) 2008-2012 5 Year Detailed Tables.

**Median Household Income (2012 Dollars)**

Sequence file 63 of the ACS 2008-2012 5 Year Detailed Table was used to provide *Median Household Income* value for each of the municipalities comprising the Growth & Investment Area. If the Core Place or G&I Area consists of a single municipality, then a Median Value is given for these geographies.

**Per Capita Annual Income (2012 Dollars)**

Sequence file 64 of the ACS 2008-2012 5 Year Detailed Table was used to provide Per Capita Annual Income and Aggregate Annual Income values for each of the municipalities comprising the Growth & Investment Area. Total Calculate the Core Place and G&I Area Per Capita Annual Incomes the Aggregate Annual Income was divided by the Per Capita Annual Income to derive the population number used in the Per Capita calculation. The Aggregate Annual Income for each unit of government was then summed together and divided by the sum of the Per Capita populations to provide the Per Capita Annual Income.

$$\text{Per Capita Income} = \frac{\sum_{i=1}^n \text{Aggregate Annual Income}_i}{\sum_{i=1}^n \frac{\text{Aggregate Annual Income}_i}{\text{Per Capita Annual Income}_i}}$$

*i* = the data for each unit of government contained in the geographic extent

*n* = to the total number of units of government in the geographic extent

**Household Income Distribution Chart**

Sequence file 58 of the ACS 2008-2012 5 Year Detailed Table was used to provide number of households falling in each of the distribution segments for each of the municipalities comprising the Growth & Investment Area. If the Core Place or G&I Area consists of a single municipality, then the municipal household distribution is used to determine the percentage falling in each income segment. If there are multiple municipalities, then the household income segment counts are summed for all municipalities then divided by the sum of all the households to determine the percentage distribution.

**Policy**

All policy data was provided during the Commercial Corridor Inventory Interviews with representatives of local units of government or a search of documentation contained on the respective municipal website.

**Zoning**

Zoning data was sourced from the respective municipality's Zoning Ordinances and Maps. Commercial Corridor extents were used to pull which Districts were bisected or bordered by the corridor. The respective District standards were then used to determine maximum dwelling densities, permitted uses and review criteria, and district standards for heights, parking requirements, maximum lot coverages, and setbacks. In cases where explicit dwelling densities were not contained in the zoning ordinance, a theoretical maximum was calculated taking into ac-

count lot coverages, parking requirement, minimum unit counts and standard assumptions for building envelope ratios (specific formulas for each included district are available upon request). **These maximums are theoretical and are not based on specific site constraints. As such they should not be relied upon for site planning or determinations of value. Contact the applicable Zoning Administrator for inquiries about any specific determinations. For a list of contacts please see the municipality's website or the Networks Northwest County Guides to Permitting and Zoning.**

(<http://www.nwm.org/planning/resources/publications/permitting-and-zoning-guides.html>)

## Infrastructure

### *Municipal Water Service*

All Municipal Water Service data was provided during the Commercial Corridor Inventory Interviews with representatives of local units of government or a search of documentation contained on the respective municipal website.

### *Municipal Sewer Service*

All Municipal Sewer Service data was provided during the Commercial Corridor Inventory Interviews with representatives of local units of government or a search of documentation contained on the respective municipal website.

### *Broadband*

All data on Broadband available was sourced from Connect Michigan's technology service maps. Connect Michigan is a subsidiary of Connected Nation and operates as a non-profit in the state of Michigan. Connect Michigan partnered with the Michigan Public Service Commission to engage in a comprehensive broadband planning and technology initiative as part of National effort to map and expand broadband. The program began by gathering provider data to form a statewide broadband map and performing statewide business and residential technology assessments, but has since progressed to working with communities on community plans. (Connect Michigan 2014) Ultra fiber service over 1 Gbps (Gigabits per Second) was sourced from the National Broadband Map (<http://www.broadbandmap.gov/technology>) as updated on 12/31/2013. (National Telecommunications & Information Administration 2013)

### *Energy*

All Energy Infrastructure data was provided during the Commercial Corridor Inventory Interviews with representatives of local units of government or a search of documentation contained on the respective municipal website.

