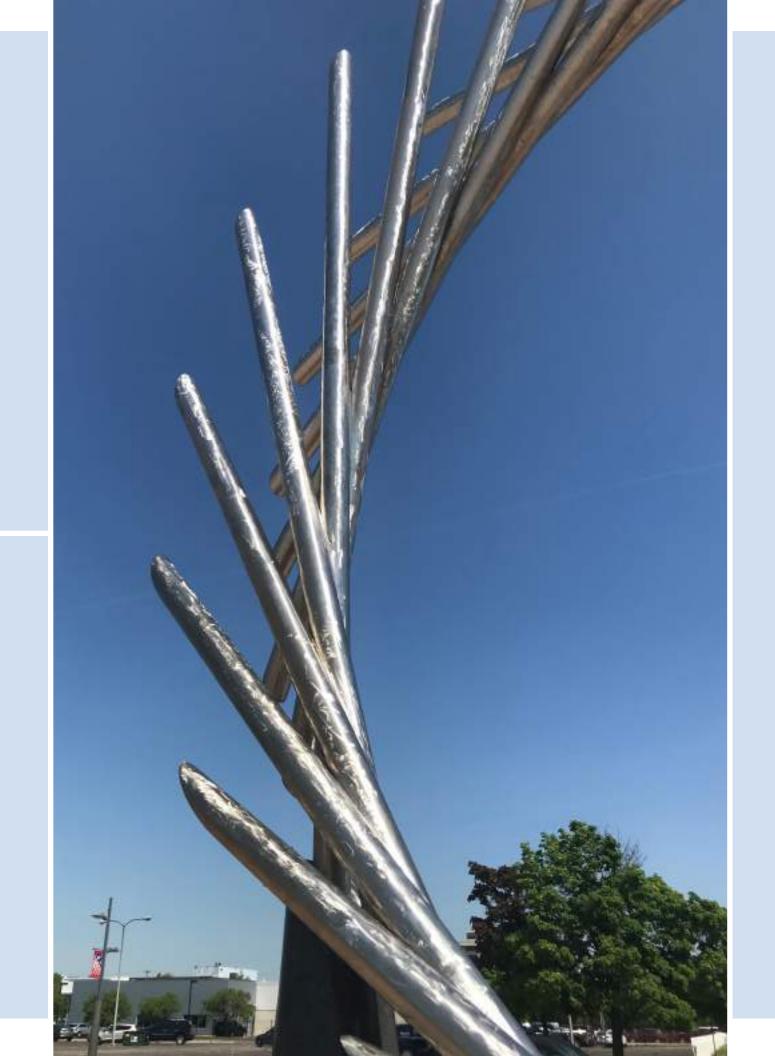
CITY OF WARREN MASTER PLAN



JANUARY 2021

RESOLUTION APPROVING "CITY OF WARREN MASTER PLAN"

At a regular meeting of the City Courts of the City of Warren County of Macomb Michigan, held on January 12, 2021, at 7 p.m. Eastern Daylight Savings Time via Zoom Video Conference pursuant to Public Act 254 of 2020.

PRESENT.	Councilmempers	Green, Kab	acinski, Lafferly, Mpo <u>re, Papar</u>	ndrea_
Ragensues,	Watts			
ABSEN":	Councilmembers _	None		

The City of Warren Planning Commission. In accordance with the orocedures and requirements of Michigan Planning Enabling Act. Public Act 33 of 2008 ("the Act"), propared a proposed "City of Warren Master Plan" as a guide to land use and development within the City of Warren.

The Planning Commission, through the certified urban planning consulting (i.m., Beckett and Reader, Inc., performed the studies, surveys and careful analysis of public interests, present conditions and future growth trends as the framework for the proposed Master Plan

The Secretary of the Warren Planning Commission forwarded to the City Council all copy of the proposed City of Warren Master Plan for Its review on January 14, 2020.

On January 14, 2020, Warren City Council approved for distribution the "City of Warren Master Plan" to the entities named in Section 41 of the Act for review and comment

Following the comment period, the City of Warren Planning Commission held a public hearing on June 22, 2020, duly published and noticed in accordance with MCL 125 3843.

On June 22, 2020, the City of Warren Planning Commission, by over a 2/3 vote of its membership, approved the City of Warren Master Plan, and authorized the Secretary of the Planning Commission to forward the proposed City of Warren Master Plan to the City of Warren City Council.

THEREFORE, IT IS RESOLVED, that the Council approves City of Warran Master Plan

:TIS FURTHER RESOLVED that the Secretary of the Warren City Council is authorized to execute a statement on the master plan recording Council's approval of the master plan in the manner provided in MCL 125.3843

AYES:	Councilmembers <u>Moore, Lafterty, Rogenuses, Papandrea, Kabacinski Watts.</u>
Green	
NAYS:	Councilmembers, None
RESOL	UTION DECLARED ADOPTED this 12th day of January 2021. Whendy Thomas MINDY MOORE

CERTIFICATION

\$TATE OF MICHIGAN) (\$8. COUNTY OF MACOMB)

I. SONJA BUFFA, only elected City Clork for the City of Warren. Macomo County, Michigan, hereby certify that the foregoing is a true and correct copy of the resolution adopted by the Council of the City of Warren at its meeting held on January 12, 2021.

> SONJA BUFFA City Clerk

Secretary of the Council

ANAMINOT TRESS

ACKNOWLEDGEMENTS

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Special thanks to the citizens of the City of Warren, whose information and insight were paramount to the development of this plan.



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INTRODUCTION

There is a rare and transformational opportunity contained within these pages. This Master Plan represents only the third comprehensive planning exercise undertaken by the City of Warren, which engaged in this endeavor once near its inception in the middle of the 20th century and again almost a quarter-century later. Warren's population has surged to the third-largest in the State, its signature industry has fully transformed the public and private realms through vehicular dominance, and tens of thousands of residents have built, purchased, maintained, and animated its commercial and residential buildings. By all measures, the City has been a winner under the 20th century paradigm.

The focus of this Master Plan is on transitioning this success into a new era marked by the knowledge economy, diversity of household types, and climate variability. Systems which were optimized to serve practices rooted in the Industrial Revolution are now in some cases asked to do an about face: natural features as assets to be enhanced and supported rather than to be exploited and mitigated; the "single-family home" as an option among an array of habitats rather than the singular achievement valued by all responsible adults; infrastructure and ecosystem services as complementary and balanced rather than the total replacement of nature with concrete. Warren's strengths, including its size and its economic success, make it a formidable ship to turn, but they also provide the resources with which it can be done.

Through the Town Hall meeting series, Warren's residents spoke strongly and touchingly about the community of their past: its neighborhoods, institutions, and sense of connectedness to each other. They also spoke of their hopes for the future: a progressive community where all are welcome and safe. The purpose of this Master Plan is to chart the course between the two.

HISTORY

The City of Warren, originally known as "Beebe's Corners," was officially settled in 1830, seven years prior to Michigan becoming a state (1837). The "Corners" was a bustling trade hub with a mill, drinking establishments, and a trading post. Many pioneers from New England, mostly farmers, settled in the area and established churches, schools, and other business operations. It was not until April 28, 1893 that the settlement became the Village of Warren. The Village and surrounding areas were agriculturally based until the turn of the 20th century and the Industrial Revolution.

As the City of Detroit took its place as a leader in the emerging economy, the effects on land and people were far-reaching. Sprawling industrial operations grew among tightly packed housing developments intended for masses of workers. Millions of African Americans migrated from southern states to northern states, in the "Great Migration," lasting from 1916 to the 1960s.² There was a mass influx of people flooding into the City of Detroit, and housing was very limited. Thus, as people continued to flock to Detroit, settlements

grew outward and into the Village of Warren. Because of this sudden population growth connected to the City of Detroit in the early-mid 20th century, many people consider Warren's primary identity to be a suburb of Detroit.³ Yet, due to the community established prior to the "Great Migration," Warren has its own unique character and history.

Like much of southeastern Michigan, Warren became an industrial hub during and after World War II. In 1941, the Detroit Arsenal Tank Plant started mass producing tanks for the war, and the plant continued producing tanks until 1997.⁴ Inaugurated in 1956, the GM Tech Center represents the industrial center that Warren is today. Warren officially became a city on October 27, 1956, and the City's population doubled between 1960 and 1970.5 Along with the rest of the country, there was rapid housing and commercial development during this time period. Although development has continued, there has been a steady decline in population since its peak in 1970. However, there has recently been a shift in population trends due to a 0.8% population growth between 2010 and 2016.

PLANNING CONTEXT

The City of Warren has engaged in multiple planning efforts in the past. The following is a description of these efforts.

1966 Master Plan

The field of planning has changed in the decades since this plan was written, but the basic tenets for creating an attractive city remain the same. Like most plans of the past, the content is land-use heavy. The city is divided into eight planning areas and each area's proposed future is discussed in terms of how residential, commercial, industrial, and community-based land uses should be preserved, scaled back, or expanded. Of equal importance was how major circulation would factor into each planning area, wherein lies the largest change in planning practice; in the 1960s planners promoted and planned for auto-centric cities whereas today planners work towards improving non-motorized connections. What is striking is that after 50 years, the major topics of concern then are still relevant today:

- » Obsolete industrial buildings
- » Balancing traffic concerns with new residential development
- » A recognizable downtown and identity
- » Redevelopment opportunities
- » The appearance of the physical environment
- » Housing deterioration and rehabilitation

Today, technology affords planners the opportunity to gather more complete datasets and pursue different and varied approaches to enhancing cities, but this plan provides an insightful link to the past that highlights that while we are living in a different time, our desires are largely the same.

WHAT IS THE PURPOSE OF A MASTER PLAN?

What is a Master Plan?

The Michigan Planning Enabling Act (PA 33 of 2008) enables municipalities to write a Master Plan that broadly guides development to meet current and future needs and promotes the health, safety, and general welfare of its residents. The process of creating a Master Plan asks a community to pause from its busy daily operations of running a municipality and look to the future. A Master Plan is a policy document that comprehensively inventories and analyzes the elements that make a city function (i.e. housing, transportation, services), so it is essential to include as many stakeholders into the process as possible. Through community engagement, the Master Plan seeks to understand how residents rate their "quality of life." It identifies Warren's vision and defines goals that could help achieve that vision and preserve the city's unique character. The Master Plan serves many roles as a vision statement, an Action Plan with specific strategies, a tool for making coordinated land-use decisions, an assessment of current programs, services, structures, and infrastructure, and a document to inform its citizenry on how the city will plan for its future.

Relationship to Zoning Ordinance

The Master Plan is not a binding agreement but rather a planning framework. The Zoning Ordinance, on the other hand, is local land use law. The Zoning Ordinance is a set of regulations that provide the details for how and where development can locate to exacting specifications. Thus, the Zoning Ordinance implements the Master Plan; and, as outlined in MPEA, a direct relationship between the two documents is required. For example, if it emerges through community engagement and research that the housing types available do not adequately serve the population, then a vision statement in the Master Plan could read "to plan for housing types that meet all the preferences of all age groups, income levels, and disabilities." To ensure that this vision is implemented, a municipality would revisit the Zoning Ordinance to determine if the land use code is preventing a particular type of development through height restrictions or lot size requirements. Only when the two documents are in sync can they be effective planning tools.



Warren Police Department, 1942

Source: City of Warren

1989 Policy Update

As a 22-year follow-up, the 1989 Policy Update does just that: it recommends updates, in particular, for goals that were not implemented in the 1966 Master Plan. Preparing for a shrinking population, the policies call for strengthening the City's industrial base to maintain its status as an employment center, attracting a younger population, preserving neighborhoods that have lost their schools as a focal point, expanding parkland, and upgrading commercial corridors, parking, and circulation. The update also has a section titled "the divisive effect of 1-696" that explains how the bifurcation of the city created the "desirable" north and "undesirable" south, a distinction that is still heard today. The 1966 plan mentions that southern Warren was the first part of the city to develop and as such features older housing stock, but the policy update calls for actively removing obsolete buildings and bolstering community services to encourage private development.

2015 Parks and Recreation Plan

The Parks and Recreation Plan showcases its 27 parks with a thorough description, an aerial map with neighborhood services radii, and specific recommendations for improvements. Mapping parks in relation to how many residents they serve shows that parks are considered an integrated component of a neighborhood and not a separate entity. With this approach, recommendations can be tailored to specific needs of its most frequent users. The communitywide survey revealed that residents are highly supportive of hiking and biking trails, preserving natural areas, and developing more recreation opportunities.

The Action Plan is based on extensive community engagement and takes on the suggestions received through focus group sessions and survey results as guide post for action. The plan is aspirational with its push to maximize use of all of its indoor and outdoor facilities, build pedestrian and bicycle-friendly paths to connect recreation facilities and to regional trails, increase park acreage, ensure barrier-free accessibility, and modernize facilities.

2017 Warren Town Center Master Plan

The goal of creating a "walkable, mixed-use urban center on the city-owned Civic Campus" is not new for Warren—this document is the fourth plan to consider this area. The 2017 plan incorporates many of the City's long-held desires for development: a town center, 200+ room hotel connected to the GM Tech Center, grocery store, multi-family housing, and retail space. The retail analysis shows that as of 2016, Warren could support 73,200 square feet of retail in the form of grocery stores, general merchandise, limited service eating, full-service restaurants, specialty food services, and apparel stores. The estimated retail sales are \$24.4 million and expected to rise to \$25.6 million by 2021. The arrangement of the new buildings with retail on the ground floor encourages walkability and connection to the town square.

Patriot Place

City Council voted to create the Patriot Place District, an overlay district centered on Van Dyke between Eight Mile and Stephens, to define its neighborhood boundaries, and to establish a Neighborhood Enterprise Zone (NEZ) within the district to capture tax increment financing. The intent of this overlay is to revert these neighborhoods to the walkable scale as when WWII and Korean War veterans lived and worked at the Tank Armory or the Auto Plants. The City and various departments are investing millions of dollars in a new Civic Center on Nine Mile and Van Dyke with a mini police station, a high tech library, city hall offices, a community room and an all access outdoor play area. Investment is also going towards LED lighting, 108 new trees along Van Dyke, new benches, bike racks, and receptacles. In addition, over \$200,000 is available in façade improvement grants, with more scheduled for dissemination. On the western border of this district is the Warren Assembly plant where Fiat Chrysler Automobiles has announced a \$1 billion investment and expects to generate about 2,500 jobs. With creative zoning and public and private investment, this section of the City is likely to see major changes in the coming years.

Eight Mile Boulevard Unifying Framework

In 1993, 13 municipalities and three counties who saw a common interest in preserving the vitality of Eight Mile came together with other stakeholders to found the Eight Mile Boulevard Association (8MBA). The Patriot Place district is within this framework, and 8MBA references the NEZ, new Civic Center, streetscaping plan along VanDyke, and new permanent supportive housing for veterans planned for just north of Eight Mile. Other collaborations include working with Macomb County on a Groesbeck Corridor Plan and working on new uses for Eight Mile and Schoenherr.

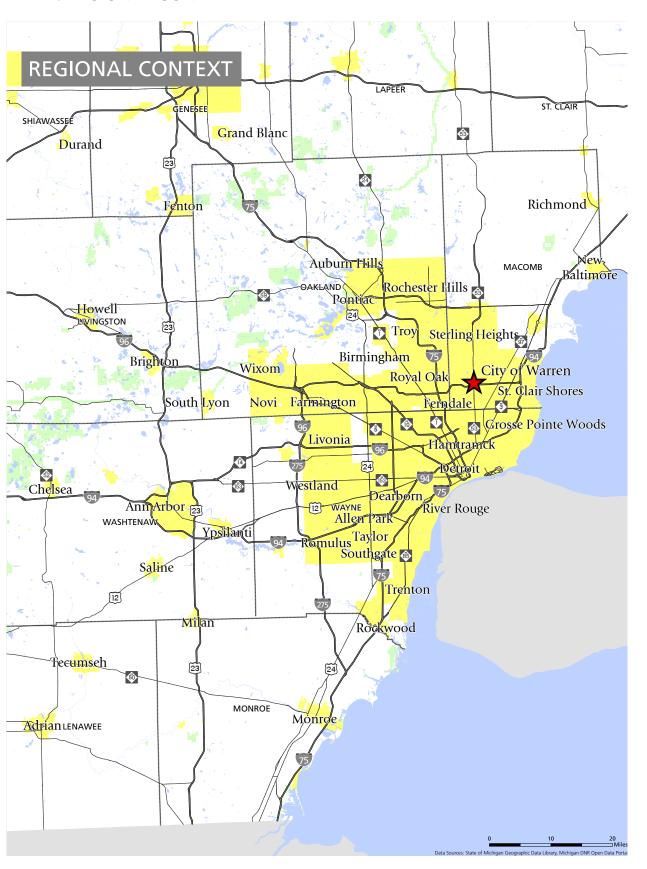
Groesbeck Corridor Assessment Tool

This web-based tool is hosted at Macomb County GIS, and is designed to promote Groesbeck Highway as a key transportation network by showcasing economic development success stories and available prime properties along the highway. This information is submitted and updated by local communities involved in the Groesbeck Highway Development initiative. "Groesbeck Corridor" refers to the road that cuts across the southeast corner of Warren, but the adjacent rail line serves to increase its physical impact. This corner of Warren has lagged in recent growth and is ready for reinvestment.

REGIONAL CONTEXT

The City of Warren, located in Macomb County in Southeastern Michigan, is the third largest city in population in Michigan. Situated about 20 miles north of downtown Detroit, Warren is Metro Detroit's largest suburb. Roughly 34 square miles in area, the City encompasses an entire township, excluding the City of Center Line, which Warren completely surrounds.

MAP 1: REGIONAL CONTEXT



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Located within the Metro Detroit Area, the City of Warren has numerous suburban neighbors, including the City of St. Clair Shores about eight miles to the east; the City of Sterling Heights along the north border, and the City of Royal Oak about ten miles to the west.

The City of Warren is connected to other communities primarily through roadways. 1-696 goes directly through the center of the City in the east-west direction, and I-94 sits just outside of the City boundaries to the east, while I-75 sits just outside of the City boundaries to the west. Three railways run through the City - Norfold Southern, Consolidated Rail Corporation, and Canadian National. These lines aid in the numerous industrial operations within the City, though are exclusively for the transfer of goods, not people. Additionally, Warren residents have easy access to the Detroit Metro Airport for both domestic and international air travel.

SEMCOG (Southeast Michigan Council of Governments) Regional Review

As the third-largest city in the State of Michigan, Warren has a large presence in Southeast Michigan. There are numerous regional studies and reports that directly pertain to Warren:

- » Regional Housing Needs and Neighborhood Resiliency Strategy (2012)
- » 2040 Regional Transportation Plan (2013)
- » Green Infrastructure Vision (2014)
- » Partnering for Prosperity (2016)
- » Stabilizing and Sustaining: The Economic and Demographic Outlook for Southeast Michigan through 2045 (2017)
- » Regional Master Transit Plan (2016)
- » Nonmotorized Plan for Southeast Michigan (2014)

One of the region's core challenges impacting sustainability and quality of life is the mismatch of housing supply and demand. The 2012 Regional Housing Needs and Neighborhood Resiliency Strategy identifies that although the region has lost more than 125,000 residents since 2000, more than 108,000 new housing units have been added. Significant gains in population can be seen near the GM Tech Center and Warren Technical Center with population gains greater than 10% and even greater than 50% in some block groups. The increased supply of housing in these areas contributes to higher vacancies in older, less competitive areas and systematic and accelerated neighborhood decline throughout the region.

Both the 2040 Regional Transportation Plan and the 2016 Partnering for Prosperity Plan identify the region's aging infrastructure as one of Southeast Michigan's greatest challenges for economic prosperity. Additionally, as identified in The Economic and Demographic

Outlook for Southeast Michigan through 2045, the region has a disproportionately large share of baby boomers, so southeast Michigan will age more dramatically than the nation as a whole. Even though southeast Michigan's recovery since 2010 has been incredible, attracting a more highly skilled and educated work force is crucial to future economic prosperity in the region.

Macomb County Review

Macomb County has numerous county-wide plans that involve the City of Warren. The 2014 Macomb County Economic Impact Report identifies several employers in Warren as participating in the 2014 Business Retention Program. Chrysler Group LLC invested the greatest amount of money of all participating businesses in Macomb County in 2014, investing a total of \$63,000,000 and retaining 48 jobs. The 2004 Macomb County Trailways Master Plan identifies Warren as a central feature for the area's trail system. The City of Warren Community Center was proposed to be a staging area for the County's nonmotorized system. The route along the Red Run Drain, as well as the route along the Conner Creek Greenway, were both identified as regional routes; they too were later identified in the Nonmotorized Plan for Southeast Michigan (SEMCOG) in 2014. These routes and the Iron Belle Trail are also highlighted in the "Transportation" chapter of this Master Plan. The City of Warren is well-positioned in that the Iron Bell Trail will run directly through the City, thus connecting Warren to the rest of the State of Michigan.

Neighboring Master Plans

Communities which share a border with Warren include Center Line, Detroit, Eastpointe, Fraser, Hazel Park, Madison Heights, Roseville, and Sterling Heights. Of these bordering communities, the City of Detroit and the City of Sterling Heights both distinctly connect land uses to the City of Warren. The City of Warren, along with Madison Heights and Sterling Heights, is an employment center where residents of the Detroit region commute for work. For instance, the Warren Truck Plant is among the many automotive manufacturing assets in the greater Detroit area.

Because of Warren's proximity to the City of Detroit, land uses between the two cities are interconnected. The 2012 Detroit Future City report's future land use map as represented in a 50-year Land Use Scenario depicts:6

- » A significant amount of traditional residential uses in northwest Detroit near Warren.
- » Green residential areas in the northeast, which are neighborhoods expected to demolish vacant structures, employ low-cost and low-maintenance green space improvements, and create large open spaces for the public.
- » A small section of green mixed-use development along Woodward Avenue, intended to be a mixed-use space that incorporates the context of green spaces surrounding it.

- » An innovation ecological district between I-75 and Woodward Avenue wherein industrialized vacant sites return to nature with little guidance as a "landscape of innovation," where forests, meadows, and other landscapes develop over time.
- » Existing land use shows predominately residential uses bordering Warren with some scattered parks, open spaces, commercial, and industrial uses.

The Sterling Heights 2017 Master Plan also strongly connects to the City of Warren in terms of land use. Some interesting categories of future land use are immediately adjacent to Warren, including:⁷

- » A mixed-use area along Van Dyke Road.
- » An expansive industrial area between Van Dyke Road and Mound Road, with an "Innovation Support" zone on the west side of Mound Road.
- » Considerable residential uses, including suburban residential, planned residential, and multiple family residential along Fourteen Mile Road.
- » Scattered local commercial and office uses along Fourteen Mile Road, intermingling with residential uses.

SOURCES

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Source: City of Warren



COMMUNITY



COMMUNITY ENGAGEMENT PROGRAM

One of the primary purposes of a Master Plan is to uncover the goals and preferences of the community, so that they can help shape the recommended policies and procedures. The benefits of a robust and inclusive community engagement process are hard to overstate. First and foremost, it makes the plan implementable. When the needs of the public are sought out, listened to, and offered thoughtful solutions, those solutions then have ambassadors in the constituency. Priorities which are set directly by the public lend clarity to the jobs of public servants.

In addition to positive effects on the project, there is another reason to make as much as possible of this opportunity for direct interaction between citizens and leadership: public trust in government. It is common knowledge that this has been in precipitous decline for decades; what may be less well-known is that this is really only true at the national level, joined this millennium by falling confidence in state governments.² Yet, local government has been a bright spot in this gloomy picture, with citizen trust in local officials holding steady at about 70% since at least 1972. Master planning is one instance with which citizens may interact, participate in, and impact their local government in a context that is not driven by conflict or a problem to be solved. The more people who come to the table and then walk away feeling good, the better the community can work together.

Given Warren's large and diverse population, a two-pronged strategy was designed to maximize the opportunities for participation. The first prong was a series of neighborhoodlevel community meetings, designed to take place in different locations throughout the City with participation from the local elected official as well as the Steering Committee. This format permitted more qualitative data to be elicited, conducive to building an overall vision of the City's future. It also offered an opportunity for one-on-one interaction with local officials, and for citizens to have fun participating in government. The second prong was an internet-based community survey, which provided broad-based information and generally reached more people than an in-person meeting. It also provided an input avenue for groups who traditionally are never seen in a government public meeting, such as young adults and working parents.

TOWN HALL MEETING SERIES

Overview

To offer citizens the chance to give direct qualitative input to the plan, the City of Warren held five Town Hall Meetings, scheduled every Thursday evening starting from May 31 st until June 28th, 2018. The meetings were spread across the City to facilitate geographic representation. As can be seen in Map 2, participation was indeed fairly evenly distributed, with the exception of the northeast corner of the City.

The meetings were advertised through a variety of channels, including the City's website, electronic display outside of City Hall, social media, an informational interview on Warren

VENUES:

City Hall

Warren Community Center

Owen Jax Recreation Center

Fitzgerald Recreation Center

McKinley Elementary School

TV, direct mailings, an advertisement in Warren Weekly, and personal invitation from Steering Committee members and other City representatives. A total of 146 participants attended the Town Hall meeting series.

The meetings were formatted as interactive visioning workshops. Most of the meetings started with an introduction by the Mayor, who shared his enthusiasm for the plan and appreciation for the residents who spent their evening working to better the city. Then, a brief presentation was given by a facilitator which explained the planning process and offered some preliminary findings on how the City is changing. The majority of the evening was devoted to a combination of group and individual exercises that were designed to capture the participants' thoughts on Warren as it is now, and how they wish to see its future.

Participation

Since these meetings did not include everyone in the community, it is important to know which demographic groups were best- and least-represented. Optional demographic questionnaires were given to attendees in meetings 2 through 5, and 97 responses were received. The data collected shows that the audience was heavily composed of seniors, homeowners, Caucasians, English-speakers, the highly-educated, and those with a higher than median income. This is a common outcome for such meetings, and members of the planning profession have noted anecdotally that it feels like it is increasing – that there is less participation overall, and that the participation which does occur comes from a homogenized section of the population which generally has the characteristics described.

In one sense, this is the straightforward result of the maxim "The world is run by those who show up." It's also the case that visioning workshops are designed to emphasize qualitative

MAP 2: COMMUNITY ENGAGEMENT WORKSHOP SERIES

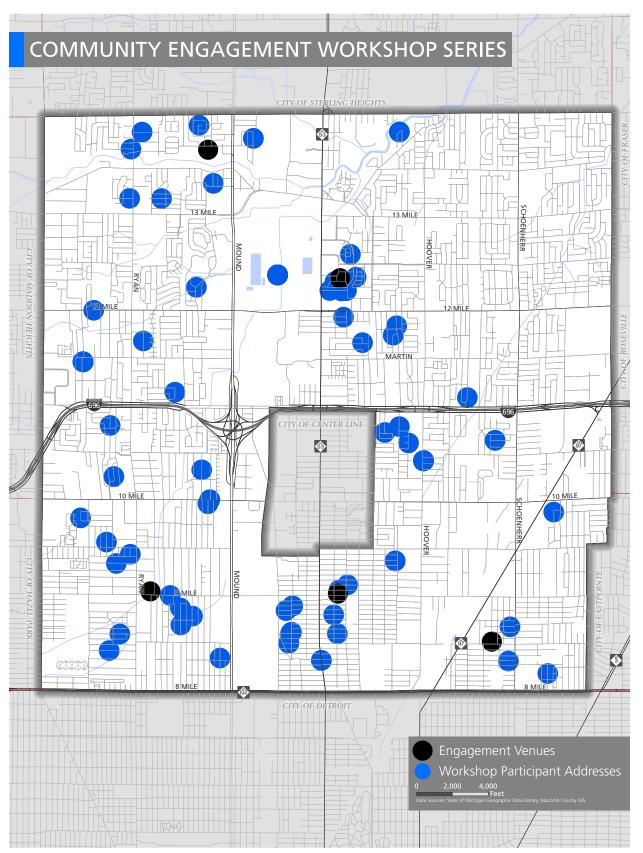


TABLE 1: TOWN HALL PARTICIPANT VS. CITY OF WARREN COMPARISON

	TOWN HALL PARTICIPANTS	CITY OF WARREN
Average age	60.0	39.2
Tenure	~4% renter	30%
Race/Ethnicity	~7% people of color	28%
Avg # disability per household	0.23 (9% of average household)	17% of persons (not direct comparison)
Primary language	100% English	7% speak English "less than very well"
Educational attainment	66% bachelor's degree +	17% bachelor's degree +
Average Annual income	\$70,530	\$44,014



Plickers exercise at the May 31st Town Hall Meeting.

input rather than quantitative data—that is, they are a vehicle better suited to capturing descriptions and characteristics than to recording hard numbers. However, it is important to recognize the limits of representation, and to acknowledge that these sessions are one part of a multi-pronged community engagement strategy.

Individual Exercises

The individual exercises were a series of questions aimed at grading the City's performance in a report-card style using the "Plickers" voting system. Plickers is an online program designed to collect and record data in real time. Participants use cards with QR-code-like images on them, each of which is capable of giving four distinct responses (marked A, B, C, or D) depending on the angle at which it is held. The facilitators projected six statements onto the screen and asked each participant to use the cards to assign a letter grade assessing how well the statement described conditions in the City of Warren. The cards were then scanned by a mobile app and the responses recorded in the program.

This exercise was geared toward rating the City on its resiliency, in the broad sense of its ability to respond, adapt, and act to any type of stressor or shock. The statements used were from the International Federation of the Red Cross and Red Crescent Societies' (Red Cross) 2011 report titled, "Characteristics of a Safe and Resilient Community," identifying an allencompassing set of human-centric characteristics that help mitigate and respond to the negative effects of change. In a modern world that changes quickly on several dimensions demographically, technologically, environmentally, culturally—understanding the residents' perception on how well the City can adapt to change is of increasing importance.

Table 2 shows the statements that were posed to the audience and a compilation of the grades given. The grades were converted into a grade point average (GPA) and then to a final grade. Warren's report card is satisfactory—not excellent, not failing. The final grades, if expressed through words, would say that residents are not confident that City has the resources or capacity to plan proactively to avoid or mitigate new stressors, but would respond after the fact fairly well. The slightly lower grade for "managing natural assets" is touched on it greater detail in the group exercises; the prevailing thought was that Warren does not "recognize their value," as evidenced by the relatively few green spaces for a City of its size. Similarly, residents do not see the City as particularly well connected to other entities, such as other local governments, regional authorities, the state, nonprofits, or foundations, for collaboration or support in times of need. Given Warren's position in the middle of a metropolis of national scale, this is a reflection of the citizens' perception of organizational cooperation.