## Placemaking Elements

### *Select Placemaking Elements*

All data for the *Parks and Pocket Parks* and *Pedestrian Connections* was sourced from data provided during the Commercial Corridor Inventory Interviews with representatives of local units of government. The *Theaters & Entertainment Venues* and *Grocery Store* data was sourced by a search of business listings from several sources including Google, Yellow Pages, and Fandango.com.

### *Job Population Ratio*

The rationale for including the ration of *Jobs to Population Ratio* in Commercial Corridors is based on research that finds that in mixed-use developments external vehicle trips decline substantially as the number of jobs and the resident population become more balanced. (Reid Ewing 2013) Ratios approaching 1 indicated balance jobs and population. The ration was calculated by dividing the job density by the population density. Ratios of less than 1 have higher resident populations than the number of jobs. Ratios greater than 1 have a higher number of jobs to the resident population.

To calculate Job density, Job information utilized data from LEHD (Longitudinal Employer-Household Dynamics) Origin-Destination Employment Statistics (LODES) from the US Census Bureau. The 2011 (latest year available) Workplace Area Characteristics (WAC) data files were used at the Census Block level. A ¼ mile circumference

buffer was created from the KML defined Commercial Corridor delineation. The buffer was then used to pull job data for any Census Block either fully or partially contained within the buffer.

To calculate Population density, the TIGER/Line® with Selected Demographic and Economic Data Shapefiles for the 2010 Census were used for Census Block level data. A ¼ mile circumference buffer was created from the KML defined Commercial Corridor delineation. The buffer was then used to pull population data for any Census Block either fully or partially contained within the buffer.

## Talent Jobshed

All Jobshed information utilized 2011 data from LEHD (Longitudinal Employer-Household Dynamics) Origin-Destination Employment Statistics (LODES) from the US Census Bureau. Data files are state-based and organized into three types: Origin-Destination (OD), Residence Area Characteristics (RAC), and Workplace Area Characteristics (WAC), all at census block geographic detail. Data is available for most states for the years 2002–2011.

*Workers Living within Study Area, Worker's Earnings, and Jobs Located in Area* and their resultant density calculations utilized data from the Michigan RAC and WAC databases. The Origin-Destination database file for Michigan was not available at the time the *Commuting Data* was analyzed, so the OnTheMap application was used to download data sets for each of the Census Places and County Subdivisions that comprise the Growth & Investment Areas. The available data from OnTheMap locates the worker's residence within a 2010 Census Block. The centroid, as established by the Census Tiger Files, was used to calculate the start location of the commute route distance and time. Without the individual employment locations within the Growth & Investment being contained in the OnTheMap datasets, the end location for the commute route distance and time was determined by using a point along a major commercial corridor of the Census Places and County Subdivisions that comprise the Growth & Investment Areas. The data was filtered to utilize only workers living in Michigan as workers living out of the state would have low propensity for daily commutes. The start and end locations for filtered worker commutes was then processed by a Visual Basic for Applications routine that used the Google Distance Matrix API to calculate route distance and time for 35,524 pairs.

The Google Distance Matrix API is a service that provides travel distance and time for a matrix of origins and destinations. The information returned is based on the recommended route between start and end points, as calculated by the Google Maps API, and consists of rows containing duration and distance values for each pair.

LEHD Origin-Destination Employment Statistics (LODES)<sup>1</sup> are the job data that are delivered in the OnTheMap application. This document describes the contents of the LODES Version 7 dataset in the context of the OnTheMap application.

U.S. Census Bureau. 2013. LODES Data. Longitudinal-Employer Household Dynamics Program.  
<http://lehd.ces.census.gov/applications/help/onthemap.html>

U.S. Census Bureau. 2013. OnTheMap Application. Longitudinal-Employer Household Dynamics Program.  
<http://onthemap.ces.census.gov/>

### Overview

As with previous versions of data released in OnTheMap, LODES Version 7 is a partially synthetic dataset that describes geographic patterns of jobs by their employment locations and residential locations as well as the connections between the two locations. These data and marginal summaries are tabulated by several categorical variables. More detailed information on the variables and scope of the data follows.

### Job Definition

In the context of LODES and OnTheMap, a job is counted if a worker is employed with positive earnings during the reference quarter as well as in the quarter prior to the reference quarter. This is called a “beginning of quarter” job because the assumption is that the worker was employed on the first day of the reference quarter.

### Years

LODES Version 7 includes data for 2002-2011, for which Quarter 2 (April – June) is the reference period in each year. Not all states have data available for each year and not every variable is available in each year.

### Geographical Vintage

LODES Version 7 and OnTheMap use 2010 census blocks, defined for the 2010 Decennial Census, as their base geography. Data released in previous versions of LODES and OnTheMap used 2000 census blocks as the geographical base. For data previously released in 2000 census blocks, the LODES data has been “crosswalked” or “transformed” into the base of 2010 census blocks. Further information on how OnTheMap and LODES implement the 2010 census blocks can be found in OnTheMap: Updating the Base Geography

### Data Structure

The overall file structure of LODES Version 7 remains similar to that of previous versions. The origin-destination (OD) matrix is made available by 10 different “labor market segments.” The area characteristic (AC) data – summary margins by residence block and workplace block – contain additional variables including age, earnings, and industry plus the newer variables outlined below.

In OnTheMap, the OD data are used to produce the Destination, Distance/Direction, Inflow/Outflow, and Paired Area analyses. The AC data are used to produce the Area Profile and Area Comparison analyses.

### **Commuting Workers**

*Commuting Workers* is the subset of *Jobs Located in Area* that is defined by those jobs where the commute route is from 2 to 175 miles. This LODES data does not sample for weekly commutes. As a result, this study chose to filter job commuting data based on these assumptions for plausible commute distances.

### **Total Daily One Way Commute for all Commuters**

The *Total Daily One Way Commute for all Commuters* (TDOWC) is computed by taking all commuters as filtered by the 2 to 175 mile assumption and calculating the total daily one-way route distance in miles and time in minutes.

### **Total Annual Commute for all Commuters**

The *Total Annual Commute for all Commuters Distance* (TACD) is computed by taking all commuters as filtered by the 2 to 175 mile assumption and multiplying the total daily one-way route distance in miles by two for the daily commute distance then by 5.25 for the weekly distance then by 50 for the annual distance. The *Total Annual Commute for all Commuters Time* (TACT) is computed by taking all commuters as filtered by the 2 to 175 mile assumption and multiplying the total daily one-way route time in minutes by two for the daily commute time, then by 5.25 for the weekly time, then by 50 for the annual time, then dividing by 60 to arrive at the total annual time in hours.

$$TACD = TDOWCD \times \text{Round Trip Commute (2)} \times \text{Days in Work Week (5.25)} \times \text{Work Weeks in Year (50)}$$

$$TACT = TDOWCT \times \text{Round Trip Commute (2)} \times \text{Days in Work Week (5.25)} \times \text{Work Weeks in Year (50)} \div 60$$

### **Annual Commuting Costs**

The *Total Fuel Cost* is computed by taking the Total Annual Commute for all Commuters Distance and multiplying it by the cost of fuel per gallon (\$3.15) and dividing by the fleet average from the 2003 CAFÉ Standards (20.7 Miles Per Gallon).

$$\text{Total Annual Fuel Cost} = TDOWCD \times \text{Fuel Price } (\$3.15) \div \text{FleetAverage MPH}(20.7)$$

The *Total Cost (IRS 2014 Standard Mileage Rate)* is computed by taking the Total Annual Commute for all Commuters Distance and multiplying it by the cost per mile from the 2014 Internal Revenue Service Standard Mileage Rate (\$.56).

$$\text{Total Commuting Cost Total Cost (IRS)} = TDOWCD \times \text{2014 IRS Standard Mileage Rate} (\$.56)$$