TABLE 2: WARREN'S RESILIENCY RATINGS

RESILIENCY STATEMENTS	RESPONSE DISTRIBUTION	FINAL GRADE
Warren is knowledgeable and healthy. It has the ability to assess, manage and monitor its risks. It can learn new skills and build on past experiences	50% 0% A B C D	C+
Warren is organized. It has the capacity to identify problems, establish priorities and act.	50% 0% A B C D	C+
Warren is connected. It has relationships with external actors who provide a wider supportive environment, and supply goods and services when needed.	50% 0% A B C D	С
Warren has infrastructure and services. It has strong housing, transport, power, water and sanitation systems. It has the ability to maintain, repair and renovate them.	50% 0% A B C D	C+
Warren has economic opportunities. It has a diverse range of employment opportunities, income and financial services. It is flexible, resourceful and has the capacity to accept uncertainty and respond (proactively) to change	50% O% A B C D	C+
Warren can manage its natural assets. It recognizes their value and has the ability to protect, enhance and maintain them.	50% 0% A B C D	С

FIGURE 1: ONE WORD OR PHRASE THAT DESCRIBES WARREN TODAY



Group Exercises

For most of the evening, participants worked together in small groups to answer larger questions about the direction they want the City to pursue, their priorities amongst all their ideas, and strategies for how to accomplish them.

One Word: Current

"What one word (or phrase) best describes Warren?" was posed as a neutral question, in a setting where participants were asked to be candid. Few of the 149 unique responses could be considered positive. The affirmative descriptors of Warren were largely based on its people and how they relate to create "community" and how a big city has a "small town feel." Others remarked on their "friendly and helpful neighbors," and that the City is "familyoriented" and "open-minded." Aside from its people, a handful of Warrenites enjoy its "great library program" and "good parks," and its generally accessible location within the region.

After brainstorming responses, each participant was asked to select the two they felt were the most accurate from their table's list. (This method was repeated throughout the program as a way to identify and prioritize the most relevant responses.) When the votes were tallied across all five meetings, "family-oriented" and "strong library program" were the only two positive words voted into the top ten.

TABLE 3: ONE WORD THAT CURRENTLY DESCRIBES WARREN

ONE WORD	NUMBER OF TABLES THAT MENTIONED IT	TOTAL VOTES
Outdated	4	15
Divided	4	9
Unattractive	3	8
Seniors	4	8
Industrial	5	8
Affordable	2	8
Family oriented	4	7
Great library program	2	7
Good Police/Fire/EMS	4	6
Poor Roads (tie)	3	6
Car-oriented (tie)	3	6

Warrenites' description of the City in its current form is concerning. The top three most commonly voted on words among all five townhall meetings were "outdated," "divided," and "unattractive." Many of the other adjectives and phrases used speak to the varying aspects associated with the top three choices. "Outdated" can be summed up by the phrase "driving through the 1960s." Because Warren grew so quickly during the middle part of the 20th century, residents have noticed that the City's development patterns firmly track that era. Some of those features are a "lack of walkability" because business and residences were deliberately disconnected; its "industrial" employment base; and that the city is "not progressive" or quick to adopt new ideas. Other references to "outdated" are more general but draw the same conclusion: "behind," "old-fashioned," and that the City is moving "backwards (50s and 60s)." Relatedly, although not expressly tied together, is the notion that an aging population limits the city's ability to advance toward a more modern approach to planning. It is also noteworthy that these descriptions are not coming from the City's younger residents, but from many who have been in the City long enough to see the change in function of these conditions.

The theme of division was repeated across the three Town Hall meetings that took place in south Warren. Feelings of physical separation were expressed through terms such as "geographically divided," and that the separation is felt most strongly by income between north and south Warren. One of the more telling words used to capture this sentiment was "segregated." The spatial analysis conducted for the Master Plan on income, race, and housing tenure status corroborate the participant's statements. The term "unattractive" is vague but generally refers to a city's physical appearance. Words that help clarify what residents could mean more specifically are "pothole heaven," "unkept/abandoned buildings" (although another resident was "impressed with the city's blight management"), "poor landscaping," "loud," and "poorly maintained" among others that add to the impression that the City lacks clean, beautiful, and inviting spaces.



May 31st Town Hall Meeting.

TABLE 4: CATEGORICAL SUMMARY OF ONE WORD THAT CURRENTLY DESCRIBES WARREN

CATEGORICAL SUMMARY OF "ONE WORD TO DESCRIBE WARREN"	NUMBER OF TABLES THAT MENTIONED IT	TOTAL VOTES
People: Caring, friendly, helpful, blue collar, grey, diverse, community, seniors, disconnected, aging population	24	25
The Past: Behind, aging, backwards (50s and 60s), deteriorate, not as safe as before, hasn't changed, not as good as it used to be, gone downhill, low tech, outdated, aging infrastructure, mature, old fashioned, tired, old, unkept	21	44
Physical Descriptions: geographically divided, a city of neighborhoods, houses and factories, plain suburb, suburb of Detroit, sprawling, bedroom community, packed, isolated, blight, good geographic location, not bike friendly, poor landscaping, abandoned buildings, vacant properties, cookie cutter homes, accessible to highways, vast, unclean, east access to Detroit, typical unplanned growth, car oriented, flat, developed, clean, lack of continuity with greenspaces, lack of walkability, residential	44	47
Activities/Recreation: arsenal of democracy museum, no greenspaces, recreational, seasonal activities, good parks,	6	12
Business: shopping, too many gas stations and tattoo parlors, GM, big box retail, Meijer, auto manufacturing, industrial	16	21
"Atmospheric" Descriptions: Negative-lax, changing neighborhoods, stressed out, exclusionary, lack of community, apathetic, segregated, uncoordinated, needs guidance, poorly maintained, changing in South, lack of destination, congestion, boring, loud, nothing to attract Millennials, not progressive, non-experiential, uninviting, disparity divided, complicated, unattractive Positive- family oriented, opportunities, potential, small town feel, home, has promise, diverse, open minded, momentum	50	68
City Services/Government: unkept Mound Rd, lacking senior activities, community center, education/schools, rubbish fire department, cooperate focused government, poor infrastructure, impressed with blight management, excellent public works, declining school population, good mayor, good police/fire/ems, aging infrastructure, congested traffic, poor roads, not properly policed, pothole heaven, higher education	31	34

FIGURE 2: ONE WORD OR PHRASE THAT DESCRIBES WARREN IN THE FUTURE



One Word: Future

With the general feeling from the previous question's findings that the City has declined over time, the expectation is that the answer to how residents "would like to describe Warren" would point to a contrasting future. Before anything else, residents want to live somewhere "safe." A word that was not used to describe the City now, perhaps it is the biggest change they hope to see in the future. Perceptions of safety are rarely directly correlated with specific crime statistics. Instead, factors that contribute to perceived safety include cleanliness, absence of blight, and sufficient buffering from dangerous traffic conditions.

Next, Warrenites want their city to become "bikeable," "walkable," "green," with "better public transportation." Some participants even combined those three words to describe nonmotorized pathways through greenspace. They want to be able to say that the city is unified (bridging the south and north divide), blight-free, and has a downtown with trendy, cultural, and family-friendly amenities.

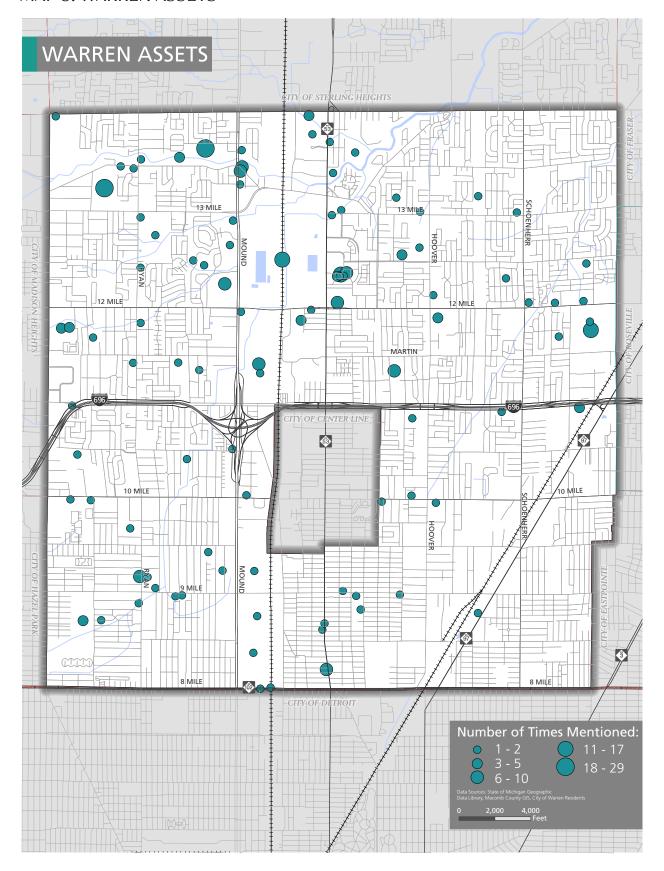
TABLE 5: ONE WORD THAT DESCRIBES WARREN IN THE FUTURE

FUTURE WORD	NUMBER OF TABLES THAT MENTIONED IT	TOTAL VOTES
Safe	13	20
Bikeable-Walkable	9	12
Green	5	9
Better Public Transportation	5	9
Progressive	3	7
Trendy	2	7
Cultural	4	6
Green Space-Bike/Walking Path	2	6
Unified	2	6
Nature-Walk Ways	3	5

TABLE 6: CATEGORICAL SUMMARY OF ONE WORD THAT DESCRIBES WARREN IN THE FUTURE

CATEGORICAL SUMMARY OF "ONE WORD TO DESCRIBE WARREN" IN THE FUTURE	NUMBER OF TABLES THAT MENTIONED IT	TOTAL VOTES
People : diverse, tolerant, compassionate, strong families, embrace diversity, permanent residency, neighborly, strong community participation, family oriented,	12	24
Physical Space Descriptions: underground power, one big city, cleaner factory areas, well maintained, tall multistory, no high rises/subways, beautiful, better property maintenance, build up the city center, clean no blight,	14	27
Activities/Entertainment: small concert hall, more/better special events, city activities, food trucks and parks, night life, activities for all ages, good shopping, stage theatre, tank museum,	11	16
Business: more grocery stores, development, business friendly, retail variety, small and diversified industrial, entrepreneurial, upscale dinning, good investment, economic growth, more family run business, small business,	12	13
Atmospheric Descriptions: uncongested, quaint, nice, kind, home, humanistic focus, fun, equity, entertaining, cool, attractive, harmonious, great potential, fresh, colorful, comfortable, positive, exciting, desirable, upscale, up and coming, relevant, energetic, artsy, unified, modern, prosperous, should and could be better, innovative, inclusive, welcoming, progressive, vibrant, inviting, cultural, trendy, safe	66	97
City Services: good roads, control barking dogs, more police presence, get rid of drug houses, public transportation, monitor fireworks, abundance of senior programs, fire department, smooth roads, better public transportation	17	23
Downtown: Attractive Business Corridor	3	8
Accessibility: Handicap Friendly, Mobility options, accessible,	5	5
Recreation: more recreational opportunities, better parks, more parks, children play areas, green spaces in neighborhoods, beautiful clean parks, updated parks, greenspaces everyplace, nature walkways, walking/biking paths,	12	19
Healthy Living : organic local farming, independent health stores, healthy independent restaurants, green and clean, clean, bikeable-walkable	19	18
Youth: young, more young families, youth focused,	3	7
Leadership: proactive, leading, honest politicians, good leadership, conservative values, low taxes, future focused, an example to other cities,	8	11
Housing: Affordable, housing variety, appreciating value,	4	3
Education: blue ribbon schools, intellectual, good schools, embraces education, educated,	6	7

MAP 3: WARREN ASSETS



Assets

Large paper maps of Warren were provided for each group to spatially identify what they consider to be community assets. Each group from each Town Hall meeting placed sticky dots on the map to locate physical assets, and then they were compiled digitally with the number of times mentioned recorded per asset. A total of 91 assets were listed that were grouped in 14 larger categories to see if there were any obvious land use preferences. The able "Categories of Assets" shows that Warrenites are fond of their restaurants and places of commerce but following closely behind are public spaces such as parks, facilities, and schools.

In the table "Specific Community Assets," the top assets are listed in the left column, and the number of times each asset was mentioned by participants is in the right column. This is not an exhaustive list of community assets but the frequently mentioned assets indicate widespread recognition and value to the residents. The results of this exercise show gratitude for the Community Center and Halmich Park, among other highly regarded public institutions. Residents' attachment to these places is often emotionally based, likely tied to a cheerful memory, and once residents have made a connection to place, a bond forms

TABLE 7: CATEGORIES OF **ASSETS**

ASSET CATEGORIES	NUMBER OF MENTIONS PER CATEGORY		
Restaurants	15		
Commercial	14		
Parks	12		
Public facilities	11		
Schools	10		
Nature	9		
Corridors	4		
Military	3		
Residential	3		
Religious	3		
Industry	2		
Health	2		
Nonprofit	2		
Art	1		

TABLE 8: SPECIFIC **COMMUNITY ASSETS**

SPECIFIC ASSETS MENTIONED	NUMBER OF MENTIONS	
Warren Community Center	23	
Halmich Park	18	
GM Tech Center	16	
Macomb Comm. College	16	
City Center	14	
Warren City Library	10	
Little Door Theatre	9	
Meijer	8	
Dorothy M Busch Library	7	
Tech Plaza	7	
Veterans Memorial Park	7	
Kuhnhenn Brewery	6	
US Army Tank Auto. Command	6	
Andiamo	5	

that makes them more likely to stay. Assets also represent the City's strength that can be leveraged to attract newcomers. Whereas some of the assets listed are for convenience (i.e. Meijer), others leave a lasting positive impression.

Despite the overarching sense of disparity between the north and south ends of Warren, a spatial review of asset distribution does not demonstrate it. Parks, recreation, culture, and even nature are represented on the south side, while the industrial sites are recognized for their economic if not aesthetic value. This compilation of sometimes-overlooked assets offers a chance to connect and emphasize them. The one place that does clearly show a deficit of assets is the southeast corner of the City, roughly around Schoenherr and Groesbeck Roads. Groesbeck's wide right-of-way and the rail line it follows create a formidable physical barrier between this "forgotten triangle" and the rest of the City of Warren.

Barriers

Participants were asked to name the barriers to success in Warren—that is, to answer the question, "What's preventing us from accomplishing all we set out to do?" There are endless ways to answer this question, so attendees were asked to focus their responses on the realms of public policy and the built environment, since these are most relevant to the master planning process. The highest vote-getter across all visioning workshops was, somewhat ironically, "lack of vision." It's hard to imagine an outcome that would more strongly underscore the value of this process. Second to this in terms of votes, residents believe that "politics" are a barrier to Warren's success. This was expressed as a "failure to be proactive," "lack of forward thinking," "lack of collaboration," lack of "creative leadership," "political controversy," and "lack of diversity in City government." These responses should not be construed to refer to any individual or even currently-serving member of Warren's leadership, but rather a reflection of the citizens' long-term perception of how their community functions as an institution. A Master Plan's range is long-term and outlives most politicians' tenure; these comments are most effective when considered in light of the community's overall culture.

A "lack of public transportation" was mentioned more times than any other topic and is tied for the second most votes. As an issue that impacts the convenience with which some travel, a lack of transportation can make it impossible for anyone with mobility constraints to get around. Just beneath that, resident believe "city streets" are a barrier rather than a benefit. This is a stellar example of a mismatch between preferences which were in place when the community was built and those which currently prevail. Since the time of Warren's founding in the mid-20th century, mobility has meant one thing: efficient vehicular throughput. This value is even more strongly on display in the global headquarters of General Motors. However, the population's preferences as well as technological advances are swiftly demanding expanded accommodation, and Warren's streets do not adequately serve pedestrians or bicyclists. This contributes to a lack of safety and a lack of public transportation options. With an aging population, seniors will likely depend more heavily on transit options to get to important appointments or to visit family and friends.



June 28th Town Hall Meeting.

TABLE 9: WARREN'S BARRIERS

BARRIER	NUMBER OF TIMES MENTIONED	TOTAL VOTES
Lack of Vision	1	8
Lack of Public Transportation	7	7
Politics	3	7
North and South Divide	2	5
City Streets	1	5
Poverty/Income Disparity	3	4
Aging Infrastructure	3	4
Blight on Business Properties	3	4
Lack of Greenspaces/Natural Landscaping	2	4
Run-Down Hotels (tie)	1	4
Environmental Land is Disjointed (tie)	1	4
Racial Division (tie)	1	4



Resident sharing group results at the June 28th Town Hall Meeting.

The same barrier that emerged when describing the City in the first question were reiterated as the "north and south divide." Receiving just one less vote, "poverty/income disparity" and "racial division" were also mentioned as barriers that happen to correspond with the geographic divide. In addition, residents worry about "aging infrastructure" and a "lack of greenspaces." Depending on the severity of the infrastructure problems, implementing greenery strategically can add capacity to the City's ability to prevent erosion and reduce flooding. Investment in quality, context-appropriate landscaping features is a reliable method of improving both the private and public realms to improve attractiveness and economic value, both of which are needed on the south end of the City. The strength in identifying barriers is that potential solutions could address more than one barrier at a time.

Visioning: Priorities

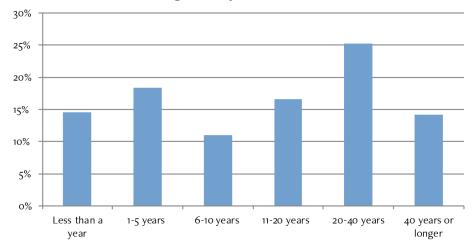
The question, "What does Warren look like ten years in the future?" asked the participants to assume the hypothetical scenario where all of the barriers were removed, and the action plan had been successfully implemented. With that in mind, the residents wrote words or phrases that describe their vision for a future Warren, and then voted on their top two options. The top three priorities from each group were shared with the group at large and recorded on a separate "collective priorities" sheet for everyone to vote on at the end of the night. That way, before casting a final vote, residents could hear from each other and learn from another resident's perspective. Once that exercise was completed, residents voted for their top three collective priorities. The results echo, as they should, themes that arose through the meeting series by level of importance. The priorities were condensed into major themes, but in the "Priorities" column all of the responses can be seen and their aggregated votes tallied in the "Number of Votes" column. The "Preliminary Goals" column shows the direct relationship between the input from residents and goal formation; the preliminary set of goals were constructed to reflect what was heard in the Townhall Meeting series.

The provision of more greenspace tops the chart with 70 votes. Warrenites shared a strong desire to preserve the greenspace that the City has and where possible to add more to support beautification in grey landscapes and to provide more space for recreation (also directly related to "healthy living" priorities). Having a downtown and well-maintained housing were also popular requests. Residents are also looking for better connections in terms of reliable infrastructure, communication with City officials, and city services throughout all of Warren.

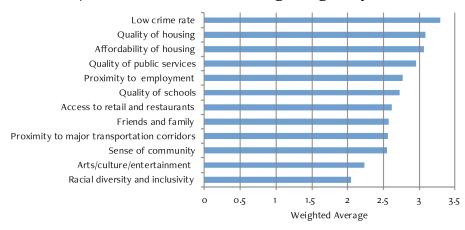
TABLE 10: WARREN TOWN HALL PRIORITIES

PRIORITIES	NUMBER OF VOTES	PRELIMINARY GOALS	
Greenspace: more well maintained and connected parks, areas for athletics and organized group activities, park and Dallas and Ryan, accessible parks, more greenspaces, landscaping and beautification, clean and green, preserve and enhance greenspaces		Preserve and increase open greenspaces that can be used for recreation.	
Downtown: International plaza with restaurants and entertainment, multiuse, vibrant downtown, walkable downtown	58	A multi-use walkable downtown that offers a diverse range of eateries, retail, and entertainment.	
Housing: Well maintained, less rental properties, long term residency, solar panels and wind energy, realistic density, attract new residents, less drug houses, and owner-occupied homes	52	Committed and invested residents	
Entertainment : More entertainment, small business, growth, TACOM museum, theater, vibrant arts, culture, and entertainment, entrepreneurial, growth, tourist destination	48	Small business growth and new diverse business development	
Healthy Living: medical centers, gyms, parks, health stores, more biking and walking options, pedestrian living, nonmotorized options, locally produced products and food, walkable districts	35	Healthy lifestyle options including recreation and nutrition	
Education: Better schools/education, invest in schools, training, apprenticeships, no school of choice, encourage good schools	32	Quality schools that improve the greater Warren Community	
South Warren: Viable, Safe, Clean, and organized South Warren, beautification and nicer	29	A South Warren that is clean, safe, beautiful, and viable	
Infrastructure: Good roads, improve road safety, sustainable infrastructure, better traffic control, remove blight, maintenance of properties	21	Safe and sustainable roads that ease traffic congestion	
Communication: Better communication between city and residents, unified city, forums to interact, equal services, measurable progress	17	Opportunities for consistent communication between the city and residents	
City Services Priorities: less crime, more patrols, a plan for marijuana facilities, mass transit	15	A city that ensures safety and accessibility for all community residents	
Senior Priorities: more senior housing, new senior center, more programs, funding	3	Dedicated services, housing, and programs for senior citizens	

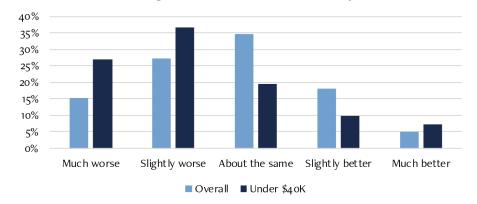
How long have you lived in Warren?



When you decided to live in Warren, how important were the following things to you?



In your opinion, how have things changed in Warren over the past 5 years (or since you've been living here, if that's less than 5 years)?



COMMUNITY SURVEY

In addition to the five visioning sessions held throughout the summer of 2018, an online and physical survey were administered between June 2018 and January 2019. Surveys are an excellent tool for receiving feedback from a broad swath of the community and offer an opportunity for candid commentary. Just over 1400 surveys were collected, which is an excellent response. Below is a summary of the results.

Basic Demographics of Respondents

As is true in many communities, the most invested in the planning process are those that have lived in the city the longest. The highest proportion of respondents have lived in Warren for over 20 years (40%). The newcomers who have lived in the city for five years or less are expressing their interest in the city's future, representing the second highest proportion of responses. The self-reported demographics of the survey respondents show overrepresentation of several types of groups: homeowners (90% of respondents vs. 70% of residents), Caucasians (87% of respondents vs. 72% of residents), highly educated (53% with a bachelor's degree or higher vs. 18% of residents), and wealthier (median income response of \$80,000 or more vs. median household income of \$44,000). Even with an excellent response rate, it is important to know whose voices are being heard and whose are missing. Another limitation to the data is that the survey was only offered in English. Warren is a linguistically diverse city, but without the use of translators, only English-speakers' opinions are captured. These findings lack the point of view from 7% of the population that speak English "less than very well."

When you decided to live in Warren, how important were the following things to you?

A low crime rate was most important to survey-takers when deciding to move to Warren: almost two-thirds of respondents selected this option as "very important" in their decisionmaking. The next most selected options were related to housing: affordability of housing and quality of housing received 49% and 47% of "very important" votes, respectively. Receiving slightly fewer votes, "quality of schools" (46%) and "quality of public services" (44%) were the next most commonly selected factors. In short, Warren residents felt they could buy decent housing within their price range in a safe neighborhood and send their children through the public school system. The City was also alluring because of its proximity to employment.

In your opinion, how have things changed in Warren over the past 5 years (or since you've been living here, if that's less than 5 years)?

Warrenites have varied responses to this question. Most commonly (35%), they feel that the City is "about the same," but the "slightly worse" (27%) and "much worse" (15%) responses did edge out "slightly better" (18%) and "much better" (5%). Although overall responses

are fairly distributed, the underrepresented group of respondents that annually earn under \$40,000 reported that Warren has become "much worse" (27%) or "slightly worse" (37%) over the past five years. The divergence between the overall responses and the responses of the underrepresented group indicate that Warren's low-income residents perceive change in the city less favorably that the typical, more wealthy, survey respondent. When asked what more specifically what has improved, many responses demonstrated the effectiveness of City management and services: they remarked on the city being cleaner, blight reduction, road repairs, garbage and recycling pick up service, and that more businesses are moving in. Those who perceived the city as getting worse commented on crime, cleanliness, traffic, road quality, and the maintenance and appearance of rental properties. To roughly state the level on interest on both sides, there were 275 responses about what has improved, and 794 explaining what has gotten worse in the last five years.

Top Three Areas to Improve

Coupling the importance of a low crime rate to survey respondents with a perception that this valued characteristic may be changing, it is unsurprising that over half of Warrenites want to see "less crime" (56%). Next, with quite a wide margin in number of votes cast, they'd like to see the school system improve (28%). These are communitywide issues which do have a land use dimension but which are mostly conducted outside the purview of physical planning. The next several items, however, are all clearly planning-related: better access to nature, improved business mix that includes both stores and arts / culture / entertainment, truer options for nonmotorized and non-car transportation, and better-quality housing.

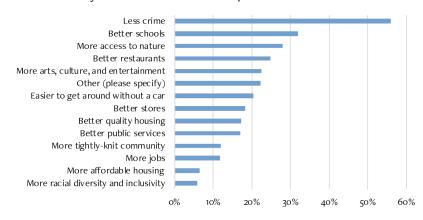
Pride and Community

Residents were asked about their level of agreement with two statements in order to gauge a level of commitment and dedication to the betterment of Warren: "I am proud to live in Warren" and "I feel like I have found a community within Warren." Notwithstanding the improvements they wish to see, the majority of survey-takers (53%) were proud to live in Warren. In such a large city, it is also important for residents to feel like they have found a smaller group of trustworthy community members with shared interests such as a neighborhood association, an exercise group, or social organization to connect with. A smaller but still sizable proportion of respondents (40%) agreed that they had found a community, though the most commonly selected response to that question was "I'm not sure" (36%).

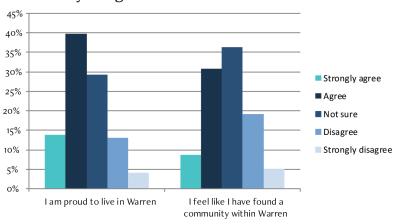
One Word

Just as during the visioning sessions, survey participants were asked to describe Warren now, using one word or a short phrase. They were then asked for a word for short phrase they would like to describe the city in the future. When depicting the City's current state, many of the responses were neutral in tone, balanced by positive and negative descriptions. The positive adjectives used were "friendly," "community," "diverse," and that it is well

Please choose the top three things from this list that you would like to see improved in Warren.



Do you agree with these statements?



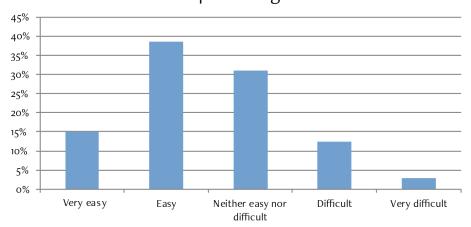
One Word that Describes Warren Now



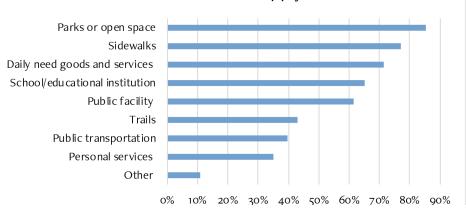
One Word that Describes Warren's Future



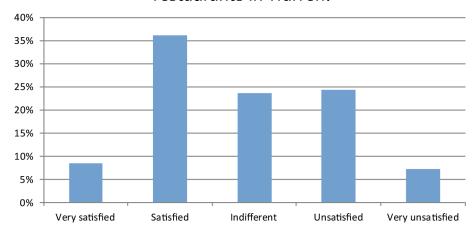
How easy was it to find a home in your price range?



What elements do you think are necessary to describe a "complete neighborhood?" Please check all that apply.



How satisfied are you with the variety of restaurants in Warren?



located in the region. Similar to the visioning sessions, the positive aspects of Warren are people-centered as opposed to city-centered. The phrases used referred to Warren as a city that is progressing, a city that is trying to move forward. On the other hand, some Warrenites think the City is "divided," "declining," and "changing unfavorably." References to "deteriorating" are physical and exemplified through phrases that describe blighted and abandoned buildings and infrastructure. For the future, they want Warren to be a "modern" and "innovative" destination that is welcoming to newcomers. Mentions of modernity are frequently repeated to counter claims that the city is living in the past. They imagine a community that is inclusive, walkable, clean, safe, and beautiful.

Housing & Neighborhoods

Residents were asked what type of house they live in. Over 85% of survey-takers live in single-family detached homes. Next in popularity were small condos or apartments in a building with five to 20 units. While the category of small condos or apartments only accounts for 3.5% of overall responses, it represents 24% of the home types for respondents that rented their homes. When asked what types of home Warrenites would LIKE to live in, the responses for each category went up, with the exception of detached homes and mobile homes. The strongest showing was lofts above a commercial use: 4.75% of respondents would like to live there, but only 0.34% already do. Desire for attached single-family housing, such as condos (4.15%), is double what currently exists (2.2%), and high rises are desired even more strongly (4.15% desired vs. 1.36% existing). Senior housing was also identified as a need (2.85% desired vs. 0.25% existing). These increases look small on paper, but in the context of Warren's 53,000 households, it is a significant shift: the changes listed above total 12%, or 6,360 dwelling units.

Most of the survey respondents had not purchased a home in the last five years (65%), but for those who were looking, almost two-thirds were looking for homes within the price range \$100,000-\$200,000 and for the few who responded that wanted to rent, most of them were looking for a place for \$500-\$1,000 per month (78%). About 85% of respondents said that they were able to find a home within their budget with relative ease.

Housing is the building block of a neighborhood and usually its largest component. A "complete neighborhood" is a land-use concept that includes neighborhood services in proximity to residences so that people can access their daily needs efficiently. Much of America's current housing stock has been built in the conventional subdivision style which fully segregates housing from commercial and industrial uses, and as Americans have grown accustomed to this arrangement, it has been difficult to introduce commercial uses into neighborhoods as residents fear more traffic near their homes. However, 71% of survey participants believe that stores that provide daily products and services should be integrated into their neighborhoods, after parks and open space (85%) and sidewalks (77%)—more than even schools (65%), with their long-established role in neighborhoods. This speaks to a desire to have a multi-functional neighborhood rather than a "housing only" subdivision.

Entertainment

The following questions were designed to see more specifically what Warrenites feel is missing in terms of entertainment. When asked about their levels of satisfaction regarding the variety of restaurants within the city, about 45% were either "satisfied" or "very satisfied" compared to 32% who were either "unsatisfied" or "very unsatisfied." This finding only speaks to the variety of restaurants and not their location; it would probably be even more favorable if they were clustered together in an identifiable downtown rather than scattered throughout the city. Even more specifically when asked which types of restaurants they would like to see, over half wish to see "family-friendly" restaurants (51%), followed by breweries (49%), farm-to-table (47%), and fine dining (46%). Additionally, minority residents indicated a strong desire for more ethnic restaurants in Warren (52%). Other popular choices included cafes and bars/restaurants. Similar to restaurant variety, about 43% are satisfied with the variety of shopping options in Warren compared to 25% who are unsatisfied. The top favored shopping options to come to the city were "clothing and accessories" (60%), "specialty shops," (59%) "food and beverage" (53%). The "other" section added some qualifying statements to the selections made in that there is a desire for independent stores in combination with chain stores, and that the city cannot rely too heavily on one or the other.