### **Average Annual Per Worker Commute**

The *Average Annual Per Worker Commute Distance* is computed by dividing the *Total Annual Commute for all Commuters* by the number of *Commuting Workers*.

$$\text{Average Annual Per Worker Commute Distance} = TACD \div \text{Commuting Workers}$$

The *Average Annual Per Worker Commute Time* is computed by dividing the *Total Annual Commute for all Commuters* by the number of *Commuting Workers*.

$$\text{Average Annual Per Worker Commute Distance} = \text{TACT} \div \text{Commuting Workers}$$

The *Average Annual Per Worker Commute Total Cost* is computed by dividing the *Annual Commuting Cost Total Cost (IRS 2014 Standard Mileage Rate)* by the number of *Commuting Workers*.

$$\text{Average Annual Per Worker Commute Distance} = \text{TACD} \div \text{Commuting Workers}$$

## Retail Activity

*Retail data was sourced from Environmental Systems Research Institute, Inc. (Esri) by the purchase of a Complete State Retail MarketPlace Data License for the State of Michigan by all levels of geography.*

### Total Retail Sales

Whitepaper Statement from Esri: Esri has combined the latest Consumer Expenditure Surveys (CEX), 2006–2007, from the Bureau of Labor Statistics (BLS) to estimate current spending patterns. The continuing surveys include a Diary Survey for daily purchases and an Interview Survey for general purchases. The Diary Survey represents record keeping by consumer units for two consecutive weeklong periods. This component of the CEX collects data on small, daily purchases that could be overlooked by the quarterly Interview Survey. The Interview Survey collects expenditure data from consumers in five interviews conducted every three months. Esri integrates data from both surveys to provide a comprehensive database on all consumer expenditures. To compensate for the relatively small CEX survey bases and the variability of single-year data, expenditures are averaged from the 2006–2007 surveys.

Products and services, such as apparel items, types of digital cameras, video game systems, financial accounts and services, health-related items, Internet activities, satellite TV providers, personal care services, and detailed information about cell phones/PDAs (brands, service providers, average monthly bills, and purchase locations), are included. A product description was revised since the last Market Potential update if a product change was made by GfK MRI, if ranges had to be collapsed, or if more clarification was required. A product was dropped since the last Market Potential update if it did not pass a sample size test, became outdated or unnecessary, or no longer exists in the GfK MRI database.

### Total Potential Retail Sales

Esri computes Market Potential by combining 2011 Tapestry™ Segmentation data with Doublebase® 2009 data from GfK MRI. Doublebase 2009 is an integration of information from four consumer surveys. Each survey respondent can be identified by Tapestry segment, so a rate of consumption by Tapestry segment can be determined for a product or service for any area.

The Expected Number of Consumers (households or adults) for a product or service in an area is computed by applying the consumption rate for Tapestry market segment "n" to households or adults in the area belonging to Tapestry segment "n," and summing across 65 Tapestry segments.

$$\text{Expected Number of Consumers} = \sum_{n=1}^{65} (\text{Count}_n \times \text{Consumption Rate}_n)$$

The *Local Consumption Rate* for a product or service for an area is computed as the ratio of the expected number of consumers for a product or service in the area to the total households or adults in the area.

$$\text{Local Consumption Rate} = \frac{\text{Expected Number of Consumers}}{\text{Base Count}}$$

The *Market Potential Index* for a product or service for an area is the ratio of the local consumption rate for a product or service for the area to the US consumption rate for the product or service, multiplied by 100.

$$\text{Market Potential Index} = \frac{\text{Local Consumption Rate}}{\text{US Consumption Rate}} \times 100$$

Esri's Market Potential database includes data for more than 2,200 items, organized into 35 categories, representing goods, services, attitudes, and activities collected from GfK MRI surveys. Unless otherwise noted, each item refers to consumer spending or behavior in a 12-month period. The *a* or *h* following the five-digit product code denotes a consumer base of adults or households, respectively.

### **Leakage**

*Leakage* is defined as the Potential Sales less the Total Sales. All inputs are as reported by Esri.