Another question on this topic was presented in picture form. One photo was of a "traditional" downtown, with multistory buildings, sidewalks, and trees, while the other was of the "conventional" or suburban style with single-story strip commercial development and parking immediately in front of it. Overwhelmingly, over 87% of respondents prefer the traditional configuration; this finding is aligned with what was heard at the visioning sessions, and something the city is in the process of developing. The next question addresses the residents' preferred proximity to this type of development. Surprisingly, a vast majority of participants prefer close proximity to traditional style developments: 85% selected "in the same building," 87% selected "next door," and 79% selected within "biking distance" (between .5 and 2 miles away). Over half still prefer "commercial development to be completely separated from [my] home." This finding adds credibility to permitting and building mixed-use developments in Warren.

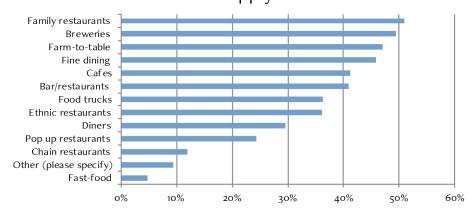


Traditional downtown

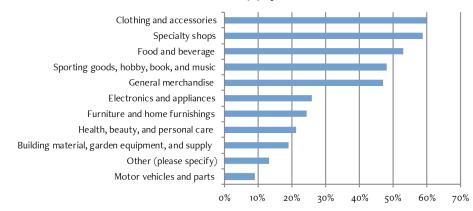


Strip mall

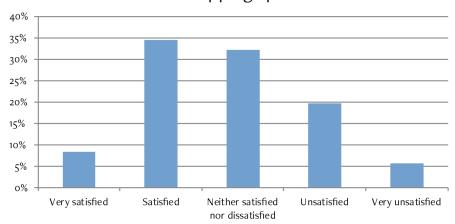
What type of restaurants would you like to see in Warren? Please check all that apply.



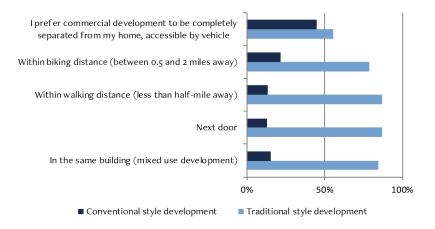
What type of shopping opportunities would you like to see in Warren? Please check all that apply.



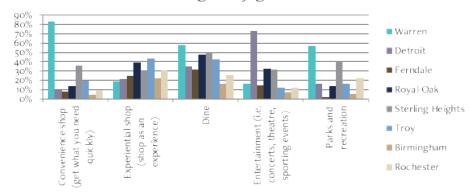
How satisfied are you with the VARIETY of shopping options?



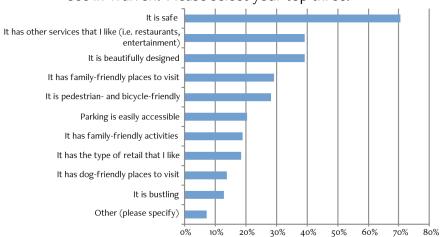
What is the CLOSEST distance to your home you would like to see commercial development such as stores, restaurants, and service providers?



Where do you go for shopping, dining, and entertainment? Please check all that you regularly go to.



Which of the following do you most wish to see in Warren? Please select your top three.



The survey also asked Warrenites which cities they go for shopping, dining, and entertainment. When it comes to convenience shopping, and parks and recreation, Warren residents stay in the city more often than leave. For entertainment that includes concerts, theatre, and sporting events, many go to Detroit (73%). While many dine in Warren, the results are split among Royal Oak, Sterling Heights, and Troy. The results make sense; Warren was built for convenience, and that is what it is used for. For a nice experience, residents must leave for cities that have focused on creating a memorable setting. Common places listed in the "other" section were Roseville, Clinton Township, Shelby Township, St. Clair Shores, and Madison Heights.

In this section, survey-takers were also asked what their top three wishes were from a list of characteristics that are typical of a downtown style development. First and foremost, residents want it to be safe (71%). In planning, that can refer to several features that make a space functional and that protect its users from the elements and from each other (i.e. vehicles and pedestrians). Given the prominence of safety and crime in the survey results, it is taken that the residents mean crime-free. The second most elected options were "it has services that I like (i.e. restaurants)" (39%) and in third place was that it is "beautifully designed" (39%). Note, that these features were considered more important than parking accessibility, and retail options, which historically have been highly regarded ingredients to a downtown experience.

Environment

The results were encouraging as they reflect support for many pressing environmental issues. When combining the issues that received "very important" and "important," over 70% of residents want "better access to nature," "more trees," "more green infrastructure for storm water management." These three requests are highly related as trees are sources of green infrastructure, could create more natural places if clustered, and then provide access. On the flip side, residents did not find "less pavement" as important—it is the only item that less than a majority deemed "important" or "very important" at 38%—although increasing green infrastructure, trees, and urban agriculture will almost always means taking away some pavement.

Another request was that the city "encourage renewable energy" (71%), although the choices for residential and commercial solar installations received fewer votes, 56% and 42%, respectively. The volume of these votes suggest that a solar and wind ordinance are reasonable considerations for a zoning update. Similarly, urban agriculture was met with strong approval. Over 60% believe that having locally grown food is an environmental matter that the City can tackle. Respondents were also asked where they would support the installation of urban agriculture such as green houses, orchards, and gardens. Their replies focused primarily on commercial, residential, and industrial vacant lots (after soil testing). Commercial and industrial rooftops were next in popularity. Some even went so far as to request that homeowners build gardens on their private property.

Parks and Recreation

The survey question aimed at parks and recreation asked park users to rate a list of characteristics from "excellent" to "poor." None of the characteristics received a high number of votes at either extreme. The majority of the rankings fell into "good" or "fair." However, when adding together the top scores of good and excellent, the most frequently chosen characteristics were parking, number and size of parks, and accessibility. The lowest ranking characteristics by votes were "variety of public facilities," "quality of public facilities," and "trail connectivity." The bottom three attributes of a park represent good places to place city resources and energy with the goal of pushing them into the "good" category.

Transportation

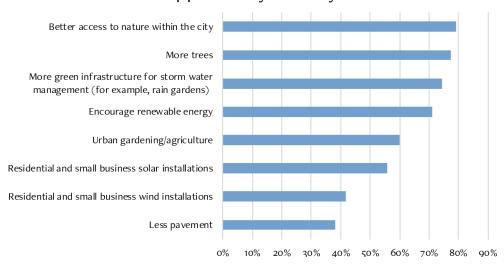
In a car-dominated region, it is important to understand the extent to which residents rely on a personal vehicle for commuting. For families with two cars, a flexible work schedule, or sufficient money to repair it promptly, this question may seem unnecessary. For some, a car is in an inordinate expense and their only means to decent employment that helps them pay for the vehicle. The responses to the statement "If my vehicle broke down, I could easily find another way to get to work" were split evenly on both sides: about 41% agreed to some degree and 40% disagreed to some degree. 35% agreed with the statement, "If my vehicle broke down, I would not be able to get to work," which means that up to one-third of survey takers could lose pay if they were to miss a shift. Still, the preference is to drive alone in a personal vehicle to work (88%), but when given different options for getting to work, almost half said carpool (49%), and another 47% said bus. For low-income residents the preference is still to drive a personal car to work (74%), but a higher percentage, compared to overall, takes other modes of transportation to work.

The next statement, and the way the responses skew confirm that Warren was not built to accommodate nonmotorized users. When asked to rate how safe pedestrians and bicyclists feel in Warren, 49% report not feeling safe, more than double those who feel safe (23%). This sentiment is also reflected in the findings that the vast majority of residents prefer to walk or ride a bicycle as a form of recreation as opposed to a means to run errands or commute. In a world where cities are moving towards multi-modal transit, Warren has a lot of room for improvement.

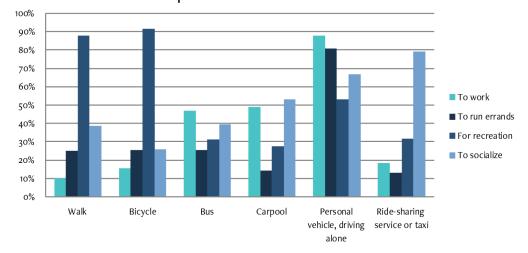
SOURCES

- 1 Pew Research Center, 2017. Public Trust in Government 1958-2017. http://www.people-press.org/2017/05/03/public-trust-in-government-1958-2017/
- 2 Gallup, 2016. Americans Still More Trusting in Local over State Government. http://news.gallup.com/poll/195656/americans-trusting-local-state-government.aspx

Which of the following environmental issues would you like to see supported by the City of Warren?



How do you prefer to get to the following places and activities?



COMMUNITY ENGAGEMENT | 29





Master Plans formerly focused primarily on how to develop land, employing minimal demographic research outside of population projections. Learning from planners' history of prioritizing development over people, plans now heavily feature a review of how different demographic groups experience the city, how they may have differing needs, and how they have changed over time, as a basis for guiding development. The intent is to match the two so that development is rooted in enhancing residents' quality of life. This review also finds intrinsic value in understanding the City's population in order to build stronger networks and social resiliency in the community. In addition to examining the population of the City of Warren, the analysis benchmarks the data with the neighboring cities of Center Line, Eastpointe, Fraser, Roseville, Sterling Heights, Hazel Park, Madison Heights, and Detroit as well as with Macomb County, the State of Michigan, and the United States.

The following data sources were used in this review, in this preferred order:

- » 2010 US Census. This is the gold standard for demographic data. It measures 100% of the population and offers comparable data points at regular intervals throughout most of the United States' developed history. However, available data is limited to population and housing information, and the ten-year interval between data points means it is rarely "fresh."
- » American Community Survey. The ACS program replaced the "long form" Census questions beginning in 2000, collecting the same types of detailed information about social, economic, and housing conditions on a rolling basis instead of once per decade. Statistical validity of the ACS depends on sampling. In larger communities (those with populations of 65,000 or more), it is possible to gain a valid sample within twelve months, which the ACS calls a "one-year estimate." For smaller communities, a longer timeframe of 60 months is required to gather a statistically significant sample. This system exposes the statistical tradeoff between the reliability gained by increasing sample size and the currency that is sacrificed in the time it takes to do so. The Census notes that even in communities greater than 65,000 people, the one-year sample is "best used when currency is more important than precision." For information not available from the 2010 Census, the dataset used for this project is the 2012-2016 American Community Survey.
- » ESRI Business Analyst. This proprietary software presents privately-generated market research data. It is used for projections and for business information not collected by the Census of ACS. In addition, it estimates Census and ACS data for geographic configurations other than Census-defined tracts, blocks, and places.

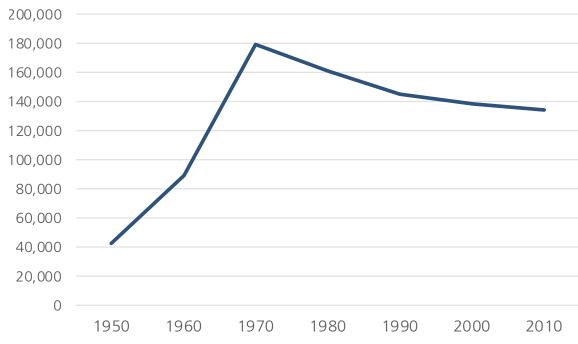
POPULATION

Warren's population peaked in 1970 after two decades of tremendous growth. The decennial census shows that in 1960, the population had doubled over the last decade, and then doubled again by 1970! Such extraordinary growth was followed by 40 years of steady decline. Warren was one of the most rapidly declining cities in Michigan for two consecutive decades, losing about 10% of its residents per decade. Only recently has population decline tapered off, and in 2016 there was an estimated recorded growth of 0.8% compared to the base year 2010. It is important, however, to consider that there is a +/- 82 people margin of error for the 2016 ACS estimates, so the true population growth could be slightly higher or smaller.

HOUSEHOLDS

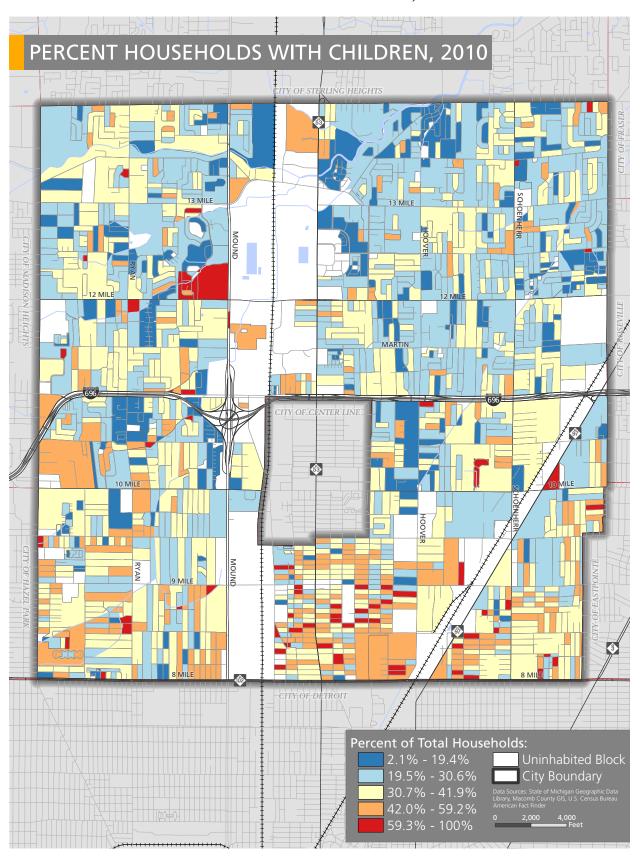
In contrast to its fluctuating population, Warren has seen relatively little change in terms of household composition. Warren continues to be a city primarily composed of families (64%) where just under one-third have children under 18 years of age in the household. Family households with children under 18 years of age make up a higher proportion than any of the other communities except Eastpointe (32%) and almost identical to the national rate (29%). This is good news for the school systems now, and if these future citizens can be kept within the City, it can help buffer Warren against the sharply rising median age in the state. The other third of households (35.6%) are called "nonfamily," defined as co-habitation with those other than relatives. While this figure has stagnated since 2010, it represents a large cultural shift since the 1966 Master Plan was completed. As younger generations wait longer to form families, those gap years are spent living with roommates or with unmarried partners. Warren falls in middle of the pack on this front, where Hazel Park represents the higher end of nonfamily households at 48% and Sterling Heights, the bottom at 31%. The other noticeable change was an increase in families with a "female householder, no husband present." Rising from 16% in 2010 to 18% in 2016, this trend is worth following because single mothers are more than three times as likely to live in poverty as married-couple families.

FIGURE 3: WARREN POPULATION



Source: U.S. Decennial Census 1950-2010, Population and Housing Unit Estimates.

MAP 4: PERCENT HOUSEHOLDS WITH CHILDREN, 2010



MAP 5: MINORITY POPULATION

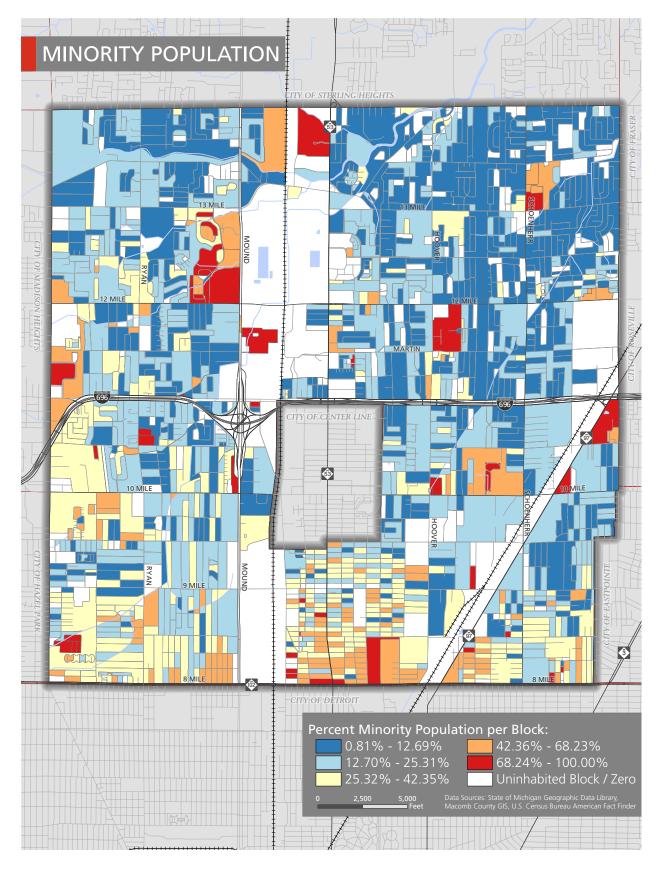
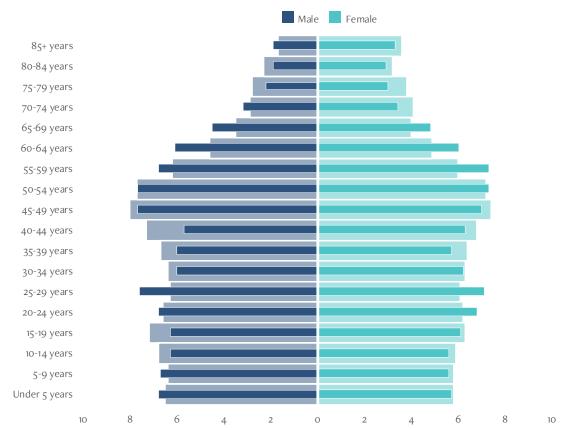


FIGURE 4: WARREN POPULATION PYRAMID*



Sources: 2010 Decennial Census, Table QT-P1, ACS 5-year Estimates 2013-2017, Table S0101

TABLE 11: DEMOGRAPHIC DESCRIPTIONS

CATEGORY	DEMOGRAPHIC DESCRIPTIONS		
Race	The U.S. Census counts the following races: White, Black or African-American, American Indian and Alaska Native, Asian, Native Hawaiian and other Pacific, Some Other Race, Two or More Races		
Ethnicity	Hispanic or Latino is considered an ethnicity, not a race. If you select the Hispanic or Latino box, you then select which race you identify with (from the list above).		
Foreign-born	Place of birth outside if the U.S. You may be a U.S. citizen or a naturalized resident with a different country of origin. Your country of origin helps determine which racial category you fall into (from list above).		
Language	Language spoken at home. This could be in addition to English but is the primary language of communication. Language can be an important indicator of race or ethnicities that are lost in the "other" categories or that are not distinctly counted, like residents of Middle Eastern descent.		

Source: U.S. Census

^{*}This population pyramid show population change between 2010 and 2017. The light-colored, large bars represent 2010 population counts and darker, narrow bars respresent 2017 population estimates.

FERTILITY & AGE

Uncharacteristic of many cities, Warren's median age has declined ever so slightly over time. Between 2010 and 2016, the median age dropped by 0.2 years from 39.4 to 39.2 years. Currently the youth outnumber the City's eldest residents, but this may not be the case for long. The younger end of the Baby Boomers and some of the GenX generation, spanning ages 45 to 59, is bigger still and outweighs the school-aged cohort. It has not registered yet, but Warren in the next decade will likely become an aging community contingent upon fertility rates and migration patterns. At 49 births per 1,000 women ages 15-50, Warren's fertility rate tracks with the County, State, and national rates (49, 52, and 52 respectively) and has risen since 2009. Fertility varies considerably among the communities surveyed, ranging from 87 per 1,000 women in Madison Heights to 32 per 1,000 women in Eastpointe and Hazel Park. The highest birth rate in Warren is among women aged 20-34 (96 births per 1,000 women); it is good news that there were only 6 births per 1,000 women aged 15-19.

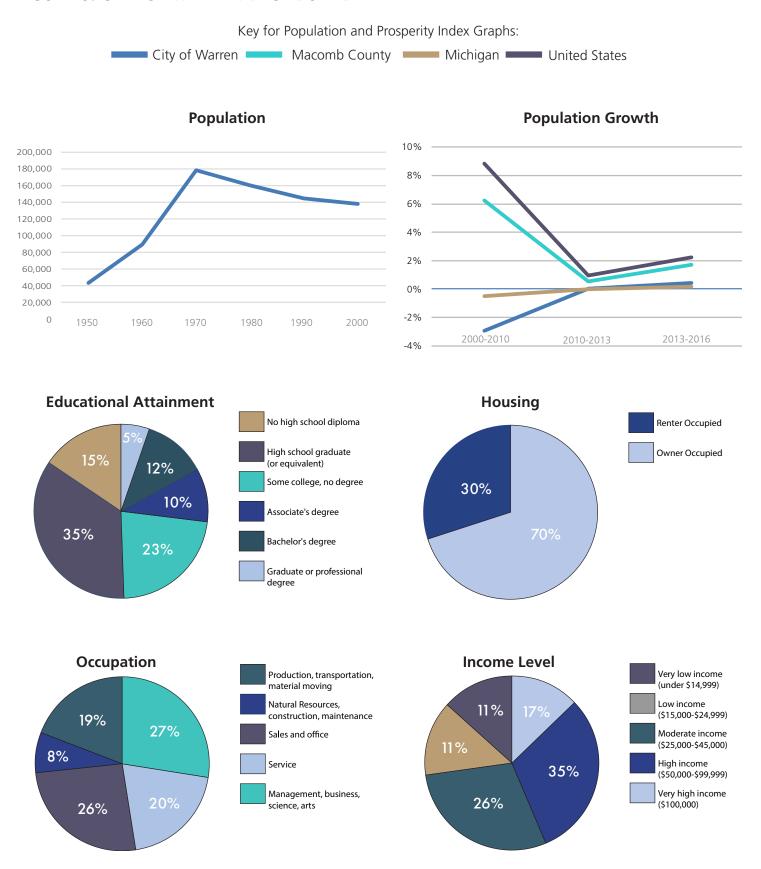
RACE & FOREIGN BORN & LANGUAGE

The U.S. Census is the most reliable source for systematically collecting data on race, language, and foreign-born persons, but the data suffers from some limitations. Categorization helps to make sense of complicated matters such as race, but information is inevitably lost when people are forced into boxes. For example, the Census counts people of Middle Eastern and Northern African (MENA) descent as white, a controversial designation that many feel does not match their experience. MENA identifiers often share the experience of "race-based" discrimination similarly to other minority groups, but this cannot be determined if they are not given their own category. Federal funding is also often based on U.S. census data that may underrepresent the number of minorities present if MENA groups are not calculated, meaning they could forgo additional resources due to miscategorization.

Secondly, the data is self-reported. For example, people may choose to select "other" on the Census form. Selecting the "other" box has grown more frequent over time as a catch all for those wish not to share their race or do not feel that they fit into one of the categories provided. While it's the best data available, it is still leaky as people fall through broad categorizations. Knowing that metro Detroit has a large Middle Eastern population that goes uncounted, getting a sense of their presence must be sought out in other ways. For example, looking up how many people speak Arabic at home provides a closer approximation for how many Middle Eastern residents live in Warren.

The United States is more racially diverse than ever. As hubs for immigration and innovation, cities usually reflect this trajectory towards dense multicultural centers. Warren is on this path, but moving slowly. At 79.1% of the population identifying as "white," Warren is a touch less diverse than the state (78.8%) and the U.S (73%). Most notably between 2010 and 2016, the African-American population grew from 13.5% to 17.4% and similarly the Asian population grew from 4.6% to 7.0%. The Hispanic population has remained the same at

FIGURE 5: CITY OF WARREN DASHBOARD



45.0% 40.0% 35.0% 30.0% 25.0% 20.0% 15.0% 10.0% 5.0% 0.0% Bachelor's degree or Less than high High school diploma Some college, school or equivalent associate's degree higher

FIGURE 6: WARREN POVERTY RATE BY EDUCATIONAL ATTAINMENT

Source: ACS 5-Year Estimates 2012-2016

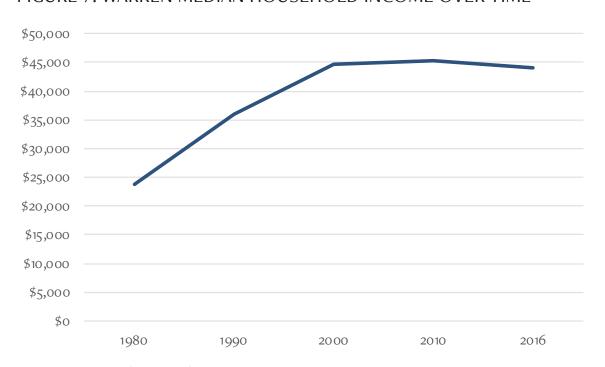


FIGURE 7: WARREN MEDIAN HOUSEHOLD INCOME OVER TIME

Source: U.S. Decennial census and ACS 5-Year Estimates, 2012-2016 & 2005-2010

2.1%. There are a few pockets where the minority population is clustered. Southern Warren, directly on the border of Detroit, is the largest area of minority population. Other areas host concentrated pockets where people of color live, including blocks in the northeast quadrant of the City; along the west border with Madison Heights; in a recently constructed housing development on Mound Road; and adjacent and west of M-53 in the northern part of City. The northeast side of the City is the least diverse.

Due to the region's major automotive presence worldwide, Warren is a recipient of international visitors and foreign-born residents. Twelve percent of its residents are born abroad with the majority of that population coming from Asia. Only Madison Heights and Sterling Heights surpass Warren for foreign-born residents (18% and 26%, respectively). Because the City is made up of people from around the world, 16% of the residents speak a language other than English at home. Corresponding to their diverse backgrounds, again Madison Heights (19%) and Sterling Heights (33%) have a higher proportion of bi- or multi-lingual residents. Lower than the national rate of 21%, it is considerably higher than Michigan's overall rate of 9%. Spanish is the least common language, spoken in less than 1% of homes, whereas 8.1% speak "other Indo-European languages," and 4.4% speak a language that is only identified as "other" by the Census. The "other" category would include Arabic. An indication of which "other" languages are spoken may be found in the data on ancestry of the population. As is common in Michigan, the largest portions of the population identify as German (17%) or Polish (16%), followed by Irish (9.1%) and Italian (8.5%). Arab ancestry is the eighth most common, representing 2.8% of the population. While this seems like a small number, it is a higher rate than in the State (1.8%) or the nation (0.6%), and is embedded in a County where 3.2% have Arab ancestry. This elevated rate holds true throughout the study area (range: 1.2%-7.9%) cementing Metro Detroit's history as one of the largest Middle Eastern settlements in the U.S.¹

EDUCATIONAL ATTAINMENT & INDUSTRY & INCOME

The percent of high school graduates is not far behind the state; just under 85% of the population aged 25 and older has a high school diploma compared to the state at 89.9%. These figures are on the low side, especially for high school attainment where only Hazel Park, Madison Heights, and Detroit have lower rates. Warren residents had previously exceeded the state in levels of educational attainment. The 2012-2016 ACS estimates that compare Warren and the state on educational attainment are comparable, but this was not always the case. Dating back to 1980, 83.8% of Warren residents had achieved a high school diploma or higher, compared to 68% of all Michiganders. During the 1990s, Warren started to trail the state; in 1990, 71.7% held a high school diploma or higher compared to 76.8% statewide.² The percentage of college-degree holders is lagging in Warren. Just over 17% have a bachelor's degree compared to 27.4% in Michigan, and 30.3% in the U.S. When compared to cities within the region, Warren lines up closely by percentage of degreed individuals.

MAP 6: MEDIAN HOUSEHOLD INCOME

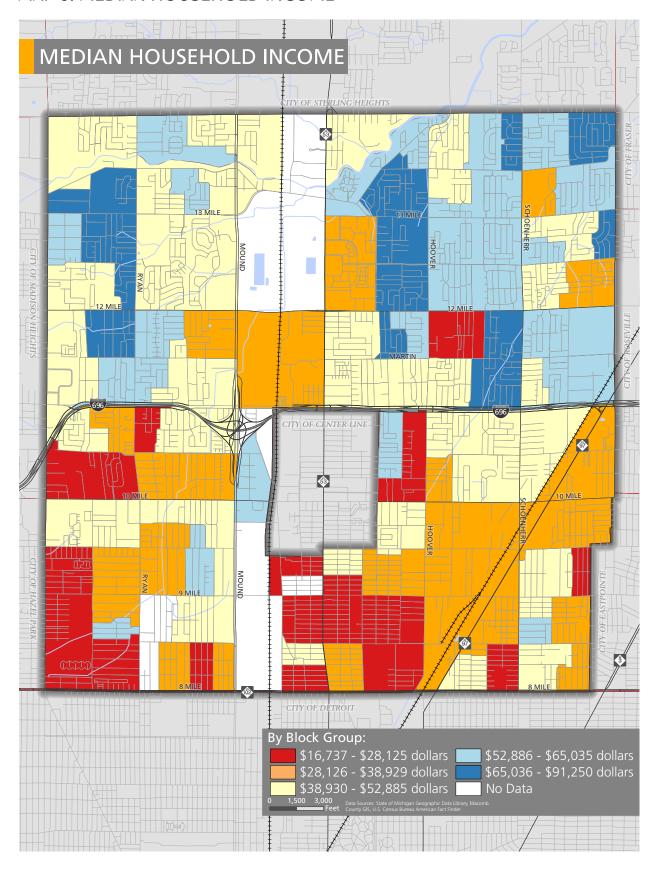
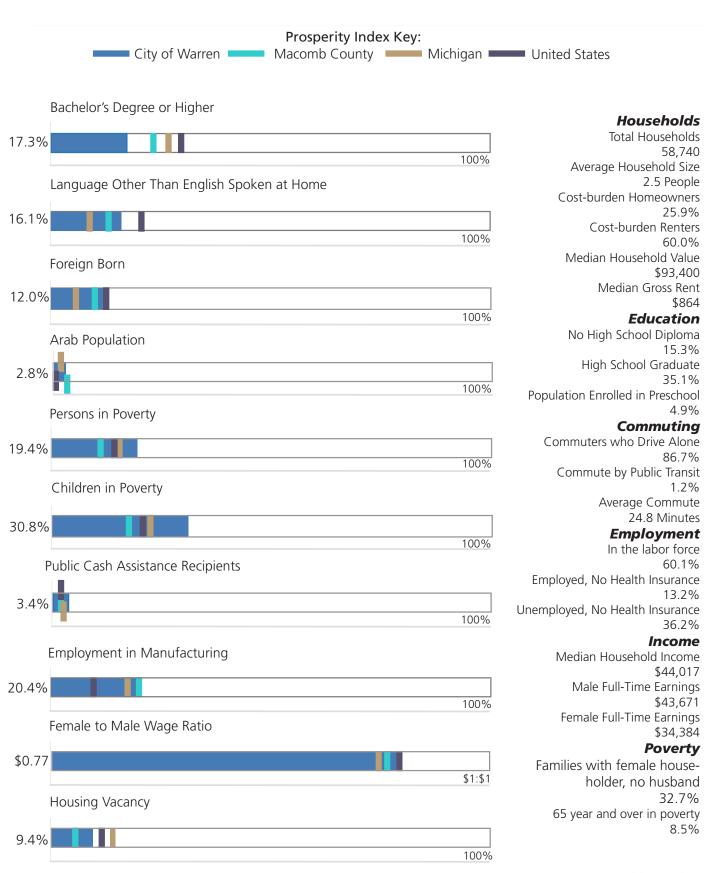


FIGURE 8: CITY OF WARREN PROSPERITY INDEX



Source: 2016 ACS 5-Year Estimates DEMOGRAPHICS | 35

TABLE 12: EMPLOYMENT INDUSTRIES AND WAGES

INDUSTRY	% WARREN	% DIFFERENCE BETWEEN U.S. & WARREN	MEDIAN WAGE IN WARREN*	MEDIAN WAGE IN U.S.
Ed and med	20.5	-2.6	\$29,550	\$35,539
Manufacturing	20.4	10.1	\$42,852	\$42,603
Wholesale trade	3.1	0.4	\$33,463	\$42,276
Retail trade	12.0	0.5	\$18,515	\$21,914
Transportation and warehousing	4.7	03	\$37,679	\$43,250
Professional, scientific, management, and administrative	10.3	-0.9	\$29,706	\$42,118
Construction	4.5	-1.8	\$36,058	\$36,055
Finance/insurance/real estate	5.0	-1.6	\$36,852	\$47,066
Information	1.7	-0.3	\$37,646	\$50,045
Arts, entertainment, recreation	9.7	0.0	\$12,363	\$12,071
Agriculture/forestry/fishing/hunting	0.3	-1.6	\$23,056	\$32,506
Public administration	3.2	-1.5	\$45,913	\$52,201
Other services	4.7	-0.2	\$22,279	\$23,203

^{*}Lighter color text refers to wages lower than U.S. median wage.

Source: ACS 5-Year Estimates 2012-2016

In a globalized economy, where jobs can be shipped or sent virtually across the world, a bachelor's degree provides some insulation from the pressure of competing internationally for work. Many good jobs that required only a high school diploma have diminished, leaving those without post-secondary education with a greater chance of living in poverty. For the jobs performed by high school graduates in Warren, the median earnings are \$27,366 compared to \$41,876 for jobs performed by those with a bachelor's degree. Of the 13,451 Warren residents living in poverty, 40.5% with a high school diploma or equivalent have an income below the poverty line compared to 8.3% people with a bachelor's degree. It is interesting to find that individuals aged 25 and older with less than a high school degree have a relatively low poverty rate compared to high school graduates. One possible answer are that they are living at home with family members or friends who are above the poverty line.

Warren's median household income of \$44,014 falls short of its larger geographies: it is only 79% of Macomb County's (\$55,951) and 86% of the state's (\$50,803). Lower median household incomes are clustered heavily in south Warren with only small pockets of lower incomes above I-696. Lower median household incomes also overlap with a higher concentration of minority populations in south Warren. Wages are also falling over time. Until 2000, wages rose steadily, but as of 2016 the median household income is about \$600 less than it was in the year 2000. With 16 years of inflation, this degrades a household's purchasing power by more than \$600 per year.

Southeast Michigan's history as an industrial stronghold lingers despite massive job loss in manufacturing over the last half century. It is possible that students who graduate from the local school system or people attracted to the trades from further away may not need a college degree to find employment. In almost all the cities alike, manufacturing accounts for an influential part of the economy. In Warren, manufacturing holds equal rank with the growing education and healthcare services field; between the two industries, over 40% of residents are employed. Warren's economy has diversified over time from heavily manufacturing to nearly exactly the same proportion of persons working in the "ed and med" (educational services, health care, and social assistance). Overall, Michigan's manufacturing advantage is still in full force: in each of the surveyed geographies and in the state as a whole, manufacturing represents approximately 20% of the workers, which is double the proportion of manufacturing workers nationwide (10%). This means that Warren has a lower proportion than the national rate of workers in other categories, and these differences are spread fairly evenly across industries (see Table 12).

Of the 13 industries listed, the median wage for 10 of them is lower in Warren compared to the U.S. Of course, wages are relative. Manufacturing's median wage is lower in Warren than the U.S., but is still higher than the City's overall median household income. In Warren, workers in manufacturing are in the top 50th percentile of wage, and workers in "ed and med" lag by about \$13,000 annually. The push for youth to enter "ed and med" jobs is not necessarily about wages; as shown in Table 12, it is not a guarantee for higher wages, but a push for stability. It is an industry that is growing and considered less likely to be outsourced.

Lower wages in almost every industry has a collective impact on how Warrenites can spend their money, and more broadly their quality of life since a larger proportion of their monthly income must be spent on "the basics." Discussed in more detail in the Housing section, Warren renters, who comprise almost one-third of the City, are spending more than the recommended 30% of their gross income on housing costs, and that burden is growing annually. This is the only logical outcome when housing costs increase and wages do not keep pace. Second to housing costs, in terms of monthly expenditures, are transportation costs, recommended to take up 15% of a household's monthly expenses. The combination of the two major expenses account for the true cost of housing, which should be less than 45% of monthly income. Yet, the Center for Neighborhood Technology's housing and transportation index uncovers that almost two-thirds of Warren residents exceed that threshold.³ The effect is that the City's residents have limited means to spend elsewhere in the community and have less to invest into homeownership.

The vast majority of Warren workers (88%) receive wages or salary in the private sector, which is higher than in the state (84%) or US (80%). This is partly explained by the fact

that these entities have their own layer of government, which is counted alongside those employed by local government, but Warren's proportion is also relatively high among the neighboring cities (range: 83%-90%). Most of these local geographies also have a selfemployment rate that is markedly lower than the state (5.0%) or nation (6.0%), including Warren. Warren's rate (3.5%) is low among these geographies, too, which generally range from 2.9% in Center Line to 4.5% in Eastpointe. Hazel Park is an outlier with 6.9%.

POVERTY

Nearly one in five persons in Warren live in poverty, a rise of almost 5% since 2010. Many of its neighboring cities share a high poverty rate, with only the City of Fraser below doubledigit figures. The figure for poverty is even higher for children, as many households have an equal or greater number of children than adults. Moreover, children do not have the means to lift themselves out of poverty. Over 30% of children under the age of 18 live in poverty, a figure that is substantially higher than the County (18%), the state (23%), and the U.S. (15%). It is also generally on the higher side when compared to the other selected cities; only Hazel Park (35%) and Detroit (56%) are higher. The definition of poverty is driven by income thresholds set by the federal government and based on the number of persons in a household. In 2018, a household of four persons was considered in poverty if it earns \$25,100 or less annually.⁴ Almost 22% of families in Warren earn less than this salary. Those living in poverty have relied on self-sufficiency to get by, as the data shows that only 3.4% received cash public assistance. The more common type of assistance for needy families is SNAP benefits, formerly known as food stamps. The percentage of SNAP recipients (19.3%) almost perfectly aligns with percentage of all people living in poverty (19.4%), with a mere difference of 0.1% between the two.

Foreign-born residents generally arrive representing the two ends of the educational spectrum. It is true that double the amount of foreign-born resident achieve "less than a high school" education when compared to the City as a whole. Considering that some would have to learn a new language first, their elementary education attainment may be delayed, but they have higher rates of bachelor's degrees or higher (25% vs. 17%). Foreign-born have lower unemployment rates but lower wages on average than native Michiganders.⁵

As mentioned previously, women who head the household without a husband live in poverty 33% of the time, whereas married-couples with children suffer that fate only 9.2% of the time. Full-time year-round working females are earning 79% of their male counterparts' earnings. In none of the selected geographies do women's median earnings equal that of men's, although Detroit comes in with the highest ratio of female-to-male earnings at 92%. It is the City's responsibility to understand the severity of community poverty because it inherits the consequences of low-incomes: delayed economic development, reduced property values and tax collection, and a business mix than can tend toward the predatory.

SUMMARY

Warren's population follows many national trends. It is finally growing again as younger generations draw energy back into urban cores. Household composition is subsequently changing. Warren remains a family suburb, but one-third of households live in less traditional ways, either as an unmarried couple or with roommates. The declining median age is a snapshot of the primarily young families in the City, but most municipalities across the nation will see older age-cohorts outnumber the youth, and Warren may be no different. As it grows, it is emerging as a more multicultural and racially diverse City in step with the rest of the country.

Warren is also experiencing the same negative trajectories of the 21st century: stagnating wages and high poverty rates. And, in some ways Warren differs from the majority of the U.S. The City remains a manufacturing center despite waning industrial investment elsewhere. It hosts a world-class tech center that continues to grow and offer a decent lifestyle for those with less than a college degree, although in decreasing capacity than in previous generations.

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THE WARREN HOUSING MARKET

As the third largest city in Michigan, Warren is comprised of a whopping 58,740 housing units. Since its housing construction apex in the 1960s, residential units have trickled to much slower rates of development and are now at a virtual standstill. Along with almost all the neighboring municipalities, few new units are reported to have been built since 2014. Despite low interest rates and appreciating home values, housing construction nationally is at a 50-year low. The reasoning behind this trend is complicated and could be a result of many factors, including shifting housing preferences among younger generations (less demand), builders prioritizing the rehabilitation of homes they purchased cheaply during the recession, a skilled-trades labor shortage, and rising cost of materials (reduced supply) that have made the venture more challenging and less financially worthwhile to build new homes.¹ It is also possible in cities that are nearly built out, and have outdated zoning, that there is little desirable space remaining to build more residential units.

TENURE AND VACANCY

Warren's homeownership rate (70%) is on par with Macomb County (73%) and the state of Michigan (71%), but generally much higher than the neighboring communities' range (48%-72%). The remaining 30% of residents are renters. These two groups, while in the same city, are experiencing different sides of the housing market. Renters are paying more each year for older units, and homeowners are paying less due to a significant drop in equity. The combination of a heating rental market and a lukewarm housing market is taking place nationwide and puts cities in a difficult spot. Cities have historically aimed for increasing homeownership to reap the perceived benefits of neighborhood stabilization and a reliable tax base, but housing meltdown of 2008 has reversed those trends, and its long-term implications are unclear.

Low vacancy rates are one indication of a housing shortage. High vacancy rates exhibit the more visible signs of a crumbling housing market: dilapidated buildings, decreasing home values, empty lots. Low vacancy rates do not necessarily represent an antidote, but rather a problem in another form. An unforgiving rental market, in this case a low 4.9% vacancy rate, is paired with significant implications for how the City's demographic profile could change. Millennials are now the largest generation, and 60% of them choose to rent.² Even when buying a home is an option, Millennials tend to prefer the flexibility and convenience of renting. This is the case in Warren: it is not until age group 45-54 that homeownership exceeds rentership. For every younger age cohort, renters exceed homeowners by a substantial margin. If adequate rental units are not available to Millennials who want to move into the City, then they will have to look elsewhere for accommodations and the City will forgo an opportunity to draw in a younger demographic.

A \$34,000 reduction in Warren's median housing value since the 2006-2010 American Community Survey, from \$127,400 to \$93,400, shows that housing values did not rebound swiftly in the aftermath of the housing collapse. More recently, homes sales data for a two

30%
25%
20%
15%
0%
15-24
25-34
35-44
45-54
55-59
60-64
65-74
75-84
85+

FIGURE 9: TENURE STATUS BY AGE COHORT

Source: ACS 5-Year Estimates 2012-2016

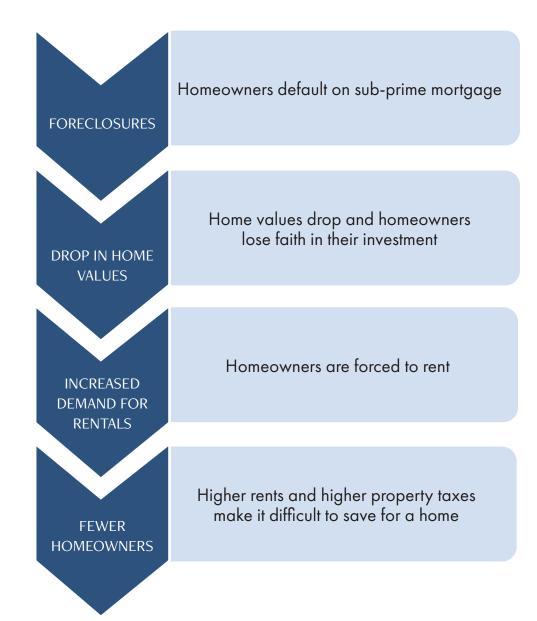
year period ending in March 2018, analyzed by Macomb County Equalization, showed large jumps in home values. Because the home values were suppressed for so long, it is not unforeseen that they would hit pre-recession values; Warren's residential properties grew in value by 10.1% in that time period and are projected to rise another 10.2% in 2019.³

■ Renter ■ Owner

While the mortgage crisis undoubtedly wrecked the lives (and credit) of millions who experienced a foreclosure, the subsequent housing prices are beneficial to those who wish to buy now, perhaps offering an explanation for such a low vacancy rate. The crisis hit homeowners first but has had rippling effects for renters as well. As people lost their homes and faith in the banking system, a switch in tenure has applied pressure on the rental market and driven up prices to unaffordable levels for many moderate income folks. Since 2010, renters have increased by almost 8% and homeownership has decreased by almost the same rate.

Despite a shrinking population, the 4.9% rental vacancy is lower than Michigan's 5.7% rate, reaffirming the popularity of rental units in Warren. The homeowner vacancy rate, almost always lower than rental vacancy, of 1.6% is quite close to the state's rate (1.9%). Relative to what is considered a healthy vacancy rate, 5%, both markets are tight. However, the effect on renters and homeowners is not equal. Gross median rent has increased by 12.6% since 2010 (\$755 to \$864), and the median monthly owner cost (a figure that includes tax and insurance estimates) has decreased by 14.8% (\$1,276 to \$1,111). Rising rents without a

FIGURE 10: EFFECTS OF THE SUB-PRIME MORTGAGE CRISIS



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100 90 80 70 60 50 40 30 2010 20 2013 10 2016

FIGURE 11: OCCUPANCY AND COST-BURDENED BY TENURE

Source: ACS 5-Year Estimates, 2006-2010, 2009-2013, 2012-2106

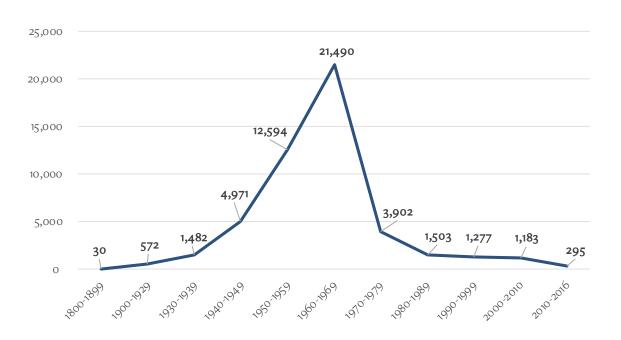


FIGURE 12: NUMBER OF RESIDENTIAL STRUCTURES BUILT BY DECADE

Source: City of Warren Assessor

simultaneously and equally rising wage results in more renters becoming "cost-burdened," a term defined as paying more than 30% of a household's gross monthly income. Between 2010 and 2016, the percentage of cost-burdened renters rose from 52.1% to 60% while it dipped for homeowners from 36.7% to 29.5%. Increasing rents make it more difficult for young adults to save enough to purchase a home and invest in the community.

To be able to afford the median gross rent (\$864), a single person would have to make \$2,880 (gross) per month, or close to \$35,000 per year, a homeowner, would have to make \$3,703 (gross) per month or \$44,440 per year. With a waning median household income of \$44,017, half of residents cannot responsibly own a home in Warren, and many renters would struggle with median rent.

One of the consequences of a lack of affordable housing is eviction crisis. Eviction Lab, a research organization, has tracked 30,000 municipalities since 2000 to show that evictions have increased in tight relationship with growing income inequality and the burden of housing cost. Evictees tend to receive little sympathy because many are expelled from their units for not having the means to pay. While this is within a landlord's right, it still causes a problem for a city where the most vulnerable populations are left in desperate situations trying to find new housing quickly and to retrieve their possessions, often with family in tow. Eviction Lab's ranking system reveals Warren's eviction rate to be within the top 10 highest of the 100 cities reported. As of 2016, it had an 8% eviction rate, which amounts to 1,188 evictions in one year, compared to an eviction rate 3.7% in Macomb County. This is a problem that requires a multi-fold solution that provides tenants with their rights, resources, and support in their time of transition, but also state and/or federal legislation that boosts the number of affordable units. In the interim, the City could update its Consolidated Plan to reflect the severity of this trend and use the Community Development Block Grants it receives from the federal government to provide renter counseling with a focus on those who face eviction, or in some cases, use that money to help renters who have fallen behind on their rent.⁴ It is rarely popular to increase the number of affordable housing units in a jurisdiction, but if that could help stem the number of evictions taking place annually, then it would be a huge benefit to Warrenites.

Lower mortgage payments that reflect the colossal drops in housing values from the Great Recession have resulted in fewer cost-burdened homeowners, a silver lining in an otherwise distressing time in U.S. history. To recoup the loss in taxable property value, the City has raised the property tax levy steadily from 16.9 mills in 2010 to 27.8 mills in 2014, where it remains today.⁵ It is difficult to know if the property tax increase has had a major impact on homeowners' desire to live in Warren because as mentioned before, vacancy rates are low but residents continue to move out of the City. Property tax revenue is a city's main source of revenue, but Michigan's Headlee Amendment of 1978 and Proposal A of 1994 dramatically reduced local control over property taxes. The Headlee Amendment requires local tax increases to be voter-approved, and limits revenue collected to the original millage amount (adjusted for inflation). Proposal A limited the growth on taxable value of property to the

lesser of inflation or 5%, unless the property transferred ownership. Cities are left with few options to boost a local budget, even in a booming economy.

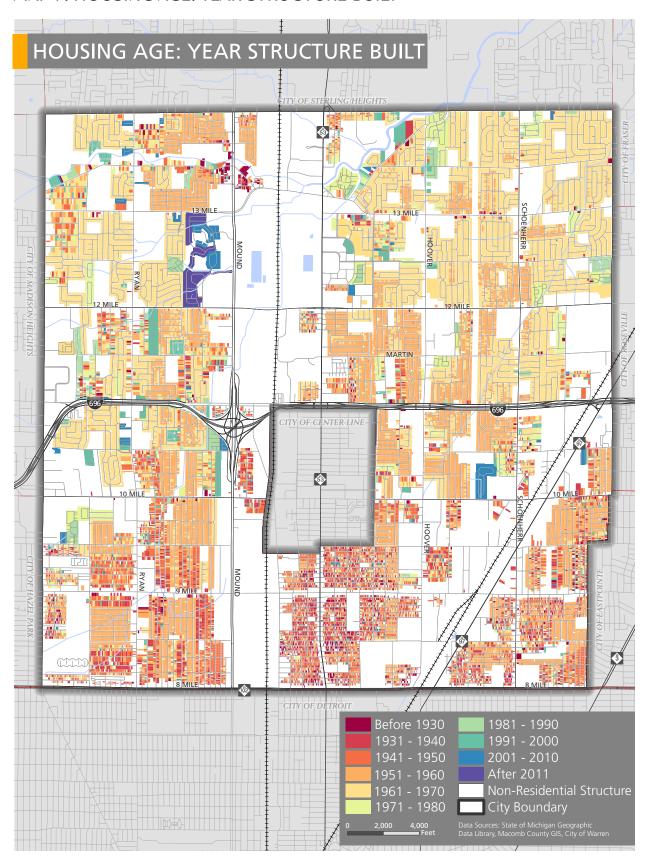
AGE AND VALUE OF HOMES

As a northern offshoot of Detroit's development, the southern portion of Warren saw the majority of housing structures built before 1930, although there is a small cluster of older housing in the northwest corner of the City. As residential development intensified, it spread north. The "Year Structure Built" map shows that a large portion of homes were built between 1950 through 1969 in north Warren, and the timing matches perfectly for the influx of newcomers during those decades when the population was doubling. Even though north Warren features "newer" housing, the structures were largely built in the 1960s and 1970s, making them 40-50 years old. Because today's aesthetics and lifestyles deviate from previous generations, the year the home was built could signify to buyers that homes still need additional investment to meet both their needs and desires.

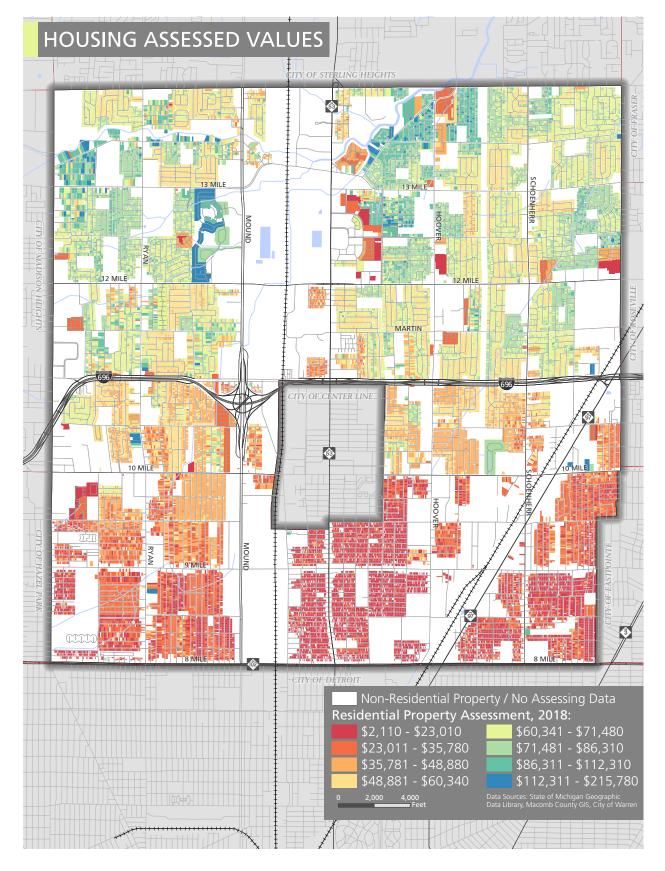


Brick home in Warren. Source: City of Warren

MAP 7: HOUSING AGE: YEAR STRUCTURE BUILT



MAP 8: HOUSING ASSESSED VALUES



In the "Housing Assessed Values" map, the correlation between age of a home and its value is clearly demonstrated: the older the home, the less it is worth. In the state of Michigan, the assessing value is 50% of the market value. For a fairer estimate of what a property could actually sell for, multiple that value on the map by two. The bifurcation of housing values, almost perfectly delineated by I-696, shows that the housing markets are also differentiated by geography, not just tenure.

The age of homes and the flatlining of wages almost inevitably manifests in declining housing quality. The City's Consolidated Plan identifies housing and community development needs and contains goals, objectives and strategies for addressing the highest priority needs. The plan's goals are to achieve decent housing and expanding economic opportunity for low- and moderate-income persons. The action plans run on an annual basis and serves as an application for federal housing programs like the Community Development Block Grant, HOME Investment Partnerships, and Housing for Persons with HIV/AIDS (HOPWA). In 2018, the City was awarded funding and used it for the single-family owner-occupied residential rehabilitation loan program. The program allows low-income families to defer loan payments and offers installment loans at 4% interest rates. The funds were used for lead-based paint hazard reduction and bringing homes into code compliance. The City was also able to purchase property and construct two single-family residences that were sold to low- to moderate-income first-time homebuyers in south Warren. These programs are critical for helping people maintain the quality of their homes when they otherwise wouldn't have the means.

TYPES OF UNITS

Three-quarters of Warren's housing stock is made up of single-family detached homes (75%). Once considered a pillar of the American dream, single-family homes were built in abundance after World War II. As in the case in all of the surrounding geographies, single-family homes dominate in neighborhoods. Because few units have been built in the last decade, the proportion of single-family homes has stayed largely the same since 2010. The remaining one-quarter of the housing units are spread among various forms of denser housing types, with single-family attached the next most popular format (8%). With few duplexes to speak of (1%), denser housing comes most often in the form of 5-9 unit buildings (7%), 20 or more unit buildings (3%), or mobile homes (3%). Duplexes are permitted in the residential zones R1, R-2, R-3, and R-5, and due to current restrictions do not pencil out for developers. As one of the most palatable ways to build density in neighborhoods, expanding the number of zones where duplexes are permitted could benefit people looking for smaller homes to maintain. Most of the multi-family units are in the southern portion of Warren, creating an area of higher population density.

THE "MISSING MIDDLE"

The lack of housing variety is problematic. Many different groups of residents may wish to be homeowners without having to care for a large standalone building or its accompanying

FIGURE 13: MISSING MIDDLE HOUSING



The graphic depicts the percentage of housing formats in Warren. The remaining 3% of housing in Warren consists of mobile homes.

MissingMiddleHousing.com is powered by Opticos Design, Illustration © 2015 Opticos Design, Inc.

TABLE 13: CNU RETAIL & HOUSING DEVELOPMENT

RETAIL TYPES	SIZE OF BUILD- ING (SQ. FT.)	HOUSEHOLDS NEEDED TO SUPPORT RETAIL	EXAMPLES	
Corner stores	1,500 - 3,000	1,000	Beverages, sundries, food, items needed on a regular basis	
Convenience centers	10,000 - 30,000	2,000	Dry cleaners, bakery, bank, ice cream shop, pharmacy, tailor	
Neighborhood centers	70,000 - 90,000	6,000-8,000 (within 1-2 miles)	Anchored by a major retailer that supports the smaller businesses	

Source: Congress of New Urbanism

yard work. Empty-nesters, retirees, disabled persons, householders who live alone, couples without children, and lower-income households may all be seeking smaller, more affordable, less time-intensive units that are not easy to find in Warren. This phenomenon is known as the "missing middle," described as the void of housing options besides detached units on separate lots and high-density apartment buildings, a consequence of suburbanization receiving widespread governmental support. "Missing middle" also notes that multi-unit housing should be designed to be compatible with the scale of detached homes, as they are the predominant housing form, but that missing middle housing helps to meet the unrealized demand for living in more walkable, urban spaces.

HOUSING & ECONOMIC DEVELOPMENT

Fortunately, the blueprint for this type of development already exists. Most historic downtowns or neighborhoods were built before the invention of a car and therefore follow development patterns that facilitate walkability and support small-scale, local businesses. The advent of sprawling, low-density neighborhoods is relatively new and a vast departure from how cities were traditionally conceived. Missing middle housing is the building block of both past and future mixed-use spaces. The key to its success is a smaller footprint that masks increased density. Knee-jerk aversion to higher density housing can be assuaged with well-designed units that are perceived as homes and still hold up to 16 people per acre.

The succinct phrase "retail follows rooftops" explains the connection between the local commercial economy and the housing market. The density found in missing middle housing formats has the power to spur economic development. It is possible that cities wishing to strengthen their local economy are targeting businesses and incentivizing them to expand, when the problem may lie in the housing stock, or the economy's connectivity to the appropriate type of housing stock. With a concentration of people, neighborhood businesses have the prerequisite exposure and foot traffic to make a return on their investment in the community. Table 13 shows the Congress of New Urbanism's best practices for how to build housing and retail together for a complete neighborhood.⁶

Embedded in a larger economy, small-scale retail will only do as well as the market that surrounds it. The economic outlook for the City looks positive as evidenced by significant job growth, but job growth that vastly exceeds housing growth can still lead to a declining population. Between 2010 and 2013, the number of jobs in Warren increased by almost 25% whereas the number of housing units only increased by 0.2%; and between 2014 and 2015, the number of jobs increased by about 2% with a 0% growth in housing. The local economy and the housing market are intricately linked. With an expanding job base, the first uptick in population in years, and General Motors announcement of investment in the Tech Center, in-migration to the City will likely receive a boost. If the economy continues to grow, pent-up demand for units may find its way to Warren and help to end the near decade-long housing construction slump.

HOUSING FUNDING

Neighborhood Enterprise Zone (NEZ)

Considering the challenges posed by the "missing middle" in Warren's housing stock and its capacity to spur neighborhood revitalization, the City established a Neighborhood Enterprise Zone (NEZ) program in March 2017. Through this program, the City provides a property tax abatement to homeowners and developers for the rehabilitation or redevelopment of existing owner-occupied housing in distressed neighborhoods. The establishment of an NEZ by municipalities is enabled through Michigan's Public Act 147, which was passed in 1992. As the act stipulates, local governments designate a district wherein residential parcels are qualified for tax exemption. Following the program's approval, Warren designated its district in the southeast portion of the City from Hoover Road to Sherwood Avenue between Eight Mile Road and Stephens Road. The zone, known as "Patriot Place District," encompasses approximately 1,422 acres of contiguous parcels of land. The area is in need of investment as the largest concentration of older homes and lowest median household incomes. As was identified in the annual action plan from the 2018 Housing and Community Development Plan, households buy property but then often lack the funds to maintain it.

The NEZ tax incentive applies to all developers and homeowners in the district regardless of their income level and lasts for eight years after it is granted. Rental housing and housing associated with businesses are not qualified for the incentive. Developers and homeowners must apply for and obtain approval from the City Assessor and the State of Michigan Tax Commission prior to receiving the incentive. In order to meet the approval process, applicants must submit a housing development or work project plan that conforms to the City's ordinances and building code standards. The applicant's plan must also follow certain improvement and cost requirements described within Public Act 147. The incentive subsequently becomes effective on December 31st of the year in which the project is completed, and the housing becomes occupied. It is the City's intent that this district spurs stabilization and enhancement of the housing stock within Warren's southern extent.

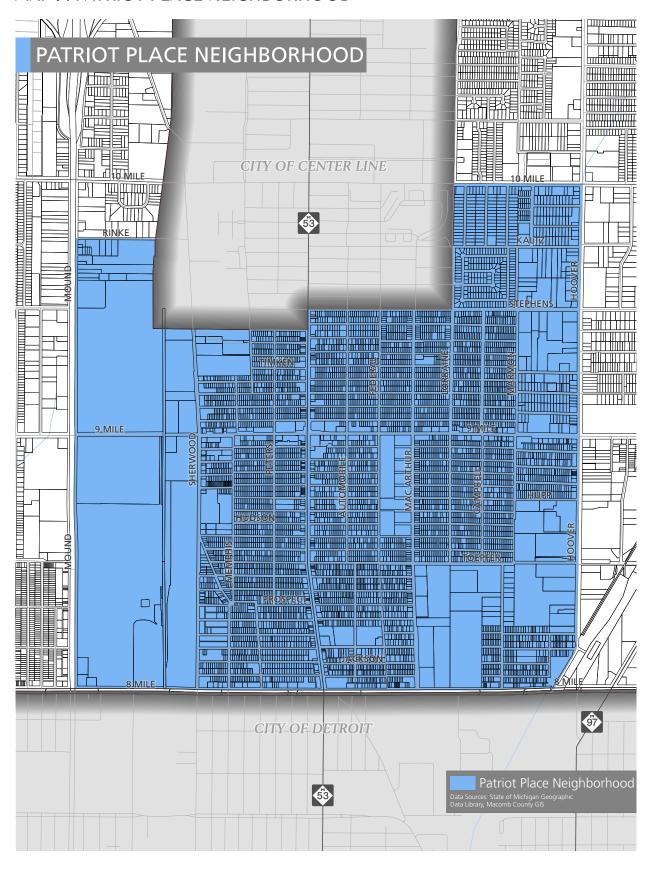
Community Development Block Grants (CDBG)

Warren is also a recipient of CDBG funds and uses them in a variety of ways. Some of the money is targeted towards preserving existing single-family homes where they are falling into disrepair. The funds are distributed specifically of rehabilitated owner-occupied homes with the large goal of reversing neighborhood decline. With the funds awarded, it is estimated that 20 families who earn 80% or less of the area median income will receive assistance. More broadly than house repair, some of the funding is used to help people stay in their homes by providing services to seniors and handicapped persons such as lawn mowing and snow removal. CDBG funds also go towards shelter for the homeless and emergency services for those at risking of becoming homeless. Funds from HOME, another grant offered through the federal Housing and Urban Development agency, have been scheduled to produce one new affordable housing project, to loan to eligible homeowners for housing rehab, and new construction.