### **Classification:**

For the purposes of determining the *Classification*, Sales, Potential Sales, and Leakage are used for the Growth & Investment Area and County to determine whether it is a Retail Hub and if its classified as a Local Hub or Regional Hub for the purpose of this study. A Retail Hub is defined in this study as having a negative retail leakage. If the Retail Sales for the Growth & Investment Area are greater than Potential Sales in the county in which it is located and the county's leakage is negative, then the Retail Hub is classified as a Regional Hub. In the absence of these two conditions, then the Retail Hub is classified as a Local Hub.

### **Sales by Retail Store Type**

Ersi in the Retail MarketPlace Dataset contains 44 different types of retail store data. The sample of retail activity by store type included in this section represents approximately two-thirds of potential retail sales depending on the geographic area. This sample of store types is indicative of a diverse set of shopping type that would support a walkable mixed use environment.

## **Commercial Corridor Datasheets**

### **Corridor Length**

Corridor Lengths were determined by plotting the described commercial corridor from the Commercial Corridor Inventory Interviews with local units of government into the Google Earth desktop application, exporting the KML files for import to ArcMAP and projecting them to calculate the linear extent of the defined corridor in feet.

### **Street Classification**

National Functional Classification (**NFC**) is a planning tool which federal, state and local transportation agencies have used since the late 1960's. The Federal Highway Administration (**FHWA**) developed this system of classifying all streets, roads and highways according to their function. The FHWA publication, **Highway Functional Classification: Concepts, Criteria and Procedures**, provides the basis for much of the following information.

**Principal Arterials** are at the top of the NFC hierarchial system. Principal arterials generally carry long distance, through-travel movements. They also provide access to important traffic generators, such as major airports or regional shopping centers. *Examples:* Interstate and other freeways; other state routes between large cities; important surface streets in large cities.

**Minor Arterials** are similar in function to principal arterials, except they carry trips of shorter distance and to lesser traffic generators. *Examples:* State routes between smaller cities; surface streets of medium importance in large cities; important surface streets in smaller cities.

**Collectors** tend to provide more access to property than do arterials. Collectors also funnel traffic from residential or rural areas to arterials. *Examples:* County, farm-to-market roads; various connecting streets in large and small cities.

**Local** roads primarily provide access to property. *Examples:* Residential streets; lightly-traveled county roads.



The following MDOT classifications for this study's Commercial Corridor Inventory are source from the MDOT's National Functional Classification Maps. The classifications are as follows:

**Principal Arterial - Other**  
**Minor Arterial**  
**Major Collector**  
**Minor Collector**  
**Local**

If a Corridor has multiple classifications along one of its segments, then the highest classification is used. Corridors with multiple segments may contain multiple classifications.

### ***2013 Traffic Volume (AADT)***

Traffic count data was sourced from the Michigan Department of Transportation's (MDOT) Traffic Monitoring Information System (TMIS) for state trunklines or from local municipalities if available. All counts utilize the Annual Average Daily Traffic (AADT) counts, which in most cases are an annual average estimate of daily traffic based on an adjustment of a sample conducted for a short period of time (short count). For short-count sites, counts are estimated by factoring a short count using seasonal and day-of-week adjustment factors. For continuous sites, counts are calculated by summing the Annual Average Days of the Week and dividing by seven.

For the purpose of this report, if the identified commercial corridor has more than one AADT count, the largest count was utilized.

### ***Number of Traffic Lanes***

Traffic Lane counts were sourced from Google Earth aerial imagery. On corridors with sections of varying amounts of traffic lanes, the count from the section with highest number of lanes was utilized.

### ***Parking***

The presence of Parallel, Diagonal, or Parking Structures in commercial corridors was sourced from Google Earth aerial imagery.

### ***Transit Service***

Transit Service was determined from data contained on the respective Transit Agency websites.

### ***Bike Lane***

The presence of *Bike Lanes* available in commercial corridors was sourced from Google Earth aerial and street view imagery. Accuracy may vary based on the level of quality of the imagery.