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MAP 9: PATRIOT PLACE NEIGHBORHOOD



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A city's development past is a strong indicator of its development potential in the future. New York City could not become an open pasture within a lifetime or vice versa. Land use analysis is the investigation of existing development patterns. It is the first step toward deliberate and prudent planning for making changes to the built environment. As lifestyles, economic systems, and demographics change, how residents and businesses use the land also changes. To remain a competitive and thriving city, the development of land must adjust with the times to support these changing trends. In an effort to simplify regional planning, all municipalities within Macomb County use universal land use codes to classify development of land. The transition to shared land use codes ensures that communities can work across jurisdictional lines with less confusion, work together to limit conflicting land uses along borders, and strengthen or build networks between them.

In general, Warren developed with an industrial spine that ran north and south down the center of the City, skirted the City of Centerline to the west, and grew an industrial appendage that juts eastward along M-97. As the residents flocked to Warren in droves in the 1960s, housing and its complementary uses (schools, parks, local services) filled in the spaces between. Today, the City is completely built out to its edges; as a result of rapid suburban growth in the middle of the 20th century, the City will have to consider infill development, re-purposing buildings, and building more densely in order to accommodate growth.

RESIDENTIAL

Housing such a large population calls for more acreage than any other land use. The gradient of yellow to dark orange signifies the various housing formats and how they have spread within the city limits. Residential development patterns track a commonly told story: the older homes built along the Detroit border in the 1930s and 1940s were smaller and more densely arranged; moving north, and through time, homes built after World War II were more likely to be detached homes on larger lots along curvilinear streets. I-696 reinforced the already noticeable distinction between the two major residential styles and has acted as an informal indicator of socioeconomic status between well-off north Warren and the lower-income south Warren.

INDUSTRIAL

Warren was an industrial hub before it was a residential suburb. Industry took hold of the landscape decades before the rush of new residents arrived. Industrial uses account for a large part of City's total acreage. The majority of these uses are "improved," which generally means that they are in use or at least that the property is hooked up to utilities. On the other hand, Warren is home to the General Motors Technical Center (GMTC), a 710-acre National Historic Landmark campus built in 1956. The GMTC features 11 miles of roads, two water towers, two lakes, and tunnels. It is not a stretch to say that this campus was a tipping point for the development of the rest of the City: shortly after its development, the City incorporated, and within the next decade the population doubled. Warren rapidly transformed from a Detroit suburb into a hybrid industrial center and suburban city.

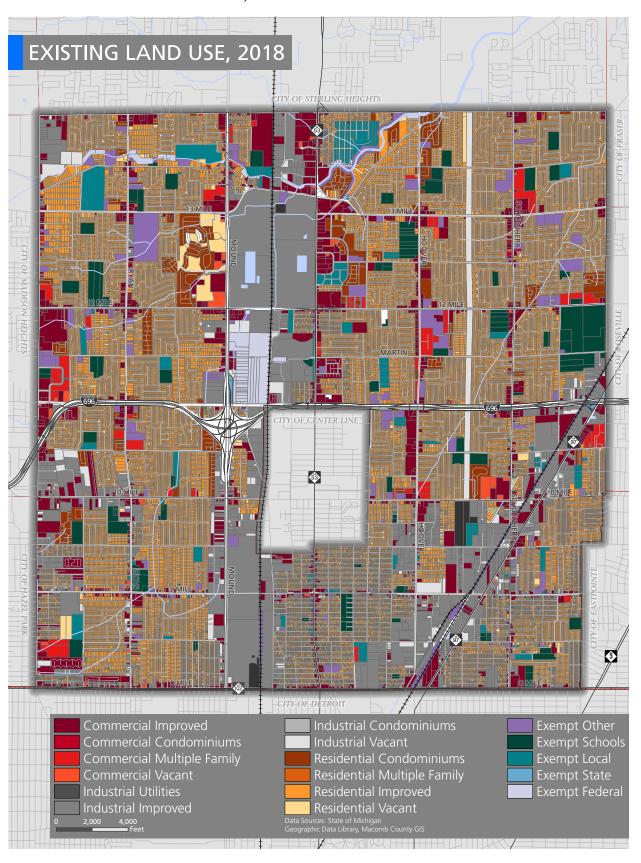
The rise of the "industrial condo," a land use classification code specific to Macomb County, is likely a response to industrial operations' shrinking building footprint. Some smaller enterprises or self-employed tradespersons find the size, and probably the price, of a condominium preferable for carrying out their work, and enjoy the perks of a shared communal space and parking. The number of industrial condos is small, but could become an emerging trend as technological advances call for fewer workers and less square footage. Industrial uses have concentrated along rail lines to facilitate movement of inputs, outputs, and final products. As vehicles became a dominant form of transportation post World War II, construction of I-696 began in the 1960s. The interstate crosses Warren's industrial belt and helps to transport goods to and from the City. With two major forms of transportation running through the City, not to mention a short distance from Detroit Metro Airport and smaller regional airports, Warren is well positioned logistically for production.

A new industrially sized land use sits before Michigan cities: marijuana facilities. Michigan's Medical Marijuana Facilities Licensing Act (MMFLA) of 2016 permits up to five types of facilities that must be established in agricultural, commercial or industrial zones. The state enables local control on where and how many types of facilities a municipality wishes to house within those three zoning categories. With no agricultural land remaining, Warren's decision to opt-in could mean that some of its industrial buildings are converted into medical marijuana facilities. Some serious land use issues emerge for cities that opt in. For example, how much land should be dedicated to this use, and what is its proximity to schools, day cares, and other incompatible land uses? Warren has instituted a 1,000-foot buffer for schools and a 500-foot setback from churches, parks, libraries, and other spaces in order to address concerns over smell, traffic, and exposure to children. The City has also limited the number of provisioning licenses, which are permitted in commercial zones, to a total of 10.1 While this legislation has the potential to vastly change how some municipalities use their land, Warren's regulations can help mitigate possible negative side effects.

COMMERCIAL

The commercial uses in Warren largely surround industrial land for convenient provision of related services. Commercial uses have a smaller presence than industry. Otherwise, commercial development can be characterized almost identically to industrial development: most of it is improved land, with widespread vacancy and a handful of commercial condos. Where commercial uses are not directly tied to industrial production, they are located along major corridors with high traffic counts such as Van Dyke Avenue. This type of development along wide, heavily-transited, fast-paced corridors precludes a walkable, experience-driven downtown unless substantial street renovations are undertaken. Warren is currently missing a commercial core where residents and visitors alike can seek out experiences in shopping, dining, or entertainment. Plans have been in the works for decades about how to foster an area with a downtown, yet that type of human-scale development has been eclipsed by a string of strip malls used for convenience shopping. The 1966 Master Plan boldly states that a "city center is not an optional extra," but development has stalled, likely due to the expense of reworking an area into a destination.

MAP 10: EXISTING LAND USE, 2018



EXEMPT

Exempt land uses refer to land that is not taxable typically defined by local, state, federal, and schools ownership. Local exempt land is often the social infrastructure of a city; it could be a community center, park, or place of worship, all of which are institutions where people gather. Higher levels of government have land holdings in the City such as a Secretary of State office and the U.S. Army Tank Automotive Command that sits on Mound Road, between Eleven and Twelve Mile Roads, currently used by the federal government. Exempt land uses that enhance city life are a boon for residents, arguably serving their "highest and best use" even if they do not contribute to the tax base, but the unproductive properties that are not owned or operated locally represent a challenge.

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Butcher Park. Source: City of Warren



Civic Center Plaza. Source: City of Warren

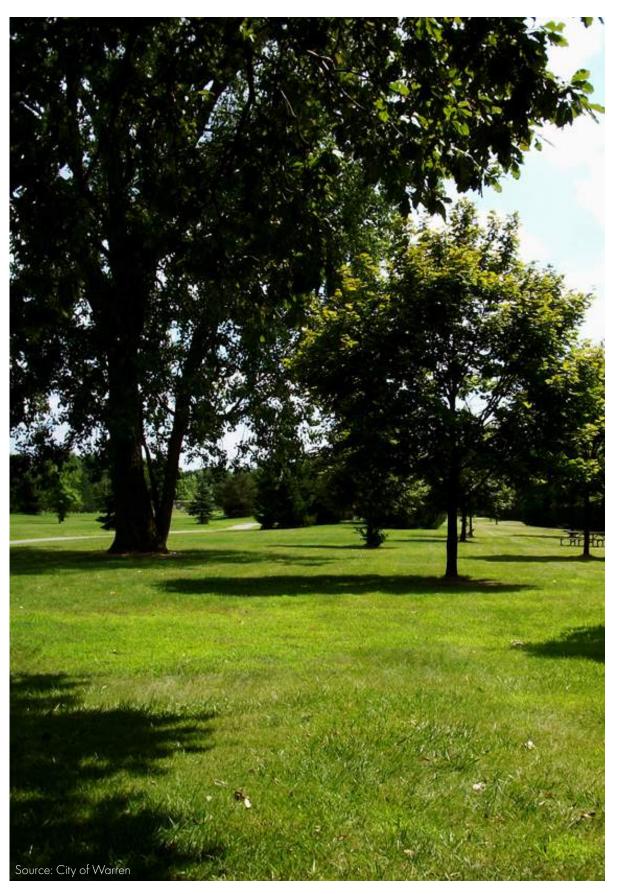


Residential land use in South Warren.

Source: City of Warren



NATURAL FEATURES



Warren's natural history started at the bottom of a lake. Ten thousand years ago when the glaciers melted, Lake St. Clair expanded to cover the eight miles that sits between its current shores and the City of Warren. When the waters receded, the land was green and abundant with a bevy of tree and animal species. Today, the only vestige of this hydraulically-rich past is the Red Run River Drain that meanders through the northern half of the city.

The arrival of European traders and farmers altered the land forever. While nowadays agriculture is thought of as a "natural" land use, farming requires severe manipulation to the landscape to yield crops. Trees were felled, waterways diverted for irrigation, and soil eroded in the river as a consequence, reducing water clarity and quality. When industrial uses came to the area, manufacturing jobs offered a middle class life to many, at the expense and exploitation of natural features. This progression from natural to agricultural to industrial land use is a common story in U.S. urban history. At the brink of irreversible climate change effects, cities worldwide are rethinking how to re-integrate green practices into city living.

This section will first begin with a description of the current environmental conditions in Warren, and then examine what can be done to green the cityscape.

GREY INFRASTRUCTURE

Warren is highly developed with impervious surfaces, or artificial material that interrupts the natural water filtration system. When pavement covers soil, it blocks water from being absorbed into the ground and filtered naturally. Instead, the water that hits the pavement is diverted into a system of constructed channels and pipes called "grey infrastructure," carrying potential contaminants along with it to its final destination in a local body of water. This type of pollution that doesn't come from one easily decipherable source, and is instead a product of whatever is in the path of excess rainfall, is called "non point source pollution." Regulation of non point source pollution has been more challenging to control than point source pollution (waste dumped directly into a waterbody by a single entity at a single point). There are common planning and development practices that help reduce the amount of contaminated run off water that reaches the waterbodies, such as overlay zones that restrict the use of fertilizers and other harmful chemicals, planting native vegetation within and around impervious areas, creating a large buffer between development and waterbodies, and collecting and treating water that falls on a highly impervious property.

Moreover, under intense rainfall, impervious surfaces increase instances of flooding as excess stormwater accumulates more swiftly than its diversion mechanisms can handle. Impervious surfaces also do not effectively absorb heat. On a sunny day, heat is bounced back into the atmosphere, forming heat islands that make cities noticeably hotter than green open spaces. This warmer air is more hospitable to biological pollutants. The combined effects of reliance on traditional grey infrastructure decreases both air and water quality.

The "Impervious Surfaces" map displays a scale from 1% to 100% to show the varying concentrations of imperviousness. Using the mapping software platform, Geographic

Information Systems (GIS), the City is broken down into equal-sized geographic cells. The analysis determined that 99% of the cells are covered by a majority of impervious surfaces. The magenta hue representing the higher end of the scale tracks closely to the industrial and commercial footprint, and the light pink areas track vegetated spaces. The most vegetated areas are adjacent to the Red Run Drain and the International Transmission Company (ITC) Corridor that runs from the northern border to Ten Mile Road. Highly impervious surfaces closely approach the Red Run Drain with very little buffer along some stretches of the Red Run Drain. Well-developed design standards with an emphasis on promoting the protection of natural features in close proximity to existing open water surfaces are important in controlling and mitigating non-point source pollution.

GREEN INFRASTRUCTURE

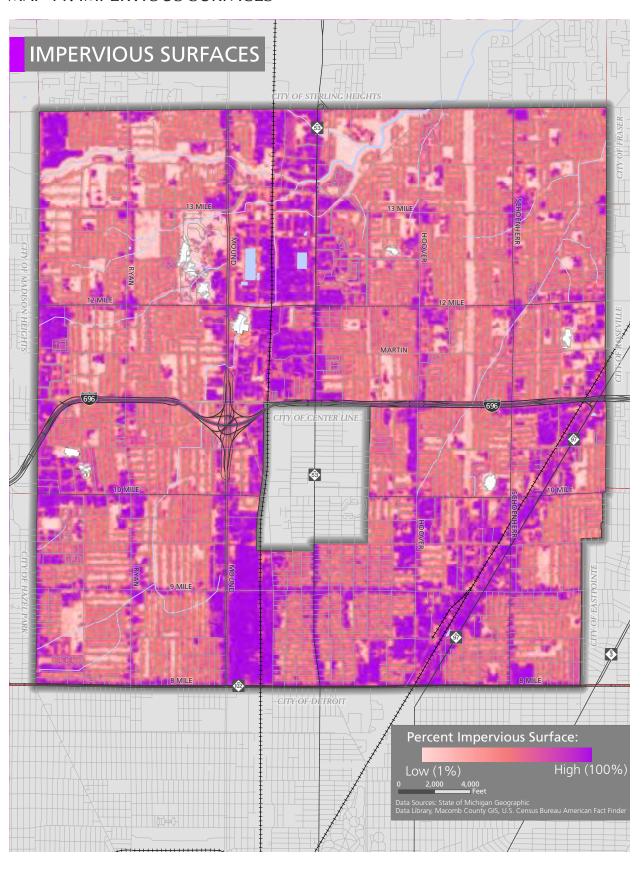
In conventional development practice, "greenery" and "infrastructure" are distinct and even opposing concepts. Favoring "grey" over "green" infrastructure, frankly, has been an erroneous approach—the truth is that municipalities need both systems to function properly. Trees and plants perform many desirable functions, some of which conventional development reproduces (often less effectively), and others of which are irreproducible (certainly at an attainable cost). The strategic deployment and placement of parks, lakes, wetlands, trees, green roofs, bioswales, and rain gardens can have a range of profound effects. The ability to slow, absorb, and clean stormwater results not only in a bettermanaged urban environment, but in cleaner waterways used for both consumption and recreation. These are the primary purposes for which green infrastructure is currently used. Unlike the built systems for accomplishing these aims, green infrastructure offers by-product benefits of cleaner air, a cooler environment, a range of direct positive short- and long-term effects on human health, and increased property valuation. The Southeast Michigan Council of Governments (SEMCOG) has collaborated with residents to create a regional vision for incorporating green infrastructure elements, a framework that recognizes the importance of treating all infrastructure, and especially infrastructure that deals with water and living systems, as a cohesive whole. This chapter's recommendations align with the regional vision.

Tree Canopy

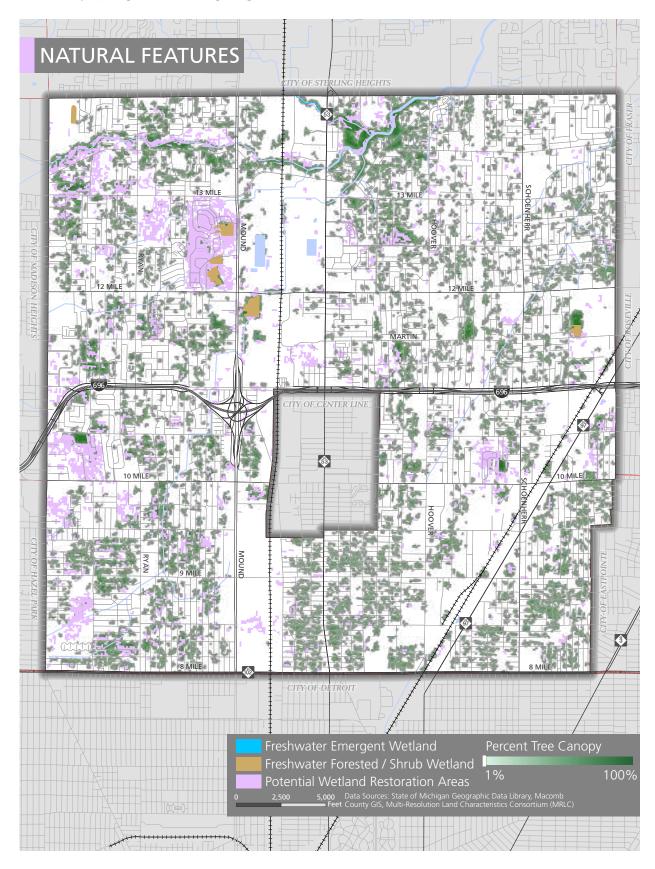
Trees are the most visible natural feature in most communities, scalable across all development contexts, and a valuable form of green infrastructure. A tree's cost is easier to quantify than its benefits, although efforts have been made to measure the ways in which people and cities benefit from trees. Studies have shown significant returns on investment. The City of Ann Arbor conducted a tree inventory and study that found that city-managed trees provide \$4.6 million in benefits annually.1 On top of that, numerous positive outcomes come from a brimming tree canopy:

- » Improved aesthetics
- » Pedestrian friendly pathways
- » Increased property values

MAP 11: IMPERVIOUS SURFACES



MAP 12: NATURAL FEATURES



- » Improved water and air quality
- » Reduced instances of flooding

Of the seven counties that make up southeast Michigan, Macomb County has the third lowest tree canopy cover. Large industrial sites leave many portions of the city with 0% tree canopy coverage. In fact, even though Warren is almost completely developed, tree canopy coverage is shrinking. From 2001 to 2011, the Multi-Resolution Land Characteristics Consortium (MRLC) tracked land cover change based upon the National Land Cover Database (NLCD) across the entire country. Although the data is limited in years and only provides a small glimpse into Warren's history, this particular decade is consistent with a trend witnessed by some residents of Warren: across the City, approximately 1.6 acres of forestland had been converted to some type of developed land over the ten-year time frame.² This data suggests that the City needs a stronger tree preservation ordinance and/ or that trees must carry more weight in the site plan development process. The City has engaged in some preliminary efforts. Working with the Greening of Detroit, Warren has planted trees in vacant lots. The trees are either too small or too recently planted to be calculated in the tree canopy map. The 2017 Annual Stormwater Report says that the City Park and Recreation Department removed 240 damaged or diseased trees that year and planted 168 new trees, 124 of them along Van Dyke Avenues as a part of a beautification project.

Climate change scientists have predicted that precipitation will fall in more frequent and intense bursts—the precise formula that causes flash flooding and property damage.³ While those living in floodplains and adjacent to surface water are traditionally at the highest risk of flooding, it has become clear that this does not represent the full risk picture: On August 11, 2014, Macomb County received a record-breaking six inches of rain in just a few hours, causing two casualties and damage to over 18,000 homes. That's over 10 times the number of parcels located in the floodplain!⁴ The intensity of precipitation has greater impacts than FEMA can accurately represent when mapping floodplains. Flooding events are increasing, and because trees help in reducing and mitigating flooding events, it is of increasing importance that the City preserve and increase tree canopy. Warren has shown a good start to this process through its extensive park system and the many efforts that the City has taken in preserving and replenishing trees in these parks.

WETLANDS

Wetlands naturally occur where dry land and water meet. Also known colloquially as marsh or bogs, they are soggy-looking portions of land that efficiently absorb and purify water, as well as provide a diverse range of animal habitats. They are valuable areas to preserve because of their ability to remove contaminants, recharge groundwater supply, and produce oxygen that diminishes the concentration of air pollution. With climate predications calling for more intense rainfall, preserving wetlands is an important for mitigating the potential for floods that put people and property in danger.

When Warren was rapidly developing, wetland protections did not exist in the same form they do today. Much of the federal legislation to protect water bodies was enacted in the 1970s and later, such as the Natural Resource and Environmental Protection Act of 1994 which requires the responsible management of wetlands. In Michigan, 40% of wetlands have been destroyed since the early 1800s.⁵ Only one two-acre freshwater emergent wetland remains in the City of Warren. The forested wetlands show a better outcome with six remaining, totaling 63 acres, concentrated in the northwest quadrant of the City. The map also identifies "potential wetland restoration areas" based on soil data, land cover, and presettlement natural features using the state's Geographic Data Library. It is not a conclusive designation but rather meant to be indicative of potential and used as an investigative tool. It is notable that the largest concentration of these lands in Warren is in the vicinity of Heritage Village, a relatively recently constructed commercial and residential development that was designed to preserve some of the existing wetland-type features. In a fully developed urban setting, such examples of sensitive site design can be well-informed by the information presented in this map.

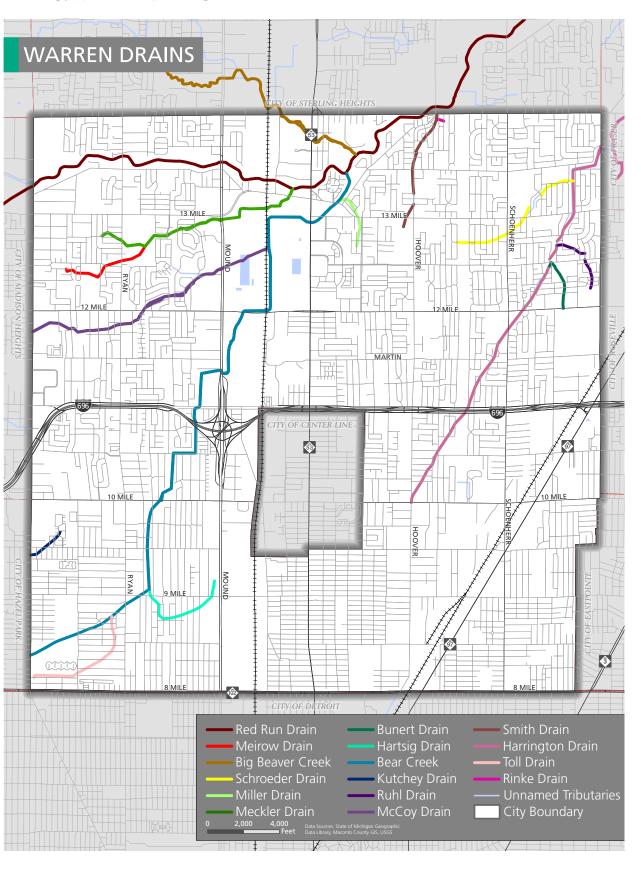
WATER

Rivers and Drains

The waterways in Warren are classified by the United States Geological Service (USGS) into three categories: rivers & streams, streams, and drains. Red River Drain, Bear Creek Drain, and Big Beaver Creek are classified as "rivers & streams." The Red Run River is the one "stream" in Warren. Red Run changes classification as it meanders through Warren starting as a "river & stream" and transitioning into a stream when it connects to the Meckler Drain, south of Miller Road. All remaining waterways are classified as drains. A drain refers to the main stream, tributary, mechanical devices (not a dam), or sanitary system materials that purify the flow of water. In some cases, a drain is indistinguishable from a creek or stream. The entire City is encapsulated by the Red Run subwatershed, meaning that any drop of water collected into any water body within the City will makes its way to the Red Run River, and eventually ends its journey in the Lake Huron-to-Lake Erie Corridor. As a connected water system, damage or pollution to one area of a watershed can negatively affect other, seemingly distant, bodies of water. The City of Warren makes up almost one-quarter of the subwatershed, so what happens within its borders could have a proportionally larger impact on the other 19 communities within it.

Since the passage of the Clean Water Act in 1972, regular water monitoring has shown in what ways the waterbodies have been degraded. While regulations have vastly improved water quality, there are residual negative effects of practices that pre-date federal regulation. Over the last 40 years, the subwatershed has been subject to sewer systems and practices, riparian and waterbody modifications (i.e. channelization), and point source pollution, but improvements have been made to mitigate these impacts.⁶ One of the results of point source solution is that the subwatershed has elevated levels of polychlorinated biphenyl (PCB), manmade chemicals that have negative health impacts on humans with

MAP 13: WARREN DRAINS



excessive exposure.⁷ Other indicators of poor water quality that cause concern are beach closings, algae, loss of wildlife habitat, and loss of fish.

Point Source Pollution

Under the Clean Water Act, facilities that discharge pollutants into navigable waters are in violation of federal law, unless the facility secures a National Pollutant Discharge Elimination System (NPDES) permit.⁸ There are about 121 facilities in Warren that have active NPDES Certificates of Coverage. Some of these sites have violated EPA standards although only two facilities in Warren are designated "major" by the EPA. The major designation signifies a high flow volume, toxic pollutants, or significant impacts on water quality.¹⁰ The City has made efforts to trace and eliminate illicit connections and illegal dumping in order to reduce instances of point source pollution as has the Clinton River Watershed Council.

Another major concern that has arisen recently are the group of chemicals known as PFAS (perfluoroakyl and polyfluoroalkyl) used in manufacturing, firefighting, and common consumer products. High concentration of PFAS have potentially negative effects on human health, so in 2017 Michigan formed the PFAS Action Response Team. It is a team of health and environmental agencies that are investigating sources and locations of contaminated sites so it can take steps to protect its citizens drinking water. Already an estimated 1.9 million have been drinking contaminated water. While Michigan is ahead of many states in that it has established that 70 parts per trillion is unsafe; other states have much stricter standards, such as New Jersey, whose standard is 13 parts per trillion. Two systems in Michigan have already exceeded that level in Kalamazoo County.11 Legislation has been introduced to reduce the parts per trillion threshold, but it has not yet been passed. Until the state acts, municipalities should prioritize water testing and information dissemination to its resident to alert them of potential health risks.

FLOODPLAINS

The only floodplains in the City surround Red Run Drain and its tributaries, which only affect north Warren. As of 2017, the Federal Emergency Management Agency's survey shows the extent of the City's floodplains where blue areas represent the 1% Annual Chance Flood Hazard (estimated to flood once every 100 years). Extending farther out, the yellow areas represent the 0.2% Annual Chance Flood Hazard (estimated to flood once every 500 years). Properties outside of the floodplain are still subject to flooding, but properties within these designated areas are at heightened risk. Currently, 1,689 parcels sit either within the FEMA-regulated floodplain.

A map was created by Warren's Assessing Department in response to the 2014, an extraordinary storm that flooded many parts of southeast Michigan. Warren was hit hard and experienced millions of dollars of damage far outside of the national flood hazard area. Storms today have the power to impact more people and property than anticipated if the intensity and duration of the storm exceeds design capacity. It is important to remember

the extent of damage outside of the floodplain because these atypically intense storms are expected to occur with more frequency.

SUMMARY

Built rapidly and before the environmental movement compelled cities to develop with nature in mind, the City's development pattern is a product of a previous era. Nearly built out, Warren has expansive impervious surface coverage, which touches almost every corner of the City but closely follows industrial and commercial parcels. The "Impervious Surface" map and the "Natural Features" map combined show that grey infrastructure has been favored at the expense of providing green spaces in the form of wetlands and tree canopy coverage. In fact, tree canopy coverage has shrunk since 2001, wetlands have suffered similar circumstances, and flooding has totaled millions of dollars of damages from the massive 2014 storm. The emphasis on gaining green spaces is multi-faceted, but in the face of changing climate patterns that affect residents in real and unpredictable ways, green space is the easier and more cost-effective solution to rising temperatures and increased instances of flooding.

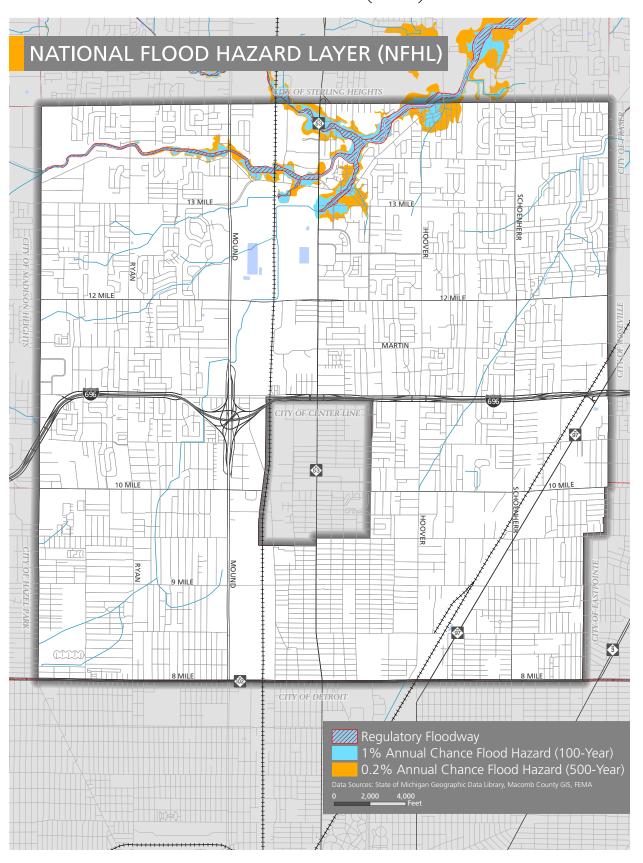
The Red Run subwatershed hosts sewer systems, riparian and waterbody modifications (i.e. channelization), and facilities with active NPDES permits. This results in a low quality of water in Warren, which has negative impacts on public and environmental health. It is important to note that impacts on water quality not only affect Warren and its residents, but also other communities surrounding Warren and, eventually, the Lake Huron-Lake Erie corridor.

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MAP 14: NATIONAL FLOOD HAZARD LAYER (NFHL)



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COMMUNITY FACILITIE & SERVICES



Current and prospective Warren residents consider the quality of a city's facilities and services, as they would any other consumer investment. Public safety, water quality and infrastructure, and public institutions can be seen as a competitive suite of services on offer to residents. In this section, a general inventory of Warren's facilities and services is taken with some discussion of how the current operation should be adjusted to fit the population's demand.