### ***Entertainment Venues***

The *Theaters & Entertainment Venues* data was sourced by a search of business listings from several sources including Google, Yellow Pages, and Fandango.com.

### ***Pedestrian Amenities***

*Pedestrian Amenities* consist of Sidewalks, Crosswalks, and Mid-Block Crosswalks. The presence of these Pedestrian Amenities in commercial corridors was sourced from Google Earth aerial imagery.

### ***Walk Score***

Walk Score<sup>®</sup> measures the walkability of any address using a patented methodology that analyzes walking routes to nearby amenities and awards points based on the distance to amenities in each category with end results ranging between 0-100, 100 being a "Walker's Paradise". (Walk Score 2014)

## **Corridor Overview**

The Corridor Overview was source from Master Plans, Zoning Ordinances, Regional Transportation Plans, and other public source documents. Content has been edited.

## Corridor Segment and Surrounding 1/4 Mile Study Area Map

The map of commercial corridors were defined by entering public road center points (latitude and longitude coordinates) along the extent provided by the Commercial Corridor Inventory Interviews into Google Earth with the Add Path tool. A sufficient number of points were used to maintain road radius conformity. The full 10 county commercial corridors studies contained 1,722 individual latitude and longitude coordinates. The Google Earth paths were then exported into a KML file for import into ArcMap. The corridors were combined with data from the 2010 TIGER/Line® Shapefiles of Census Places and Counties and road geographic features data from the Michigan Department of Technology, Management, & Budget's Geographic Data Library Catalog. A ¼ mile circumference buffer was created from the KML defined Commercial Corridor delineation. The buffer was then used to query data from various databases used in this study.

Additionally 317 Points of Interest in the 10 county Northwest Michigan region consisting of public use airports, colleges, cultural sites, grocery stores, hospitals, libraries, schools, and theaters & entertainment venues were located for inclusion into the corridor maps.

## Economic Development

All corridor specific *Economic Development* policy data was provided during the Commercial Corridor Inventory Interviews with representatives of local units of government or a search of documentation contained on the respective municipal website.

Additional information on specific community policies can be found in the Michigan Economic Development Corporations Redevelopment Ready Communities' Best Practices guide.

[http://www.michiganbusiness.org/cm/Files/Redevelopment\\_Ready\\_Communities/RRC-Best-Practices.pdf](http://www.michiganbusiness.org/cm/Files/Redevelopment_Ready_Communities/RRC-Best-Practices.pdf)

## Study Area Summary for 1/4 Mile Area Surrounding the Corridor

### *Population & Housing Data*

To calculate Population and Housing density, the TIGER/Line® with Selected Demographic and Economic Data Shapefiles for the 2010 Census were used for Census Block level data. A ¼ mile circumference buffer was created from the KML defined Commercial Corridor delineation. The buffer was then used to pull population and housing data for any Census Block either fully or partially contained within the buffer for determining data for the Corridor Segment geography. To determine calculations for the G&I Core Places and G&I Areas, the 2010 Census TIGER (Topologically Integrated Geographic Encoding and Referencing) File Data for County Subdivisions, Census Places, and Census Blocks was imputed into ArcMap software and used to create a database of Census Blocks contained in the respective geographic extents. The Census Block database was then queried for the applicable population and housing data.

### *Study Area Size Data*

A ¼ mile circumference buffer was created from the KML defined Commercial Corridor delineation in ArcMap then used to calculate the land area contained within. To determine calculations for the G&I Core Places and G&I Areas, the 2010 Census TIGER (Topologically Integrated Geographic Encoding and Referencing) File Data for County Subdivisions, Census Places used to query the land area information.