PUBLIC SAFETY

The Warren Police and Fire Departments host a training called the Citizen Emergency Response Team (CERT) that teaches certifications in Red Cross CRP, hazardous waste spills, traffic control, DTE downed wires, and self-defense, among others. As of November 2018, there were 45 CERTs, but its popularity is growing, and a number of applications are undergoing the background process. Training residents in these areas is tremendous help to police and fire during natural or manmade disasters.

Police

The Warren Police Department is headquartered next to City Hall, and there are plans underway to build a second, smaller substation in the south part of the City. There are currently 203 sworn police personnel and 37 civilian employees for a total of 240 employees. The department is in a continual state of upgrading and renewing its equipment and technology. Recently a large-scale renovation of the 911 dispatch center, which serves as a countywide backup system, was completed in conjunction with other law enforcement agencies. As a part of the project, technological upgrades were made to the 911 communication system. Other physical improvements taking place include renovations to the locker rooms and building security.

The Police Department also works within the community to build a strong bond with Warrenites. The Crime Commission, appointed by the Mayor (the Police Commissioner is an honorary member), consists of 12 unpaid members with a background in law enforcement, public communication, and education. They hold open monthly meetings attended by citizens, schools, businesses, neighborhood leaders, and department representatives. During these sessions, commissioners listen to community questions and concerns regarding their interaction with the police and report directly back to the department what they have heard. The commission sees it as their mission to study crime trends and make recommendations to the Mayor on how to reduce or eliminate crime, and develop citizen cooperation in law enforcement.

Moreover, the Police Department operates a citizen's police academy and a junior detectives academy, a yearly open house, and works with numerous college interns to broaden its outreach to citizens. They are also committed to the community policing, a practice of policing that works to build ties with the community it serves to help reduce crime.

Fire

Warren has six fire stations throughout the City. In 2010, the Fire Department re-established the Emergency Medical Service operating from all six stations. In two years, a new fire station is scheduled to break ground on Van Dyke, between Continental and Lozier Avenues. The service is free of charge to residents with medical insurance; the Warren Fire Department only accepts what the insurance company pays out. In 2007, four new 1500-gallon-perminute pumpers were purchased to replace outdated pumps. The new pumpers allow the department to extinguish fire more quickly while using less water. They can be found at 4 of the 6 stations.

From 2013 to 2018, Warren's Fire Department has won the American Heart Association's Mission Lifeline Award. The award recognizes emergency medical services (EMS) who can treat a particular serious form of heart attack on the ground (ST-segment elevation myocardial infarction, STEMI). Working in partnership with Ascension Macomb-Oakland Hospital, Warren Campus cardiac care, and training EMS to identify the signs and symptoms of STEMI heart attacks, the Fire Department has been able to initiate treatment and bypass the emergency department to get definitive and immediate treatment to victims.

WATER

Water Source

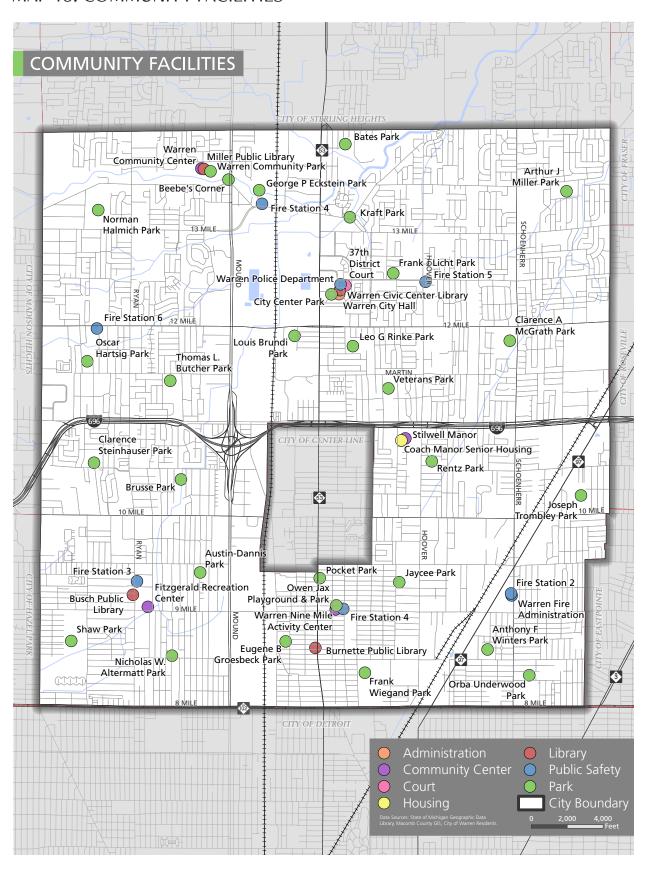
As of 2014, the City of Warren, like most of southeast Michigan, receives its water from the Great Lakes Water Authority (GLWA), which treats and distributes water from intake stations in Lake St. Clair and Lake Huron. Formerly, Warren received its water from the City of Detroit. The GLWA, formed after Detroit's bankruptcy, leases the infrastructure from Detroit and serves nearly four million people in 126 municipalities. The Board of the GLWA is comprised of Oakland, Macomb, and Wayne County representatives, two Detroit representatives, and a representative appointed by the state of Michigan from outside of metro Detroit. In a developed city, most if not all the residents are connected to the municipal water system and do not rely on wells.

Warren has also joined the Water Residential Assistance Program, a GLWA program that helps residents who earn 150% of the poverty threshold (\$36,450 for a household of four). Financial support comes in a variety of forms including help bringing a bill current, home water audits, plumbing repairs, and/or up to \$1,000 per year to help with the water bill.

Water Quality

The Engineering Division, a division of Public Service, is responsible for many infrastructure systems, one of which is sanitary sewer and the water mains. The 2017 Annual Water Quality Report results from testing show that together, the City of Warren and the Great Lakes Water Authority have delivered some of "nation's best drinking water."

MAP 15: COMMUNITY FACILITIES



Due to the Flint water crisis, Michigan's Department of Environment, Great Lakes, and Energy (EGLE) is tightening standards for the permissible levels of lead allowed in water and is setting a plan to replace portions of lead services lines starting in 2021.² The water was tested for lead, and no violations were found. The report does say that while the water does not contain lead, it can leach into water from lead pipes that go to homes. During the treatment process, corrosion control methods are taken to coat pipes and prevent lead or copper from leaching into the water.³ The City reports that there are no lead pipes on its properties, but the water department would like to start an educational campaign to find lead pipes in residential homes. The department would start by disseminating information to households about how to check for lead pipes.

Stormwater

Warren's stormwater system, known as a Municipal Separate Storm Sewer System (MS4), is designed to collect and convey stormwater through various means such as storm drains, pipes, ditches, etc. In 2012, the City of Warren completed a Stormwater Management Plan (SWMP) intended to reduce pollutants to MS4s, implement best management practices, demonstrating when goals are met, and their subsequent environmental benefits. Public education, illicit discharge elimination, construction stormwater runoff control, and postconstruction stormwater control are a few of the major elements of the program.

The Public Education Program was developed by the Clinton River Watershed Council and customized to reflect Warren's particular jurisdictional needs. The City promotes such stormwater educational activities through its website, cable station, quarterly issue of Newsbeat magazine, and other available publication sources.

The Illicit Discharge Elimination Program is an on-going effort consisting of monitoring permitted outfalls, dry weather screening, tracing illicit connection identifiers to their source and responding to complaints of illegal activity and dumping. The program has been very successful throughout the past years, resulting in finding and elimination of several illicit connections. The City staff is also actively working with the office of the Macomb County Public Works Commissioner and Macomb County Health Department to continue monitoring and tracing activities and coordinating efforts to find any possible new illicit connections or other pollution sources that could degrade the receiving bodies of water.

The 2012 Stormwater Management Plan strengthened the City's efforts toward construction and post-construction stormwater management for both new developments and redevelopment projects. Many of the actions are led by the City of Warren, through city ordinance, and implementation of best practices that require stormwater management issues to be addressed in the development's design and enforcement of design details through the site plan review process. The City also set up a complaint hotline to route calls to the responsible governing body.

In addition to administering the appropriate design of private development, the City also performs regular inspections of over 300 catch basins located within 43 municipal sites. The Division of Public Works cleans and maintains all storm sewers and open ditches located in the City's right-of-ways, except for those that are under jurisdiction of the Macomb County Public Works Office or the Michigan Department of Transportation.

Most of the development in the City of Warren occurred during the 1950s through 1970s. The majority of residential homes (approximately 45,000 to 49,000 homes) have footing drains connected to the sanitary sewer. During wet weather events, this additional flow of clean rainwater that does not require treatment contributes to maxing out capacity of the existing sanitary sewers and leads to basement overflows. The City explored removal of the footing drains from the sanitary sewer, and the cost estimates for such plan were estimated between \$500 and \$540 million. A pilot program for sump pump installations to remove the footing flows from the sanitary sewer was conducted. Approximately 60 households participated in this program and the program did not gain desired public interest or results to deem it effective for implementation.

Over the years, the City explored and studied several other alternative options of elimination of basement flooding. As a result, several new sanitary relief sewers have been recently installed and other collections system improvements are in various design phases, as outlined in the Waste Water Treatment Plan section.

Wastewater Treatment Plant

The City of Warren owns and operates one Wastewater Treatment Plant. The facility is located on the south side of Fourteen Mile Road, east of Van Dyke, and abuts the Red Run Drain. The plant was designed to process 36 million gallons per day but has the capacity to process up to 54 million gallons. There are no near-term plans for expansion of the existing waste water plant; however, the plant is continuously undergoing improvements or upgrades through numerous projects occurring throughout the year. To comply with the requirements of the National Pollutant Discharge Elimination System (NPDES), the City of Warren is working toward elimination of sanitary sewer overflows experienced during some higher intensity or duration wet weather events. As of February 2018, the City had spent \$20 million on installation of new relief sewers as part of a series of improvements, estimated to cost at least \$53 million. Construction of additional relief sewers in the Nine Mile sanitary sewer drainage district is scheduled to start in 2019. Additionally, a new 21 million gallon detention basin and various upgrades to the existing Nine Mile Pump Station are planned to occur between 2019-2021.

CIVIC CENTER & LIBRARY SYSTEM

The vision for the Civic Center surrounded by shopping and residences began in 1966. From that vision, the City Hall and main library were constructed in 2006 and the rest of the plans remains as just that—plans. In 2017, more movement was made when a conceptual site plan



Warren City Hall at night.





Renderings of new Civic Center
Source: Macomb Daily

was presented that includes a hotel, retail space, and luxury apartments to surround the City Hall. Known as Warren Town Center, it would be a walkable, mixed-use center.

Currently, City Hall is primarily an administrative center for local government, but its colocation with the library and its recent efforts to broaden its appeal to the public with a splash pad, sculpture, ice rink, and year-round programming in its "front yard" have brought many residents and visitors to the campus. These events have been largely successful and the subject of positive resident feedback.

In addition to the main branch, Warren's public library systems has four branches each equipped with computers, wifi, early literacy computer stations, and printing services. The main branch at the Civic Center features some special collections such as microfilm of The Detroit News and The Macomb Daily dating back to the 1960s. Friends of the Warren Public Library fundraise for the libraries and support the system as volunteers.⁴

As stated several times in the visioning sessions, residents remarked that south Warren has received less investment, and as a result has reduced access to services. Recently, the City has acted to combat years of disinvestment with new key public developments that provide essential services:

- » Owen Jax Recreation Center—built in the 1950s, facility renovated in 2010 with a new park area and parking lot upgrades
- » Busch Branch Library, 2017
- » New playscape at Trombly Park, 2018
- » Essex pocket park, a small green space that offers bike repairs, 2018
- » Maybelle Burnette Branch Library, mini police station, city hall annex—24-hour police station with a new high-tech library and special needs playground, October 2019
- » Beebe's Corner-pocket park, 2019

The relationship between the public and private sector is mutually beneficial and with that understanding, reinvestment from the public sector helps to spur revitalization in a neighborhood because it signals to the private sector that a location is ready for development.

EDUCATION

Primary & Secondary Schools

School districts are run independently of the City by School Boards that make decisions fully outside of local municipal oversight. While separately managed, a City that works closely with the School Board can only benefit, as the quality of school systems is an important factor for families choosing where to live. There are six public school districts in the City

in additional to 11 private or parochial schools and the three schools within the Macomb County Intermediate School District:5

- » Center Line Public Schools
- » Eastpointe Community Schools
- » Fitzgerald Public Schools
- » Van Dyke Public Schools
- » Warren Consolidated Public Schools
- » Warren Woods Public Schools

The largest school district is Warren Consolidated Public Schools, and just over half of the 24 schools have received the Michigan Blue Ribbon Exemplary School Award for all around excellence in curriculum, educational opportunities, and pathways to college or employment.⁶ On 2016, voters approved a \$134.5 million bond to improve its learning environment through technological and facility upgrades.

One of Warren's schools, Westview Elementary, originally built in 1958 and extensively renovated in 2007, has won several awards for the unique learning opportunities it provides. It offers an outdoor classroom for hands-on learning, and indoors offers the latest technology for efficiently heating and cooling the building, and adaptive spaces for different learning communities. It won the 2008 Michigan Association of School Boards "Educational Partnership Proved Successful" award along with many others.

Higher Education

Warren also has several options for higher education. These options include: Macomb Community College (South Campus), M-TEC (Michigan Technical Education Center), Wayne State University (Satellite Campus), Central Michigan University (Satellite Campus), Davenport University, and several trade schools.

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Westview Elementary School. Source: Partners in Architecture





Recreation space is an imperative part of residents' social and personal well-being. Often thrown into the vague, hard-to-quantify "quality of life" box, parks and recreation maintenance and development can be seen as a luxury when a City falls on hard times, under the theory that scarce resources can only be applied to activities with direct economic returns. However, this is beginning to change. For one thing, many communities are starting to understand that economic returns diminish, and sometimes disappear, as quality of life diminishes. For another, synergies in land use are becoming apparent between low-impact recreation lands and sensitive features or working landscapes which should be preserved. And finally, the public continues to raise its voice in opposition to cuts in spending: the Trust for Public Land saw that bond measures to acquire and conserve parkland and open space are approved over 75% of the time. Warrenites are no different. In spite of a waning park and recreation budget, residents voted in 2013 to increase property tax by one mill to improve the park and recreation system, reaffirming that government investment in recreation is a priority. The millage created a stable funding source to make needed capital improvements and provide public transportation to the aging population. The additional funding stream was not a cure-all, but these improvements can only happen with such demonstrated community support.

In the context of a highly-developed community like Warren, recreational needs are best understood, advocated for, and advanced by its nine-person Advisory Commission, 10 staff members, and many seasonal employees. This section therefore reviews the 2015 Park and Recreation Master Plan to incorporate the community's feedback and vision, the inventory assessment, and outline major issues and opportunities. The role of the comprehensive plan is to identify where these action items intersect with broader land use trends and community preferences, and to align the recommendations of the two plans.

2015 PARK AND RECREATION MASTER PLAN

In 2015, the City underwent a master planning process to update its inventory, re-engage the public's vision for the recreation system, and craft new goals for which to strive. During this process, the City distributed a survey, online and as a hard copy, and held eight focus group sessions with a wide range of groups:

- » Parks and recreation board members and Warren Community Center workers
- » Warren Kiwanis Club
- » Senior groups
- » Friends of the Warren Farmer's Market
- » Special needs groups
- » Recreation center users
- » Warren's religious leaders
- » Cousino High School Principal and student advisory group

Feedback ranged from more mundane maintenance requests such as restriping parking lots to more ambitious projects like installing an amphitheater in one of the parks. Most

recommendations concerned expansion or upgrades of already existing facilities or programs. Some commonly expressed ideas were extending farmer's market hours, hosting field trips to regional attractions (or more generally programming for youth and seniors), bringing wifi to the parks, upgrading the comfort stations, and improving connectivity and wayfinding between parks.

Findings from the 2015 & 2018 Survey

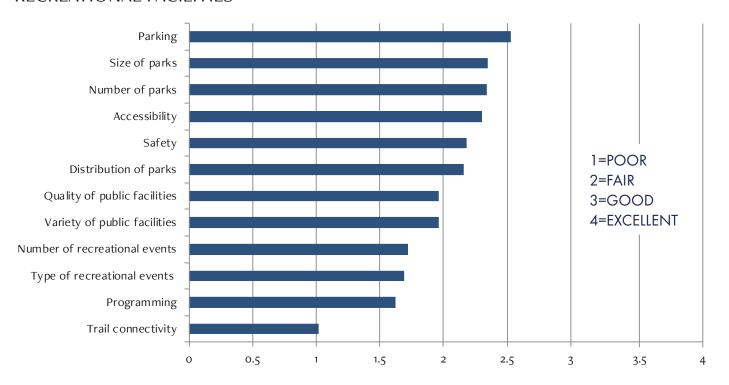
In a fully developed urban setting, one might be quick to claim that green space and recreation are of little value to city dwellers in comparison to commercial and industrial development. However, Warren residents' answers express quite the opposite. A large majority believe that parks and recreation improve health, make the City more desirable, increase community pride, and strengthen families, among other positive effects. In the 2018 community survey, "more access to nature" was the third most highly selected option when asked how residents would like to see Warren improved, chosen by about 28% of survey respondents. Survey participants were also asked to rate Warren's park and recreation facilities on a weighted scale of "poor" to "excellent." "Trail connectivity" received the lowest score, followed by "number" and "type" of recreational events. For the remaining eight characteristics, all of the final scores equated to "fair" quality. This is of critical importance to address because at best current funding will maintain park characteristics as fair, but any cuts will likely mean that they will fall in farther into the "poor" classification.

An important finding from the 260 community surveys submitted in the 2015 Parks and Recreation Master Plan was that safety and security, more than any other reason, affected users experience with parks and recreation activities: 90% of respondents recorded this issue as "very important." Following this response in close succession were "cleanliness" and "maintenance of facilities." It is difficult to say to what extent this prevents residents from using parks more often, but it appears that Warren parks and facilities are still well-used. More than 50% of survey-takers frequent recreation centers and playgrounds. Close to 50% use the aquatic center and over 40% user the picnic shelters, making the sites with these features popular recreation destinations: Halmich Park, City Square Park, Butcher Park, Veteran's Memorial Park, Licht Park.

INVENTORY OF FACILITIES

The City of Warren owns, operates, and maintains 27 parks, totaling almost 350 acres of land, and four indoor recreation centers, with a fairly even distribution throughout the City. Using the Michigan Department of Natural Resources (MDNR) pre-defined park classifications, five of them are considered neighborhood parks, and the remaining 20 are community parks. While the parks offer a range of sizes, facilities, and programming, they only represent two of the 10 park classifications. Some of residents' recreational needs may be met by the 17 state parks or recreation areas, two Huron-Clinton Metropolitan Authority Parks, and one county park within the region, but diversifying local park types could enrich the recreational experience in Warren. Below is a list of the parks that fall into each MDNR park category, their major features, and size in acres.

FIGURE 14: RATED CHARACTERISTICS OF WARREN'S PARKS & RECREATIONAL FACILITIES



Source: 2015 Park & Recreation Master Plan

MAP 16: RECREATION AND TRAILS

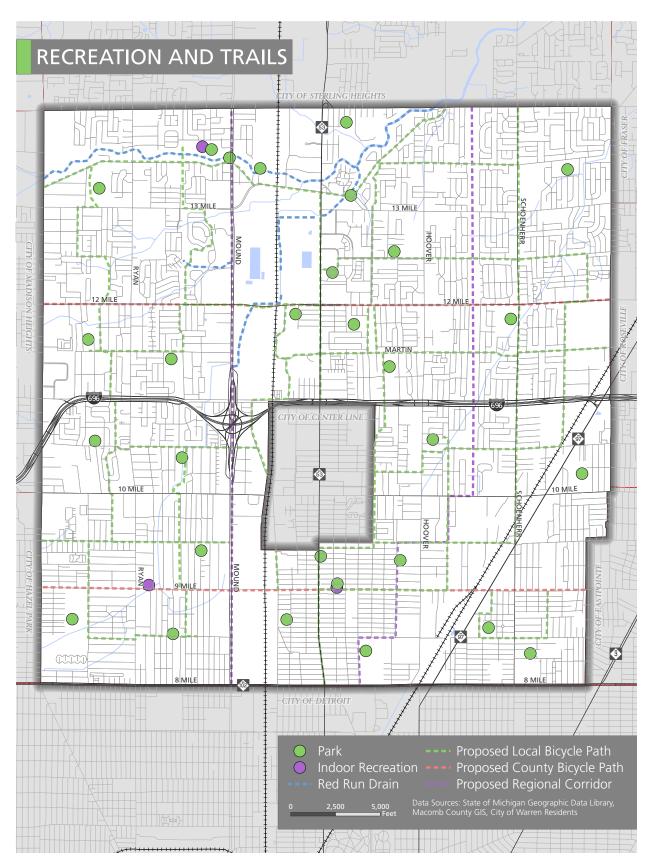


TABLE 14: MDNR PARK CLASSIFICATIONS

MINI PARK: Less than 1/4 mile in residential setting

NEIGHBORHOOD PARK: $\frac{1}{4}$ to $\frac{1}{2}$ mile distance interrupted by nonresidential roads and other physical barriers

Beebe's Corner Burdi Park Jaycee Park Eckstein Park Rinke Park Underwood Park Winters Park Bates Park McGrath Park Kraft Park Trombly Park Wiegand Park Groesbeck Park Miller Park Rentz Park Altermatt Park Licht Park Busse Park

Hartsig Park Steinhauser Park
Butcher Park Austin-Dannis Park

COMMUNITY PARK: Determined by the quality and suitability of the site. Usually serves 2+ neighborhoods and $\frac{1}{2}$ to 3-mile distance

Halmich Park City Square Shaw

Warren Community Center Veterans Memorial

SCHOOL PARK: Determined by location of school district property

Shaw ParkButcher ParkTrombly ParkEckstein ParkRinke ParkSteinhauser ParkLicht ParkMcGrath ParkWinters Park

LARGE URBAN PARK: Determined by the quality and suitability of the site; usually serves the entire community

NATURAL RESOURCES AREA: Resource availability and opportunity

GREENWAYS: Resource availability and opportunity

INDOOR RECREATION CENTERS: Strategically located community-wide facilities

Warren Community Center Owen Jax Recreation Center

Fitzgerald Recreation Center

SPECIAL USE: Variable dependent for special use

Community Parks

Community parks are the heavy lifters for meeting the residents' recreation needs. As mid-sized parks, their popularity usually lies in the diversity of facilities provided and their position among multiple neighborhoods. Unlike smaller neighborhood parks, community parks may serve as the go-to recreational spot for hundreds of households that can be reached on foot or a short car ride, depending on residential density. To fulfill that role successfully, community parks will offer an array of active and passive uses for everyone in the family to enjoy.

Neighborhood Parks

This is the hyper-local form of recreation. Small in size and reached typically by foot, these parks serve more of a respite from the built environment than anything else. They offer fewer amenities overall but are crucial components to a neighborhood because of their immediate accessibility. The experience tends to be more intimate because it is less programmed and has fewer users. The 2019 SEMCOG Park and Recreation Plan found that 42% of Southeast Michigan residents live within a 10-minute walk to a park, and those who do are five times more likely to visit.²

Indoor Recreation Centers

With Michigan winters, indoor recreation is essential for providing year-round recreation. In addition to providing a space where people can exercise, these centers are valuable for their social aspect. In these recreation centers, residents can hold meetings, social events, and program space to suit their needs.

Schools

School campuses play a huge role in providing recreation to the public because they expand the recreational footprint of the City but do not use general funds. In a City with a declining population and closing school sites, that land becomes a top contender to convert to public parks. Typically already well-situated in the center of neighborhoods and containing play structures and sports facilities in addition to indoor space, the conversion is relatively straightforward. The long-term planning of these facilities requires thoughtful coordination among the six different school districts cover the City, as many of the facilities are already shared between the School Board and the Parks and Recreation Department through a "Joint Agreement of Use of Facilities" contract. This agreement benefits the community at large tremendously as the indoor space provided by the City does not provide a high enough level of service for its population.

Parks are commonly located next to schools in Warren. Nine parks are either adjoin a school property, share a site, or were sold or donated to the Park and Recreation Department. Stated as a goal in the 2015 Park and Recreation Master Plan, the City will focus its efforts on expanding recreational opportunities through acquiring land from closed school districts with the ultimate goal of reducing the rate at which neighborhoods lose these valuable facilities.



Busse Park. Source: City of Warren

TABLE 15: COMPARISON TO STATE STANDARDS

FACILITY	SUGGESTED STATE STANDARD	STATE SUGGESTED NUMBER	WARREN NUMBER	SUGGESTED RADIUS	COMPLIANCE WITH STATE STANDARD
Badminton	1 per 5,000 people	27	0	0.25-0.5 mile	BELOW
Basketball	1 per 5,000 people	27	15*	0.25-0.5 mile	BELOW
Handball	1 per 20,000 people	7	0	15-30 minute travel time	BELOW
Ice Hockey	1 per 100,000 people	1	1	0.5-1 hour travel time	✓
Tennis	1 court per 2,000 people	68	12	0.25-0.5 mile	BELOW
Volleyball	1 per 5,000 people	27	13	0.25-1 mile	BELOW
Baseball	1 per 5,000 people	27	25*	0.25-0.5 mile	BELOW
Softball	1 per 5,000 people	27	25*	0.25-0.5 mile	BELOW
Field Hockey	1 per 20,000 people	7	0	15-30 minute travel time	BELOW
1/4 Mile Running Track	1 per 20,000 people	7	11 *	15-30 minute travel time	BELOW
Football	1 per 20,000 people	7	11 *	15-30 minute travel time	BELOW
Soccer	1 per 10,000 people	14	29	1-2 miles	✓
Golf driving range	1 per 50,000 people	3	Ś	30 minute travel time	✓
18-Hole Golf course	1 per 50,000 people	3	Several	30 minute travel time	✓
Archery range	1 per 50,000 people	3	1 (FH)	30 minute travel time	✓
Swimming pools	1 per 20,000 people	7	1	15-30 minutes travel time	BELOW
Skeet and trap field	1 per 50,000 people	3	0	30 minute travel time	BELOW

STATE COMPARISON

The Michigan Department of Natural Resources (MDNR), as a part of its guidelines, has published state standards for communities to compare against their own inventory. The state's standard ratio of facilities per population, dimensions of facilities, and distances to reach residents are suggestions that should be balanced against the needs and desires of the residents from community engagement. The table "Comparison to State Standards" should be read with slight reservation in some instances where the City appears to be "underperforming." In reality, the City works within a recreational system that is supplemented by school and private facilities and is not expected to meet all of its residents' needs alone. Only the City's facilities are evaluated because while they are in partnership with many entities, they only have control over the land they own. An analysis like this does not account for the nuance of residents' perspective. For example, the table shows that the City only provides two basketball courts when the state recommends 18 for its population size. Once schools are added, the City exceeds the state standard, and a resident with such a school in walking distance may not perceive a deficiency. Where possible, facilities that exceed the state standards once schools are included are called out with an asterisk (*). However, this analysis is still worthwhile because school facilities may not be open yearround to the public and would only be available for limited hours to the public, if at all.

PARKLAND ANALYSIS

Another well known institution, the National Recreation and Park Association, provides commonly used standards to gauge surpluses or deficiencies in parkland based on acreage per population. As with any set of standards, local context must take precedent over generalized number crunching, but if this methodology is accepted by the community, it becomes a helpful tool for tracking change over time and comparing to other cities. Based on their standards, the neighborhood park classification should equate to one to two acres per 1,000 residents. Using the median of 1.5 acres and a population of 134,000, there should be 201 acres of neighborhood parks. The City falls short by just 16 acres at 185 acres of neighborhood parks. For community parks, it is recommended that there are five to eight acres per 1,000 residents. Using the same formula, the City falls farther below the recommended 871 acres, providing only 167 acres of community parks. This number would be closer to the standard if the land adjacent to schools is converted to parkland, which is a part of the longer-term goals for the City. Due to the population of the City, conversion to or acquisition of land for parks should be at the desirable size for community parks of 25 acres or more to make up for the deficit.³ Aside from Wayne County, Macomb County offers the fewest park acres per 1,000 residents in southeast Michigan, providing just 23 acres compared to the region's 43 acres per 1,000. This finding means that the provision of parkland is more than a city-specific issue.4

TRAILS

Trails are a popular request from residents in major metros and smaller towns alike to connect the broken links in existing networks. According to the 2019 SEMCOG Park and Recreation Plan, 81% of survey-takers region-wide visit parks for "walking, hiking, or running trails."⁵ Almost all of the survey respondents from the Warren Park and Recreation Master Plan survey support a hiking and biking trail system. The difficulty in trail planning is the timing, assembling, and funding of land that often requires multi-jurisdictional or multilevel governmental cooperation. Currently, Warren has paved trails within parks but lacks a nonmotorized nature/walking/hiking trail network. One opportunity on the table is to take advantage of the parcel the City owns adjacent to the land that ITC owns to maintain its utility infrastructure. Near Fourteen Mile Road, Warren owns nearly a city block length of land next to the grassy ITC strip that would make a great start to a walking trail. The land is already well buffered from busy streets and could provide a relatively quiet and residential recreational experience. Other cities, even ones nearby like Novi, are working with ITC to use the land in a mutually beneficially way that still protects the utility towers but opens up green space for residents to use. Trails are often discussed in the context of recreation; but successful implementation of a usable trail network requires an approach more closely identified with transportation planning. Connectivity, right-of-way design, and multimodalism are paramount. Detailed trail analysis and recommendations are therefore presented in that chapter.

RECREATION PLAN LAND USE GOALS

The 2015 Recreation Plan identified an overall Plan Goal as well as a series of policies and action items addressing specific realms and topics. Those with a land use component are identified below. Other areas of focus, which are more closely under the sole purview of Warren Recreation, included: maximizing the use of existing sites and programs; expanding opportunities at each park in a prioritized manner; maintenance and landscaping programs; matching program offerings to changing demographics and preferences; serving those with special needs with appropriate programming, universal ADA compliance, and a "Field of Dreams" baseball field; increasing outreach and citizen input efforts; strengthening partnerships with public and private recreation partners, particularly schools; and sound fiscal practices. Another way to meet residents' recreational needs is to work with the local school system and healthcare system to create a ParkRx program. Known as park prescriptions, specific park resources are shared with these entities so they can be prescribed to clients for physical activity.

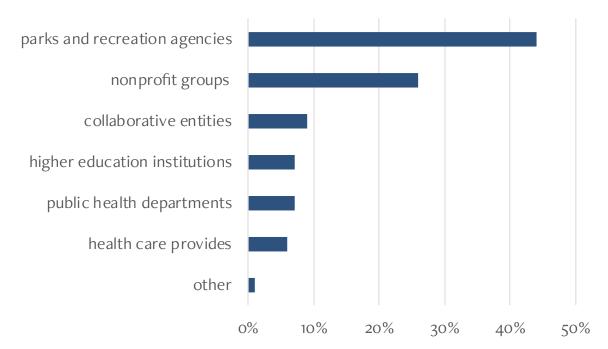
Land Acquisition

The Plan identified a general objective of acquiring additional recreation acreage citywide, and conversely preventing the loss of neighborhood parks. Neighborhoods that are not currently served by a park or elementary school should be prioritized, and the purchase of school sites as they become available is advocated.

PARK AND RECREATION PLAN GOAL

Enhance and increase the quality of life for Warren residents by providing a full range of recreation facilities and programs to meet their needs.

FIGURE 15: PARKS AND RECREATION PROGRAM PARTNERS



PARKS & RECREATION | 67

GREEN SPACE ACQUISITION

The results of both the 2018 Master Plan community survey and the 2015 Parks & Recreation Plan community survey clearly show that City of Warren residents desire more public green space and greater access to nature. Currently, a mere 1.5% of Warren is dedicated to green space. The Future Land Use Map (FLUM) of this Master Plan identifies parcels to be used as "green spaces," defined as city-owned, publicly accessible outdoor space. If the FLUM were fully implemented with the proposed green space expansion, the amount of green space available to Warren residents would triple to roughly 4.5%. Many of the expansion opportunities would come at little-to-no cost in terms of acquisition expense to the City of Warren, though it is acknowledged that maintenance obligations will incur future costs, some of which can be expected to be offset by increased property value. The City could acquire the following 266.7 acres at little-to-no cost, which would result in a 78% increase in green space and bring the City's total green space up to 2.75%:

No Cost to the City:

- » Moving City of Warren property from the Disposal Plant (24.5 acres) and the Waste Treatment Plant (16.2%) to Bates Park – 40.7 acres
- » Allowing public access to the City-owned section of the I.T.C. corridor by creating an access point on the south side of Fourteen Mile Road – 13.57 acres
- » Ensuring the public has access to the replanted area over the new stormwater detention facility once complete 9.36 acres

Minimal Cost to the City:

- » Negotiating with I.T.C. for access to the powerline corridor from Ten Mile Road to Fourteen Mile Road – 160.48 acres
- » Negotiating with Oakland County Water Resource Commission and the Army Corps of Engineers for access to property they own near the wastewater treatment plant – 33.48 acres
- » Negotiating with the Macomb County Drain Board for access to property they own along Bear Creek – 9.17 acres

Co-location of Public and Recreation Lands

Land that is already under the City's purview may be suitable in part or in full for recreation uses, especially low-impact trails. The area surrounding the wastewater treatment plant is an example of undeveloped land that could serve as access to nature with minimal investment.

Capital Improvements

The Planning Enabling Act (PA 33 of 2008) places the responsibility for Capital Improvements Planning with the Planning Commission, though it necessarily involves efforts across municipal government and that responsibility is frequently shared or delegated with departments, other boards, and elected officials. The Recreation Plan wisely tasks its department and commission with the development of a capital improvement program for each park site, including a yearly schedule. This allows Warren's adopted overall Capital Improvements Plan to address the City's recreation needs in the most targeted and detailed manner possible. However, the Plan mentions programs, facilities, and park improvements, but not land acquisition. Planning and budgeting are the best hope of securing this expensive item, and a joint effort would be needed carry it out.

South Warren Investment

Over and above the general directive to expand access to recreation in Warren is a specific recommendation to improve one or more park sites and to develop or upgrade an indoor recreation center serving the southern half of the City. This harmonizes with the City's planned investment in administrative facilities in that area, and with calls from residents both to invest in that portion of the City, and to invest in green assets more generally. As a part of the Civic Center South development, a new park is planned.

Nonmotorized Transportation

Pedestrian and bicycle paths linking Warren's recreation facilities with one another, with residential neighborhoods, and with the recreation facilities in other parts of the Metro Detroit region are recommended. Three locations are identified for a path over the Red Run Drain: between Ryan and Mound Roads; between Mound and Van Dyke Roads; and between Van Dyke and Hoover.

Iron Belle

Michigan's Iron Belle Trail is a pair of trails that extends more than 2,000 miles, across 48 counties, from the western tip of the Upper Peninsula to Belle Isle in Detroit. The portion of the trail that runs along the eastern part of the state, through Warren, is a biking trail, and the west branch of the trail is dedicated to hiking. The two trails join at the top of the lower peninsula.⁶ Coordinated and planned primarily by the Michigan Department of Natural

Resources, it is one of the longest state-designated trails in the nation. It is a momentous statewide effort that Warren is proud to be a part of, not only as a recreational boost for its residents but also the possible attraction of neighboring residents and tourists to the City.

SUMMARY

Warren's park and recreation system is on the rebound with the passage of the millage to fund some of the Park and Recreation Department's projects. While the parks are well distributed, the park types could be more varied to allow for diverse recreational opportunities. Capital improvements coordination can help ensure funds are available. Residents have expressed interest in a nonmotorized trail system. Plans are in the works at the county and state level, but completing large scale regional projects can take years. In the meantime, the City of Warren proposed expanding the bike lane network in 2015 to more quickly build out a nonmotorized system. These planned improvements are incorporated and, where possible, advanced in this plan. Land acquisition and investment in recreation assets located in south Warren are two areas where the goals of Planning and Recreation overlap, offering potential for synergy.

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Park pavillion Source: City of Warren





As the physical link that supports most of the movement in a community, transportation infrastructure is a fundamental component of city planning. Warren's intimate history with General Motors, which is now in an expansion phase at its global headquarters, has solidified the region's reliance on vehicular transit, to the detriment of developing a multimodal network. Increasingly, in a world where data and products arrive instantaneously (or at least by the next day), people expect to be able to move freely as well. And, the current path forward of congested thoroughfares are a barrier to that vision. Residents who attended the visioning sessions agreed that an ideal future for the City would be bikeable and walkable and have improved public transportation. This is also broadly seen by SEMCOG travel demand models that show that the annual average daily vehicle mile travel (VMT) peaked in 2007 and has since been declining; in every other county in southeast Michigan, VMT dropped between 2000 and 2012, except for Macomb County.¹

When the scope of transportation is broadened to include all that it touches—equity, access to services, jobs, and amenities, public health, land use, environmental sustainability—then investments that expand a network's reach are a win-win proposition. Road, transit, and nonmotorized networks will only grow in importance in the region with the 2040 projected employment and population growth.² With that in mind, transportation systems and the infrastructure they rely on must be treated with the weight that they warrant, even when it comes with a hefty price tag.

FIGURE 16: SEMCOG'S PAST AND EXPECTED FUTURE CHANGE IN POPULATION AND EMPLOYMENT



TRANSPORTATION AND ECONOMY

Michigan Department of Transportation (MDOT), the state agency responsible for planning and coordinating transportation projects, has a mission statement with the economy ingrained as a core element: "providing the highest quality integrated transportation services for economic benefit and improved quality of life." The 2035 MDOT goals acknowledge that strengthening the state's economy depends on reliable infrastructure as the backbone for moving goods, people, and services.³ It is somewhat easier to quantify the economic perks of a well-connected system, for example, the \$520 billion in freight that is carried annually on Michigan's highways, rail, and water ports.⁴ What's harder is quantifying the opportunity cost of inefficient or non-existent systems, and conveying the importance of implementing a system that people have little experience using, for example, a light rail system. A stagnating transportation system drags the whole region down. Consider Amazon's second headquarters bid that hundreds of cities went after: One of the top criteria for site location was a mass transit system not only for logistics to move their products, but bicycle lanes and pedestrian access. Imagine how many more potential opportunities could be developed or brought to Michigan with a more dynamic multi-modal system!

Train

Michigan's success as an industrial hub can be attributed to the freight system that connected its goods to the region and the rest of the nation. Moving freight continues to be its primary use, as there is no passenger rail service in Warren. The closest passenger rail stop on Amtrak is in Royal Oak and extends as far north as Pontiac and west all the way to Chicago, through key cities like Ann Arbor and Kalamazoo. Throughout the state, the rail system has approximately 3,600 miles of track. Four of the seven railroads operated are Class I, hugely valuable in terms of the sheer quantity of commodities moved: Class I rail lines are defined by the Surface Transportation Board as having annual operating revenue of \$450 million or more (in 2012 dollars).⁵ According to the MDOT Office of Rail, the rail system carries about 21% of Michigan's freight in tons and 23% of commodities by value.⁶ For what they were designed to do, they are tremendously successful.

The Canadian National Railway runs diagonally and parallel to M-97 through a commercial and industrial area of the City. While it is pretty well buffered by non residential uses, the train line and highway demarcate a triangular area that has been called the "forgotten corner." In this area, no community assets were identified, and housing assessment values are some of the lowest in Warren. This corner suffers from the same complaints that much of south Warren expressed in visioning sessions, but in addition has a double barrier separating it from other parts of Warren. This is the double-edged sword of transportation: when designed with people in mind, it is an asset; when it is not, it can become a physical barrier. On the other hand, the other train line runs north and south through the geographic center of the City and is almost entirely buffered by industrial uses, not impeding neighborhood continuity.

Bus

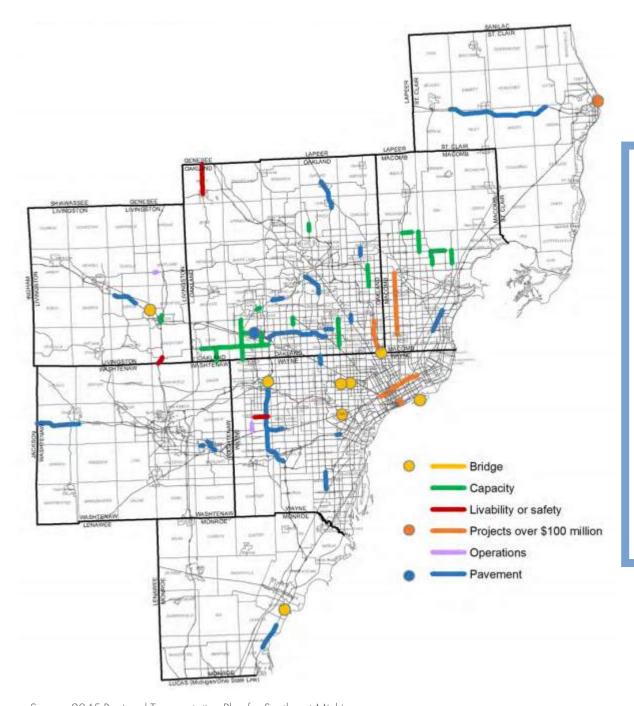
The importance of a strong bus network cannot be overstated. Buses are more flexible than other forms of public transit options, as bus lines can be altered to match changing commuter routes. One bus can potentially remove up to 60 cars from the road, helping to combat congestion and carbon emissions. Warren is a part of the Suburban Mobility Authority for Regional Transportation (SMART), southeast Michigan's fixed-route regional bus system. Seventy percent of the daily riders use SMART to commute to work, underscoring its economic benefits in connecting workers to employers.⁷ The value of this system is that its bus frequency makes taking SMART a viable option: the lines that run through Warren come on 30 minute intervals on week days. According to the Michigan Public Transit facts, in 2016, SMART had a total of 9.1 million passengers.8 While this may seem like a high number, SMART covers seven counties and is still not considered one of the nation's largest bus agencies by ridership. The American Public Transportation Association compiles data for transit agencies within 37 urbanized areas of 1,000,000 or more that operate 300 or more peak-hour buses, and SMART is not included.9

In the City of Warren, as of April 2018, 5,516 rides on average were taken daily on a fixed route, and as many as 15,000 rides are made annually to Warren and Centerline.10 Many of the bus stops were established thirty or more years ago. Constantly changing to keep up with travel patterns and building development, they generally run on major corridors and are spaced about a quarter-mile apart. If the number of boardings is high enough, SMART will install a bus shelter, taking into account requests from customers and local businesses. There is a park and ride location at the Sterling Heights Meijer on Van Dyke and Metropolitan Parkway, and unofficially at the Oakland Mall. A potential new park and ride lot may be added at the Meijer at Schoenherr and Ten Mile Road. In April 2019, it was announced that three new buses would be replacing 10-year-old SMART buses.¹¹

Eight bus lines run through Warren: four north to south, and four east to west. This represents quite an expansion; in 1997 there were only three buses serving the City.¹² Routes 710, 730, 740, and 760 run east to west connecting Warren to Farmington Hills, Southfield, and Royal Oak. Route 494 runs north and south along Warren's western border on Dequindre Road; routes 510 and 515 run down the center of the City on Van Dyke Road connecting Shelby Township to downtown Detroit; and route 530 runs along the east side of Warren on Schoenherr Road, connecting Lakeside Mall to downtown Detroit. As Detroit experiences a renaissance and expands as an employment hub, the north and south direct connections to the City makes sense. SMART and the Detroit Department of Transportation recently announced that they will make transferring between the two systems easier by eliminating fare transfers, and adding a payment app. 13

The trend of suburbanizing employment centers complicates regional transit. To be effective, bus routes cannot follow the spoke and wheel pattern that drives all workers to

FIGURE 17: 2045 RTP MAPPED PROJECTS, SOUTHEAST MICHIGAN



SEMCOG GUIDING PRINCIPLES

Provide planning solutions that support our unique and diverse region

Drive a dynamic, talent-rich economy

Steward environmental and cultural resources

Promote coordinated and effective public services

Educate and engage local leaders and residents

one spot; instead, it has to create a web that connects several dispersed key points. Job decentralization limits where and how workers, especially low-income workers, can find, access, and consistently get to work. SMART has a program called "Get a Job, Get a Ride!" that helps address this problem. For employers that participate, a complimentary 31-day pass (\$66 in value) is given to permanent, full-time employees that were hired within the last month. In Warren, eight employers participate in this program.

Commuting: The High Cost of Poor Public Transportation

Almost everyone in Warren commutes by personal vehicle or by carpool (95%). With few other alternatives, workers in Warren are forced to spend on average \$9,212 annually per car per household.¹⁴ The recommended budgetary allowance for transportation is 15% per household, but in Warren, households are spending 23% of their income, representing an inefficient use of time and money. This is tough on the pocket book, and also on Mother Nature: per household, Warrenites are pumping an average of 7.9 tons of greenhouse gases into the air per year.¹⁵ Sprawling land uses spurred by freeways, and by zoning regulations which are designed to create homogeneous neighborhoods by socioeconomic characteristics, have incurred serious personal and global consequences. Any chance at changing this reality will take regional and state planning, in addition to local government efforts, and shift in political and financial attention. Connect Southeast Michigan was a \$4.6 billion regional transportation plan for Wayne, Macomb, Oakland, and Washtenaw County that was rejected in 2016 and 2018 by voters. The proposal needed a majority of votes in each county to pass, and lost by a wide margin in Macomb County with only 40% of residents in support.¹⁶

SEMCOG

In the spring of 2019, SEMCOG published its Regional Transportation Plan, to pinpoint regional transportation issues and establish strategies through 2045. Road construction spending per capita is lowest in Michigan among other Great Lake states, and consequently SEMCOG spends less than other major metro regions. The plan identifies 174 projects estimated to cost \$36 billion over the next 25 years that implement SEMCOG's guiding principles. Most of those funds will go to pavement preservation but one of biggest projects that will take place is on Mound Road between Warren and Sterling Heights (discussed more later). The plan briefly touches on how new technologies are emerging quickly, such as driverless cars, that could have big implications for planning.

ROADS

Roads are the primary way to get anywhere, and because of their popularity (and Michigan weather), they deteriorate relatively quickly. When it comes to repair, the funds across all levels of government are generally inadequate to maintain roads in their best condition.¹⁷ It's not just Warrenites who are disappointed with the road quality—only 25% of respondents in southeast Michigan thought roads were in good/excellent condition.¹⁸ As SEMCOG points

out, transportation's finite funding is a zero-sum game: if the state or region allotted a greater proportion of funding to improving road quality, there would be less money for safety, bridges, and transit, components of the transportation system that are also of fundamental importance.

National Functional Classification

The National Functional Classification, developed by the Federal Highway Administration, is a classification system that designates which road types are eligible for federal funding. In addition to state and local funding, some roads can receive federal aid. Road types that are eligible for federal funding are major and minor arterials that carry vehicles for longer through traffic distances. Collector streets typically provide more access to properties than arterials and are primary connections between residential and areas and arterials. The descriptions of these road types are largely based on vehicular movement and efficiency.

Who Owns What?

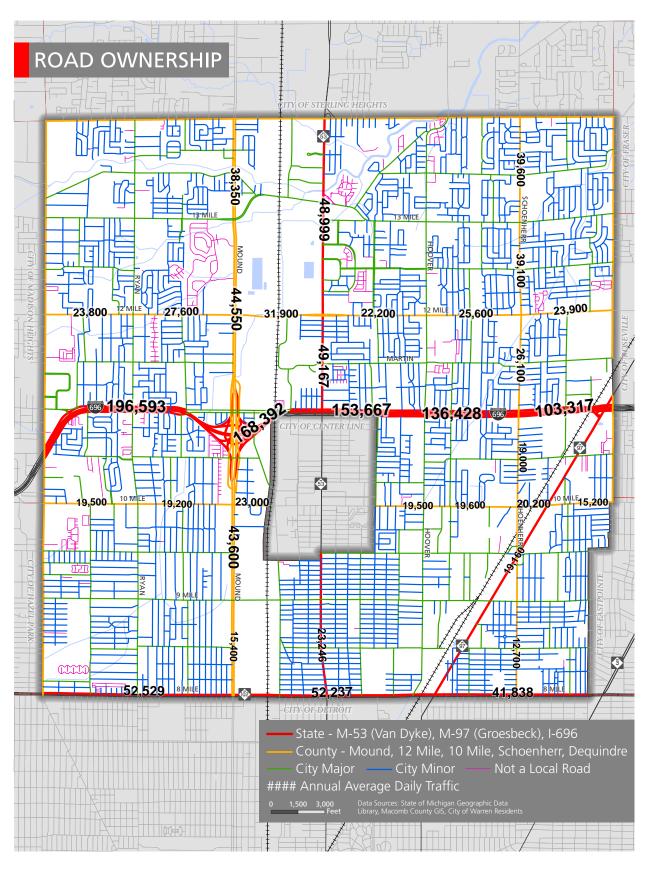
This section describes which level of government owns which roads, average road use, road quality, and recent projects scheduled or completed to repair them.

One particularly frustrating aspect of road maintenance for citizens is the multi-tiered system of ownership that makes it difficult to even ascertain which government or agency is responsible for a given road. The map "Road Ownership and Traffic Counts" shows that within Warren, roads are owned and managed on behalf of State, County, and City governments.

Road funding is even more opaque than road ownership. Over half of the respondents in a survey conducted by SEMCOG believed that road funding comes from local property tax. This is only part of the story. The primary source of road funding comes from the gas tax and vehicle registration fees that is deposited in the Michigan Transportation Fund. These funds are then distributed to municipalities throughout the state, and though some cities do supplement them with property taxes, such taxes are not the primary method of road funding.¹⁹ For example, although the City does not operate roads owned by other governmental entities, incorporated cities with a population of 25,000 or greater are required to contribute funds to state trunkline highways within the jurisdiction and for connections between city streets and the state trunkline system.²⁰

Tying road funding to gas taxes makes logical sense, since in theory it means that those who use the roads most are contributing the highest amount to maintenance. However, it is not a direct correlation because the equation is affected by fuel efficiency: under this scheme, revenue goes down as fuel efficiency goes up, creating the unintended consequence of an artificial tradeoff between air quality and road conditions. Coupled with long-term trends toward decreasing local support by both the State and Federal governments, it is clear that current funding mechanisms are not sustainable, and as a result, road quality is poor. Poor

MAP 17: ROAD OWNERSHIP



Corridors of Significance Designation

FIGURE 18: MDOT CORRIDORS OF SIGNIFICANCE

Source: MDOT 2035 Transportation Plan

road quality is conspicuous and quickly becomes a topic of discussion at visioning sessions. Universally, residents want to experience a smooth, safe, and efficient road network, and are frustrated with its deferred maintenance.

Pavement Surface Evaluation and Rating (PASER) is a commonly used visual survey that evaluates road quality. Cities use its rating system of "good," "fair," and "poor" based on the types of deterioration on a given road segment to monitor road conditions.²¹ The following sections address the related issues of use, quality, and projects for roads managed by State, County, and local authorities.

State Roads

USE: Roads that are heavily traveled will degrade in quality at a faster rate. MDOT tracks the average annual daily traffic on the roads it manages. I-696, as it was designed to do, carries the highest number of vehicles ranging from just over 103,000 vehicles entering the City from the east and almost doubling on the west side of the City to nearly 197,000 vehicles per day. M-102, Warren's border with Detroit, carries up to 52,000 vehicles, unsurprising as a road flanked by two large cities. The other two state trunk lines see far less traffic, but still in some instances carry the equivalent of one-third of the City's population: Van Dyke Avenue (M-53), north of Centerline sees an average of about 49,000 vehicles on a daily basis, and about half that number south of Centerline. This route connects the GM Tech Center to the Detroit-Hamtramck GM Assembly Plant. M-97, which runs diagonally in the southeastern corner of Warren, is the road less traveled, transporting about 19,000 vehicles on a daily average.

QUALITY: The state roads are in better condition than county and local roads, with one exception. The road segments that fall in PASER's "good" category are stretches Van Dyke Avenue, and while I-696 is ranked as "fair" by the 2017 ratings, it will soon be newly repaired and in good condition. Groesbeck Highway, while it carries fewer vehicles than the other state roads, is in the worst condition. Its proximity to the railroad and its mix of industrial and commercial uses suggest that it carries heavier trucks whose weight accelerates road deterioration.

PROJECTS: In MDOT's 2035 Transportation Plan, corridors of high significance were identified. There are 19 in total, 11 of which are national and international corridors, and eight of which are statewide; I-696 and M-53 are both included. These corridors were selected because of their supportive impact on the state's population and economy. Nearly all of the State's residents—93% of the total population—resides within 20 miles of these corridors.

Interstate 696, known as the Walter P. Reuther Freeway, runs 25 miles east to west, eight lanes wide, and connects I-275 to I-96 and I-94. Construction began in the 1960s, and decades have passed with only piecemeal repairs taking place. The 10-mile section of 1-696 that runs through Macomb County is being upgraded with pavement replacement on the mainline, shoulder, and ramps, in addition to drainage repairs for both directions.²² The repairs are estimated to cost \$90 million and be completed in winter 2019. Due to be repaired are 600 drainage structures,²³ related to the severe flood the freeway experienced in 2014 when lives were lost, property destroyed, and cars abandoned on the freeway. MDOT closed down the westbound lanes in the spring of 2018 to begin work and is expected to finish in the winter of 2019.

County Roads

USE: County roads, while not designed with the same carrying capacity as state highways, still carry a large daily load. Ten and Twelve Mile Roads, running parallel east to west, carry between 22,000-32,000 vehicles per day on average in some segments, split evenly in both directions. Mound Road experiences a wider range of vehicular traffic depending on what section of the road is examined. Near Nine Mile Road, Mound Road sees about 15,000 vehicles, but heading north between Eleven and Twelve Mile Roads, there are closer to 44,000 vehicles per day as it approaches the interstate. Schoenherr Road sees the least amount of traffic with about 13,000 vehicles in the southern part of the City, reaching up to 39,000 north of Twelve Mile Road.

QUALITY: The county roads span the spectrum of conditions. Major sections of the county roads have fallen into disrepair. Most of Mound Road south of I-696 is in poor condition, whereas north of the interstate, the road is still in the fair category. The best sections of Mound Road surround the I-696 exchange. The only other major stretch of county road in good condition is Twelve Mile, east of Mound Road, but a decent proportion of them remain fair.

PROJECTS: Repairs to the road system are always ongoing. In Warren, as of November 2018, six road projects were scheduled for Macomb County Improvement Projects. The repairs were concentrated to segments of E Twelve Mile Road (between Ryan Road and Van Dyke Avenue), E Fourteen Mile Road (between Ryan Road and Mound Road), and E Ten Mile Road (east of Groesbeck Highway).²⁴ Innovate Mound Road is an initiative that aims to transform the road into a state of the art corridor from 17 Mile Road to M-59. Estimated to cost \$217 million, the improved corridor would feature traffic flow improvements, better landscaping, unified lighting, smart technology, nonmotorized and multi-use paths, and improved transit stops. Currently Sterling Heights, Warren, and Macomb County are using various funds from federal to local sources to complete the project. The construction is scheduled to be begin in 2020 and last for about two years.²⁵

Local Roads

USE: Most local governments do not perform vehicular counts on their roads because it is a time and resource intensive process that typically surpasses a city's capacity.

QUALITY: Almost of all of the local neighborhood roads are in poor condition. The striking juxtaposition in road quality between higher levels of government and local government

underscores how local budgets struggle to keep pace, particularly on the roads were residents live. The concentration of poorly maintained roads in the neighborhoods explains residents' consistent complaints, as this could affect the safety of their family members, the value of their homes, and the condition of their vehicles.

PROJECTS: The City of Warren has prioritized major and local roads in the 2019 budget. To keep up with road repairs, a 2.09 millage was renewed in 2016 for five more years, a testament to its level of significance to the public. The recommended budget for local streets is \$4.5 million for the fiscal year, which represents a negligible increase from the prior year. The budget is publicly available and lists which road segments are due for repairs.

TRANSPORTATION TYPOLOGIES

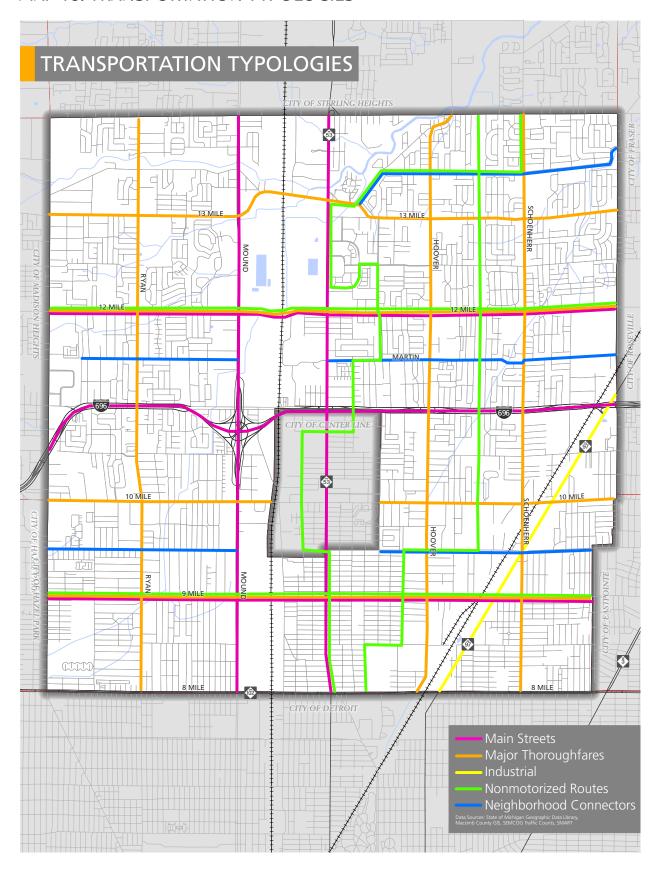
The National Functional Classification system loosely defines roads based on their function within the community, such "arterial" roads which are vital to the entire community and "collector" roads to which neighborhood traffic is routed. This approach has the specific, narrow goal of increasing efficiency for movement of passenger vehicles. While this reflects our current understanding of the purpose of a road, the historical context suggests a much broader role in the public realm. Roads are the circulation system for people, goods, and services; civilization's oldest routes have continued to do so through a never-ending array of innovation in transportation modes.

The focus on "efficient throughput" of vehicles has missed the street's other users altogether. This can be seen, especially in Warren, where speed limits are continually increased on their major thoroughfare, making any effort for nonmotorized paths alongside vehicles even more difficult. The concept of Complete Streets, in its most basic form, simply means a thoroughfare which is designed to accommodate the entire spectrum of its expected users: pedestrians, bicyclists, motorists, and public transit users of all ages and abilities. Such design anticipates an understanding of those users, their needs, the physical characteristics of the roadway, and surrounding land uses and development intensity. The first step toward designing roads this way is often for the governing body to formally adopt a Complete Streets policy. This was done by the State of Michigan in 2010, by the City of Warren in 2012, and by Macomb County in 2014. Local municipalities within the region that have also adopted ordinances, policies, plans, or guidelines promoting Complete Streets include Detroit, Hamtramck, Ferndale, Berkley, Clawson, and Sterling Heights. Michigan is a leader in the nation for number of complete street policies (approximately 100), though only a portion of them have successfully implemented elements.²⁶ This is the case for Warren - the City successfully adopted a Complete Streets policy via resolution, though the elements of the policy remain to be incorporated into everyday practice. The next step toward a street system that is designed for all users is for the City to establish a Complete Streets Commission to review all road projects. Additionally, because there are so many communities in Michigan with Complete Street policies, it is crucial for the long-term regional vision to entail careful planning for coordinated networks.

ELEMENTS OF COMPLETE STREETS

- » Sidewalk bulb-outs
- » Mid-block pedestrian crossing and refuge medians
- » Bus shelters and dedicated bus lanes
- » Protected bike lanes
- » Cross walks with countdown timers
- » Public lighting
- » Benches and landscaping

MAP 18: TRANSPORTATION TYPOLOGIES



Transportation typologies are a way of describing roadways which take these considerations into account. This system can provide more specificity when it comes to developing dynamic streets, and from a planning perspective are more useful to consult prior to development.

Main Street

As the name plainly states, this is the principal street of activity in a city, typically the heart of the downtown. Main Streets have vibrant streetscaping that are designed to handle multimodal transit and be conducive to business owner's needs (like product delivery). Warren does not have a traditional main street because it does not have a tradition downtown. Van Dyke Avenue, between Eight and Nine Mile Roads or between 12 and 13 Mile Road, and Common Road which connects to the backside of the Civic Center could be good contenders for a main street due their adjacency to the Civic Hall, GM Tech Center, and proposed development plans to build up commercial, entertainment, and denser housing

A common development pattern is for a community to grow along a major State thoroughfare, which then functions as its Main Street. In this case, the right-of-way serves somewhat competing purposes to two distinct entities. This ownership model poses some challenges for cities whose major thoroughfares are a first impression to visitors and carry thousands of vehicles per day, but have little say in its design or condition. For instance, if Warren wanted to perform a road diet on Van Dyke Avenue near its Civic Center in order to shape the public realm into a welcoming site for pedestrian-oriented commercial and recreational activity, the project would ultimately proceed at the discretion of MDOT. While this agency does espouse a commitment to Context-Sensitive Design, its decisions have long been directed by values of efficiency and throughput. It is not unprecedented for government to collaborate and modify a road's capacity and use to benefit a local community, but does require an additional layer of review before implementation can begin.

Users: public transit, car, pedestrian, bicycle, truck

Recommended elements: crosswalks, pedestrian signals, wayfinding, transit stops, bicycle parking, on-street parking, benches, decorative sidewalks, lighting, buffers

Urban Center

Urban center streets are a part of the downtown. They are built to support intense development and provide access to mixed uses. If Common Road were to become a main street, supporting urban center streets could be the Civic Center's internal network such as Kennedy Circle, City Square South, Town Center, New Horizon Blvd. They would be designed to accommodate all modes of travel, parking, and trucking needs of a downtown.