### *Worker & Job Data*

To calculate *Workers Living within Study Area* and *Jobs Located within Study Area*, data from the US Census Bureau's LEHD (Longitudinal Employer-Household Dynamics) Origin-Destination Employment Statistics (LODES) was utilized. The 2011 (latest year available) Workplace Area Characteristics (WAC) and Residence Area Characteristics (RAC) data files were used at the Census Block level. A ¼ mile circumference buffer was created from the KML defined Commercial Corridor delineation. The buffer was then used to pull job data for any Census Block either fully or partially contained within the buffer for determining data for the Corridor Segment geography. To determine calculations for the *G&I Core Places* and *G&I Areas*, the 2010 Census TIGER (Topologically Integrated Geographic Encoding and Referencing) File Data for County Subdivisions, Census Places, and Census Blocks

was imputed into to ArcMap software and used to create a database of Census Blocks contained in the respective geographic extents. The Census Block database was then queried for the applicable Worker and Job data.

## Zoning

Zoning data was sourced from the respective municipality's Zoning Ordinances and Maps. Commercial Corridor extents were used to pull which Districts were bisected or bordered by the corridor. The respective District standards were then used to determine maximum dwelling densities, permitted uses and review criteria, and district standards for heights, parking requirements, maximum lot coverages, and setbacks. In cases where explicit dwelling densities were not contained in the zoning ordinance, a theoretical maximum was calculated taking into account lot coverages, parking requirements, minimum unit counts and standard assumptions for building envelope ratios (specific formulas for each included district are available upon request). **These maximums are theoretical and are not based on specific site constraints. As such they should not be relied upon for site planning or determinations of value. Contact the applicable Zoning Administrator for inquiries about any specific determinations. For a list of contacts please see the municipality's website or the Networks Northwest County Guides to Permitting and Zoning.**

(<http://www.networksnorthwest.org/planning/planning-policy/land-use/growth-and-investment.html>)

## Infrastructure

### *Public Utilities*

All Municipal Water and Sewer Service data was provided during the Commercial Corridor Inventory Interviews with representatives of local units of government or a search of documentation contained on the respective municipal website.

### *Energy*

All Energy Infrastructure data was provided during the Commercial Corridor Inventory Interviews with representatives of local units of government or a search of documentation contained on the respective municipal website.

### *Broadband*

All data on Broadband available was sourced from both the Commercial Corridor Inventory Interviews with representatives of local units of government and Connect Michigan's technology service maps. Connect Michigan is a subsidiary of Connected Nation and operates as a non-profit in the state of Michigan. Connect Michigan partnered with the Michigan Public Service Commission to engage in a comprehensive broadband planning and technology initiative as part of National effort to map and expand broadband. The program began by gathering provider data to form a statewide broadband map and performing statewide business and residential technology assessments, but has since progressed to working with communities on community plans. (Connect Michigan 2014)

## Policy

All corridor specific policy data was provided during the Commercial Corridor Inventory Interviews with representatives of local units of government or a search of documentation contained on the respective municipal website.

## Traffic Counts

Traffic count data was sourced from the Michigan Department of Transportation's (MDOT) Traffic Monitoring Information System (TMIS) for state trunklines or from local municipalities if available. All counts utilize the Annual Average Daily Traffic (AADT) counts, which in most cases are an annual average estimate of daily traffic based on an adjustment of a sample conducted for a short period of time (short count). For short-count sites, counts are estimated by factoring a short count using seasonal and day-of-week adjustment factors. For continuous sites, counts are calculated by summing the Annual Average Days of the Week and dividing by seven.

The Traffic Count Chart contains AADT counts for the described corridor segment. For the purpose of this chart, if the identified commercial corridor segment has more than one AADT count, the largest count was utilized.

## Placemaking Elements

All data for the *Placemaking Elements* was sourced from information provided during the Commercial Corridor Inventory Interviews with representatives of local units of government. The *Theaters & Entertainment Venues, Grocery Store, and Restaurant* data was sourced by a search of business listings from several sources including Google, Yellow Pages, and Fandango.com.

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## Release Notes

1. If any information is in error or incomplete or if a community not currently participating would like to request a commercial corridor interview, please contact Scott Gest, Regional Planner at Networks Northwest.

**phone:** 231-929-5091

**email:** [scottgest@networksnorthwest.org](mailto:scottgest@networksnorthwest.org)

**mail:** PO Box 506, Traverse City, MI 49685-0506



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