Users: public transit, car, pedestrian, bicycle, truck

TABLE 16: TRANSPORTATION TYPOLOGY EXAMPLES

Main Street example: Ann Arbor, MI Urban Center example: Woodward Avenue in Detroit, MI Commercial Street example: Ten Mile Road Industrial Street example: Hoover Road Residential Street example: Wagner Avenue Neighborhood Connector example: Frazho Avenue

Recommended elements: crosswalks, pedestrian signals, wayfinding, transit stops, bicycle parking, on-street parking, benches, decorative sidewalks, lighting, buffers

Commercial

The primary function of commercial streets is vehicular mobility between residential neighborhoods and other collectors or arterials. They are often lined with freestanding and large-footprint retail, but could host other shops with shorter setbacks. This road type and the commercial parcels on it are often oriented toward automobiles but are not suitable for on-street parking. They may serve pedestrian and bicycle traffic, but often don't. Ideally, they reflect the character of the neighborhood while maintaining the desired level of mobility. In Warren, Mound Road or E Ten Mile Road would be examples that caters to convenience shopping, but could be upgraded with features that make other users feel comfortable on a fast-paced road.

Users: public transit, car, pedestrian, bicycle, truck

Recommended elements: crosswalks, pedestrian signals, wayfinding, transit stops, bicycle parking, lighting, buffers

Industrial

Industrial streets highly value mobility and accommodate the movement of freight. Without on street parking, speed limits are higher than on comparably sized streets. Parcels are typically much larger than in residential or commercial areas with large setbacks, and there is ample parking for employees, trucks, and semis. Hoover Road (between Toepfer Road and Hupp Avenue) is an example of an industrial street.

Users: public transit, car, truck

Recommended elements: crosswalks, pedestrian signals, transit stops, nonmotorized path, lighting, buffers

Neighborhood Connector

The primary function of this street type is access to neighborhood commercial properties and multi-family housing. They may serve as connections between neighborhoods and arterials so must balance neighborhood character with mobility, although mobility is secondary to access. They may offer street parking to supplement off-street parking, and also pedestrian and bicycle lanes to connect neighborhood commercial uses. While Warren's zoning does not permit many smaller-scale commercial uses, the users and recommended elements remain the same. Warren roads do not fit squarely into this category because the subdivision style development and cross connections are not built this way. Frazho Road west of the I-696 interchange connects single-family and multi-family residences to Ryan Road, which

hosts some convenient commercial businesses (CVS, Tim Hortons, Comerica Bank). An engineering study from 2013 points out that Masonic, Stephens, and Martin Roads could serve a multi-modal function because they are quieter roads with limited parking that would keep pedestrians and bicyclists safer.

Users: public transit, car, pedestrian, bicycle, truck

Recommended elements: crosswalks, bike lanes or nonmotorized path, transit stops, on-street parking, lighting, street trees

Residential

Residential streets provide access to individual residential properties for vehicles, bicycles, and pedestrians and play a role in defining the neighborhood's character. Their purpose is to carry traffic that originates and ends within a local neighborhood.

Users: car, pedestrian, bicycle

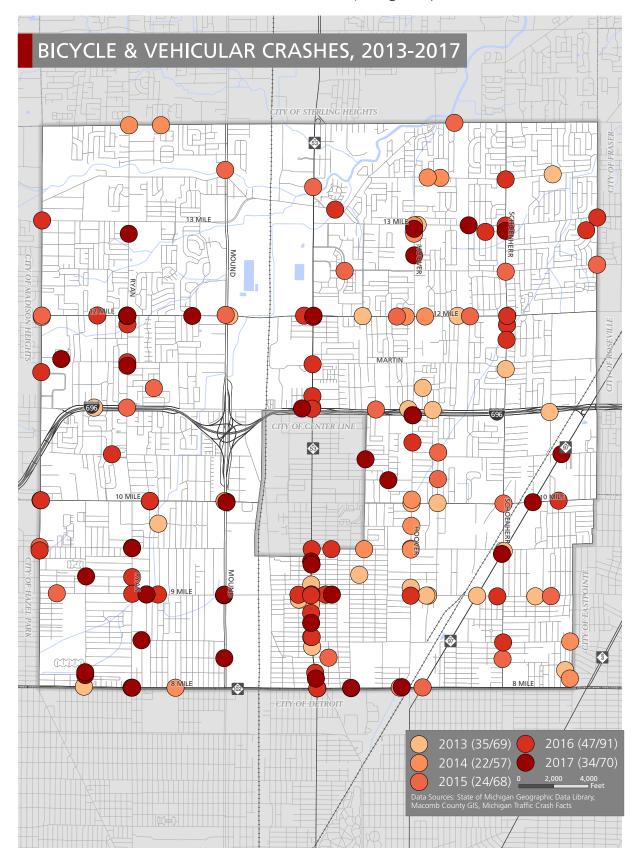
Recommended elements: crosswalk, shared bike lane, on-street parking, nonmotorized path, lighting, buffer (street trees)

Nonmotorized Infrastructure

The numbers suggest that those who take to the streets on foot or bike are risking their lives. A report by Smart Growth America called "Dangerous by Design" uses a pedestrian danger index (PDI) ranked the Detroit-Warren-Dearborn metro area 17th in 2016 out the top 104 largest metro areas in the U.S. The PDI is calculated as a ratio between the number of local commuters who walk to work and the number of pedestrian deaths. The report found that people of color and adults aged 65 and older are overrepresented as victims of collisions. The PDI also tends to ascend when income drops, and the rates of uninsured individuals rise. And unfortunately, pedestrian deaths are on an upward trajectory, ironically, as health providers encourage people to walk more for exercise.

As the name of the report explains, pedestrians are unsafe because the roads are not designed to include them, and they have limited other means to commute. Built for speed, often without the appropriate pedestrian safety features, pedestrians are in harm's way crossing a fast-moving street. The solutions lies at the intersection of policy, enforcement, and culture in addition to design, but "Complete Street" ordinances go a long way in protecting lives. Designing streets that force cars to move slowly around nonmotorized users can be lifesaving. At 30 mph the risk of death is 18%, at 45 mph the risk is 65%!²⁷ The concentration of pedestrian and bicycle crashes in Warren between the years of 2013-2017 exemplifies this trend; bicycle and pedestrian crashes are clustered along wider, faster roads such as Van Dyke, Twelve Mile Road, and Nine Mile Road. The numbers corroborate, even if ever so slightly, the "Dangerous by Design" report is finding, that the trend is getting worse. The

MAP 19: BICYCLE & VEHICULAR CRASHES, 2013-2017



MAP 20: PEDESTRIAN & VEHICULAR CRASHES, 2013-2017

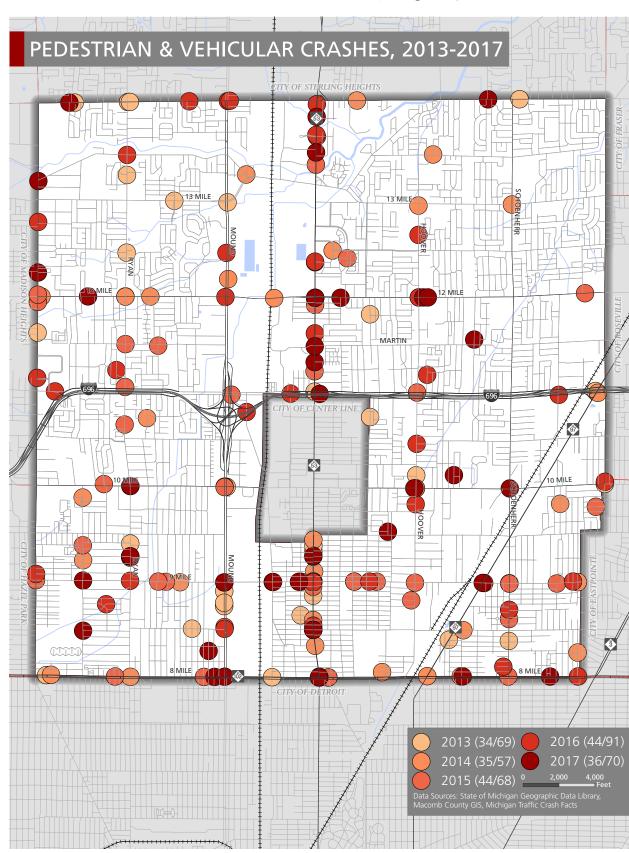


FIGURE 19: PLACE FOR BIKES COMPARISON

FERNDALE,

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insecurity that pedestrians and bicyclist face is substantial, enough to warrant re-designing the thoroughfares that are the biggest offenders.

For cities that were built to accommodate cars, incorporating bicycle and pedestrian infrastructure is not easy after the fact. But, it is not impossible. The built environment influences how we move. A lack of neighborhood sidewalks may mean driving somewhere that is in walking distance because it feels safer in a vehicle. Because much of Warren was built as a series of subdivisions surrounding major arterial roads, the infrastructure for walking or bicycling is not embedded in the City's origin story the way it is for cities that were developed pre-automobile. The tendency has therefore been for residents to forgo nonmotorized transit options because the routes suffer from gaps or are unpleasant for ambling. The immediate benefit of driving—convenience—in effect trumps the long-term harmful effects to our collective health.

The Macomb County Health Assessment uses behavioral risk factors as one of the indicators of the health of a community. In the County, over 25% of survey respondents reported no participation in a physical activity, one of the behavioral risk factors that greatly contributes to or exacerbates poor existing conditions. Some of the suggestions that came from focus groups, among many that are beyond the scope of a Master Plan, were to provide more and better-maintained sidewalks as well as community space for exercise. The demand for nonmotorized infrastructure from aging residents and Millennials is there. It's a matter of re-thinking how development is permitted and overcoming the impulse to dismiss sidewalks based on their current low use.

When bicycling is seen for more than a form of recreation, but part of a solution to problems of public health and environmental sustainability, it lends credibility to projects that are otherwise deemed too expensive. The nonprofit organization Places for Bikes has created a rating system to compare how cities fare across five factors: ridership, safety, network, reach, and acceleration. Warren received a low score of 1.2 on a scale of 1 to 5, but because there was insufficient data for the category of "acceleration," the score is lower than if that data were provided. The overall city rating is based on six data sources, and each factor (except for reach) is based on the current state of bicycling and perceptions of bicycling, receiving a weight of 80% and 20%, respectively. Each factor is then rated on a 5-point scale and weighted equally.

- » Ridership: how many people ride (ACS bike-to-work mode share, Sports Marketing Surveys, PlacesForBikes Community Survey)
- » Safety: how safe it is to ride (FARS fatality rates, Places for Bikes Community Survey)
- » Network: quality of the bike network (BikesForPeople Bike Network Analysis and PlacesForBikes Community Survey)
- » Acceleration: the degree that a community is doing what it takes to accelerate the growth of bike riding in the next three years (PlacesForBikes City Snapshot, PlacesForBikes Community Survey)
- » Reach: how consistently the bike network serves all members of the community (ACS data)²⁹

Warren's score suffers from low ridership (commuting and recreationally), poor connectivity, and safety. Using the same rating system and comparing to its neighbor, Ferndale, Warren is not so far behind on most of the indicators, except for plans to build up its network. Ferndale received its highest score of a 3.5 (out of 5) compared to the insufficient data provided on this factor in Warren.³⁰ However, because the rating process uses global standards of excellence, receiving a score at all means that a city has made an effort and is progressing. Even the highest rated cities in the U.S. have not surpassed an overall 3.5 rating. The City has an ambitious plan of proposed bike routes distributed throughout the City that when implemented will go a long way in making Warren bike-friendly. These already designated routes can become the recipients of incremental elements that work towards completing the street.

Trail Planning

Warren is located in a county that takes trail planning seriously and already has three trails: the Macomb Orchard Trail, MetroBeach Trail, and the Clinton River Spillway Trail. Macomb County's 2014 Park and Recreation Master Plan aims to expand its trail network and connectors using the definition from their Trails Master Plan as "routes that provide significant connections into the larger regional system and continuously traverse a considerable portion of the County in all directions." One of the county connectors runs east to west along Twelve Mile Road, connecting the GM Tech Center to other major

facilities like Ascension Macomb-Oakland Hospital, Warren Campus and Macomb Community College, South Campus.

The plan also identifies regional corridors that include primary routes that connect to built systems in adjacent counties and provide access to major regional sites. There are two regional connectors that cut through the City of Warren: one is along the Red Run Drain (from Warren Community Center to Madison Heights and Freedom Hill County Park), and the other runs primarily along the ITC corridor connecting to the Connor Creek Greenway and the Detroit River. The Warren Community Center is proposed as a staging area for the nonmotorized system with a parking lot and restrooms. Taking a step even further back, the ultimate goal is to be a part of the state-wide Iron Belle trail that starts at Detroit's Belle Isle park and traverses the state, through the upper peninsula to the Wisconsin border, of which a section is proposed to pass through Warren.

Local connectors, feeders to county or regional connectors, are listed as Van Dyke and various north-south routes that connect several of Warren's parks and schools. Warren is working on an expanded local network of bike lanes that connect the parks and cross the proposed county bike lanes along Nine and Twelve Mile Roads. While the City's sidewalk ordinance does not explicitly prohibit bicyclists from the sidewalk, a dedicated and protected lane is a best practice when building them. Bike lanes have many benefits in contributing to the "complete street" movement, encouraging exercise, taking cars off the road, and providing another viable source of transportation.

The cost of not providing safe connection is high, fatal in some cases. According to SEMCOGs Crash Location map, which collects yearly crash and injury data, there were no bicycle-related injuries reported in Warren; but in 2017 there were 22 instances where pedestrians sustained a minor, serious, or fatal injury from an accident. Dating back to 2013 when the data was first collected and mapped, this is an upward trajectory from 16 accidents. Some of the crash reports indicate that pedestrians were crossing major roads where there were no designated crosswalks for them.³³ Cases where pedestrians are struck by vehicles when crossing a major thoroughfare are easy to dismiss as accidents, but they also reveal a design bias—a flawed landscape that provides little opportunity for someone on foot to move safely among vehicles. Cities across the U.S. are adopting the Vision Zero platform that represents a philosophical shift from the status quo. Vision Zero's mission is to prevent pedestrian and bicyclist-related injury and death, placing more of the responsibility on road designers than its users.³⁴ Seeing as the status quo of street design has failed to protect all of its users, adopting a Vision Zero attitude and follow up would help promote these modes of transit if residents understood their safety was a top concern.

Iron Belle

Michigan's Iron Belle Trail is a pair of trails that extends more than 2,000 miles, across 48 counties, from the western tip of the Upper Peninsula to Belle Isle in Detroit. The portion of the trail that runs along the eastern part of the state, through Warren, is a biking trail, and

the west branch of the trail is dedicated to hiking. The two trails join at the top of the lower peninsula.³⁵ Coordinated and planned primarily by the Michigan Department of Natural Resources, it is one of the longest state-designated trails in the nation. It is a momentous statewide effort that Warren is proud to be a part of, not only as a recreational boost for its residents but also the possible attraction of neighboring communities or tourists to the City.

The trail is a patchwork of existing bicycle paths and lanes, sidewalks, and trails, and efforts are in place to connect the gaps. An existing hiking trail runs through Detroit, with several sections still proposed, to then become an existing biking path as it heads northwest, deeper into the metro Detroit area.³⁶ It crosses into Warren on Van Dyke Avenue, heading north and ending at the Warren-Centerline border, and does not pick up again until Sterling Heights. The proposed bicycle connection will meander north along Lawrence Street in Centerline, then zig zag through Warren along Arsenal Road, Martin Road, Lorraine Boulevard, Common Road, and the ITC Corridor, leaving the City and entering Sterling Heights.³⁷ Once the missing sections are completed, it could link Warren to state forests and to the North Country National Scenic Trail that starts in New York and ends in North Dakota.

VISION ZERO'S MISSION:

Prevent pedestrian and bicyclist-related injury and death, placing more of the responsibility on road designers than its users.



Bike trail in Warren. Source: City of Warren

The City is also working in cooperation with adjacent communities and continuously seeks funding to finance additional connectors to the Iron Belle Trail and the key facilities within metro Detroit region. Any successful financing and planning efforts for these collaborative trail developments should support this mission. In May of 2019, the City of Eastpointe, in partnership with the City of Warren and the City of St. Clair Shores, applied for a joint grant. If approved, the grant would provide funding for a feasibility study of a non-motorized project that would connect these three cities.

Electric Scooters

Electric scooters emerged as a new non-motorized transportation option in early 2018, though have not yet come to Warren. First devices were produced and distributed by startups such as Lime and Bird, and scooter users download a mobile phone app to locate an available scooter near them, then pay a flat fee to ride and an additional low-cost rate per usage time.³⁸ Flexibility in this transit mode comes from users leaving the scooter wherever their trip ends. Scooter users can reach speeds of up to 15 miles per hour, which adds to their usefulness and safety concerns.³⁹ The use of such on-demand transportation has been heralded as a transportation advantage by some, while others criticize them as a hindrance and a hazard.

Scooter startups claim that their technology accommodates trips that would otherwise be made by automobile, thereby reducing parking needs, automotive congestion, and fossil fuel emissions.⁴⁰ Supporters note that fuel cycle emissions from the electric scooters on a per-mile basis are far lower than carbon emissions generated from cars. Proponents also claim that scooters can complement other forms of mobility, such as buses, by allowing users to reach transit stations more quickly than they would by walking.⁴¹ On the other hand, critics claim that the parked scooters create pedestrian hazards and are unsightly on streets. Further, others claim that scooters on sidewalks create conflicts with pedestrians, while their use on city streets creates safety concerns.⁴² Electric scooters amplify the fact that there is inadequate infrastructure to suitably accommodate nonmotorized users. Currently, Warren prohibits mopeds, gopeds, and low speed vehicles by minors on sidewalks. Because they are so new, electric scooters are not accounted for, but could fall into the undefined category "low-speed vehicles" (section 37-703 of the Code of Ordinances of the City of Warren).

In early 2018, several cities in the United States instituted bans on electric scooters or regulations on their distribution. The legal capacity of municipalities to regulate their use however is still in question to some extent.⁴³ The City should consider how to incorporate electric scooters into the Zoning Ordinance, balancing the features of existing infrastructure and facilities with the need to connect to other transportation modes.

Safe Routes to School (SRTS)

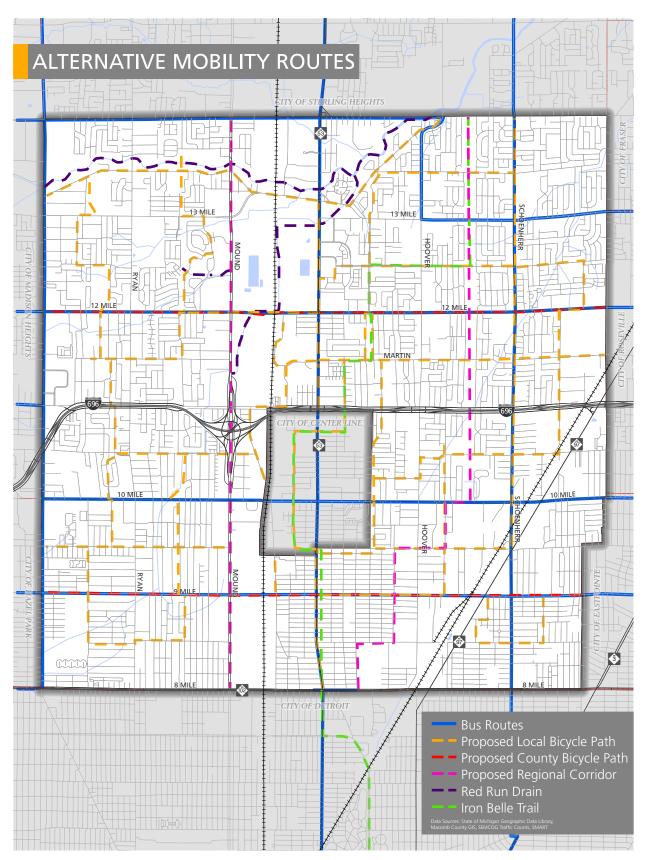
Safe Routes to School is a federal program that strives to make the journey to school safe, convenient, and fun for all children on foot or bicycle. Secondary to protecting children on their way to school, the initiative has other benefits of helping alleviate traffic and school rush hours and to reduce air pollution. It also presents an excellent opportunity to work on nonmotorized planning in a grant-funded way, and it is a good way for the City to work with schools in order to improve the child safety. Warren does not currently have any designated safe routes to school, but the state offers mini and major grants for schools with grades K-8 that apply for funding through the Michigan Fitness Foundation. Given the high volume traffic in Warren, the City and school districts should pursue this grant opportunity and should work together to submit an application on behalf of their children's safety.

TRANSPORTATION FRAMEWORK

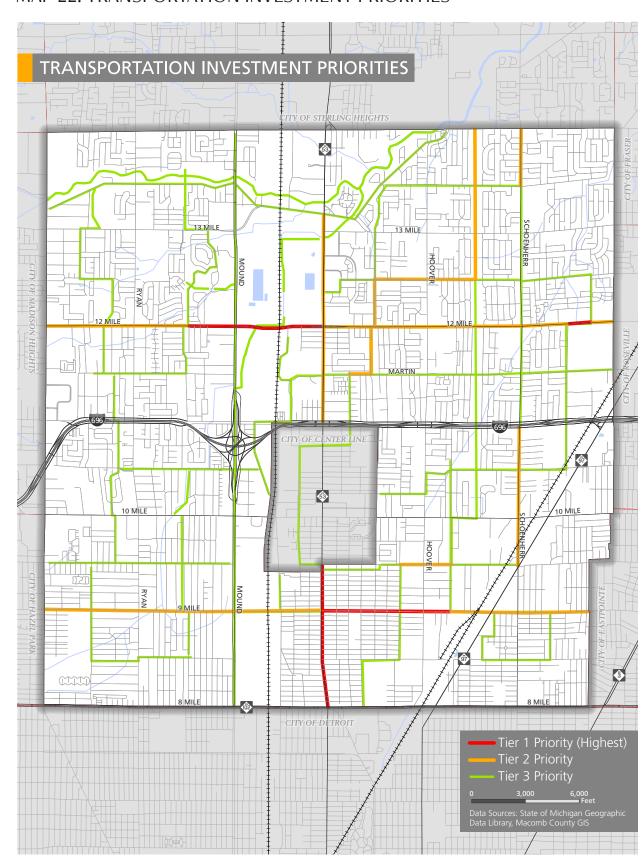
The transportation framework, visualized in the "Transportation Priorities" map, helps answer the question of what to do with all this information. The goal of compiling transportation data and inventorying different transportation modes is to determine where the City can get the biggest bang for its buck on transportation spending. The map "Alternative Mobility Options" illustrates where investment is best leveraged for all users. Each dotted line represents a form of transportation that is an alternative to traditional personal vehicular travel—either a bus line or a nonmotorized path. Where three or more modes align in the "Alternative Mobility Options" map, it is translated as a red line in the "Transportation Investment Priorities" map to signify the highest priority area. The logic stems from building on investment that is already scheduled to take place by other public entities in order to reap the rewards of collaboration and coordinated investment. For example, on Van Dyke between Eight and Nine Mile Road, a SMART bus route exists along with the proposed Iron Belle trail and local bike paths. With a confluence of planning and investment already being driven into this zone, any additional city spending here is more prudent and impactful than funds allocated to an isolated road segment. Because this stretch of road draws bus users, a high average daily traffic count, and eventually more nonmotorized users, investment here will also reach the most diverse group of users.

The second tier priorities, in orange, are generally linked to the red top priorities. Connectivity is the cornerstone of a good transportation system, so phasing investment that links to the highest priority is wise. Many of the orange segments run east and west to feed pedestrians, bicyclists, bus passengers, and vehicles to roads that have already received investment and can properly accommodate them all. Tier three priorities would be phased in last, and understanding that transportation infrastructure is a time-intensive endeavor, these investments could be decades down the line. However, the same logic follows: building on that momentum could spur highly visible and rewarding results.

MAP 21: ALTERNATIVE MOBILITY OPTIONS



MAP 22: TRANSPORTATION INVESTMENT PRIORITIES



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Non-motorized path
Source: City of Warren





The U.S. has long since broken the pattern of living and working in a factory town. Determining where people live and work is a complicated task in the modern globalized economy, as some could work remotely in Michigan for a company on another continent, others are self-employed at their home office, and most of us grind through the daily commute from one city to the next. The census survey records the industry of employment for a city's residents, which does not necessarily equate to the jobs that are available in that city. On top of that, it is no guarantee that a major employer would attract employees who have choices when deciding where to live. Therefore, it takes several different exercises to analyze what industries Warren worker's provide labor to (employed persons who live in Warren but may work elsewhere), where they commute for employment, and what types of jobs are offered in Warren. In this section, those who live in Warren and work elsewhere will be referred to as "Warren workers" or the "Warren workforce," whereas as those who work in Warren but live elsewhere will be referred to as "jobholders."

In addition to employment composition and commuting patterns, economic development for planning purposes is rooted in land use. The land use discussion largely centers on identifying vacant or underutilized properties, planning for their revitalization, and ensuring that zoning ordinances are not hindering business growth. The combination of the two—understanding the state of the economy and its relation to land use patterns—can pivot a city towards business and job growth befitting its regional context.

STATE OF THE ECONOMY

As of 2018, the overall economy is in a good place. The recent recovery has not been even-handed and some have benefited more than others in this prosperous period, but generally Michiganders are better off now than in 2000. The economic crisis started earlier in Michigan than the rest of the country; the lost decade from 2000-2009 had the worst unemployment rates in the nation, which made the state's current rebound harder than in other places. Between 2009-2016, however, Michigan has produced at pre-recession levels and has grown faster than the U.S. Some permanent damage was done: an estimated quarter million fewer jobs exist now and are unlikely to come back. Overall unemployment rates are low, even though in Warren the 6.2% unemployment rate hangs higher than all larger aggregate geographies by as much as 1.5%. If anywhere in Michigan is going to ride that wave to recovery (or crash), it's the southeast region, where some of the state's power house institutions reside and where about half of the state's population lives and works.

While the region forges ahead with job growth and declining poverty, the SEMCOG report "Partnering for Prosperity" found that there is a skill gap at every level in the workforce, referring to a mismatch between the training and/or certification deemed necessary by local employers and the skills that the workforce possesses. Part of the skill gap could be attributed to comparatively low education attainment levels. In comparison to other metro areas in the U.S., southeast Michigan lags on its percentage of persons with a bachelor's degree or higher.³ This could become increasingly detrimental to economic prosperity, as a college education is a minimum requirement for high-paying jobs in fields that are growing.

For decades, workers were able to find decent paying jobs with little education, but safe and steady jobs nowadays are more likely to necessitate a degree.

WARREN WORKERS

Employment Sectors for Warren's Workforce

Over half of Warren's workforce is made up of manufacturing (23.4%), education / health care / social assistance (19.4%), and retail trade (10.6%), practically mirroring Macomb County's workforce. This represents a fairly diverse workforce; in terms of industry distribution, workers are not too concentrated in any one field. A diversified workforce will help to mitigate the effects of economic slowdowns on the City of Warren, hopefully such that fewer people will experience unemployment, underemployment, evictions and mortgage defaults, and the other negative consequences of a contracted macro economy. Comparing these proportions to 2010, near the low point of the Great Recession, it appears that the retail sector did indeed provide some relief for a portion of workers in the manufacturing and education / health care / social assistance industries.

The Midwest needs no reminder that manufacturing has suffered over the last several decades, but despite its decline, Warren's locational advantage remains relatively strong when compared to national employment in manufacturing, which has languished at 10.3% of all workers. The higher concentration of manufacturing is likely to endure due to the infrastructure network and expertise in the region, but its absolute numbers may continue to slip. According to SEMCOG's forecasted jobs by industry, the "old economy" jobs in manufacturing are expected to decline, while the "new economy" jobs are forecast to grow. The distinction between the two economies describes how the U.S. has transitioned from the former, which can be generally described as land-intensive commodity-production, to the latter, which are knowledge-based industries that tend to trade services over physical goods. That shift chiseled away at southeast Michigan's economic base and is expected to continue: SEMCOG predicts that manufacturing jobs in the region will shrink by 27% between 2015-2045, for an estimated loss of almost 71,000 jobs. The 2019 news of General Motors laying off 14,000 workers affecting Michigan (including in Warren), Ohio, and Maryland aligns with this prediction.⁵ On the other hand, education and healthcare services are "new economy" sectors expected to grow by 6.3% and 28%, respectively during the same 30year period, which is good news for the one in five Warren workers already in that field.

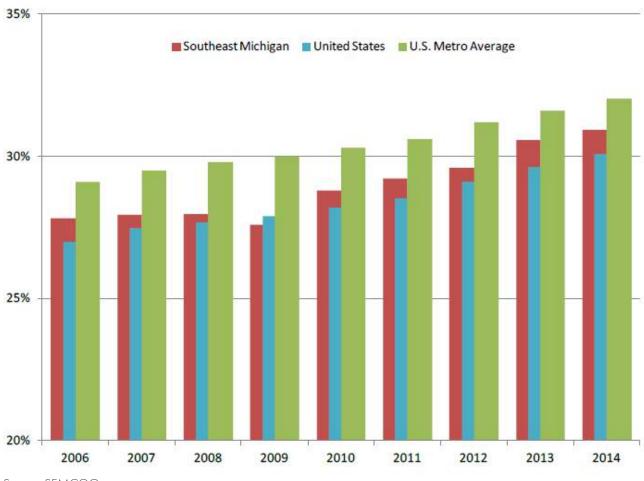
There is a caveat to the all forecasting: It's the best tool in our toolbox, but it comes with limitations. SEMCOG calculations are based on steady economic growth until 2045, although it is likely that there will be another dip in the market before then, but when and the extent of its effects are unknown.

Retail doesn't fit neatly into either "old" or "new" economy descriptions, but it is definitely experiencing disruption. Some researchers have coined the term "retail apocalypse" to refer to the nationwide shedding of brick and mortar stores. In 2017, an estimated 9,000 stores

TABLE 17: MAJOR EMPLOYMENT INDUSTRIES IN 2010 & 2017

INDUSTRY	% EMPLOYMENT, 2010	EMPLOYEES, 2010	% EMPLOYMENT, 2017	EMPLOYEES, 2017
Manufacturing	19.9	10,608	23.4	14,169
Education / Health Care/ Social Assistance	18.5	9,830	19.4	11,752
Retail trade	13.2	7,039	10.6	6,409

FIGURE 20: PERCENT OF POPULATION WITH BACHELOR'S DEGREE OR HIGHER



Source: SEMCOG

FIGURE 21: RETAIL VS. FOOD

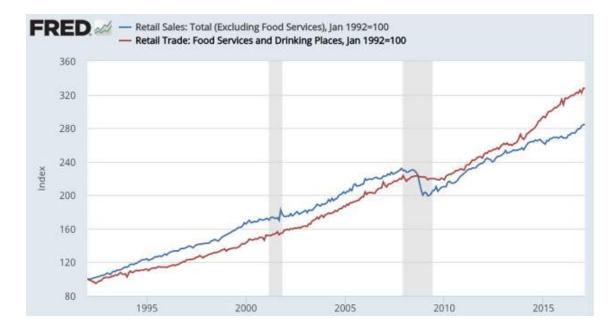
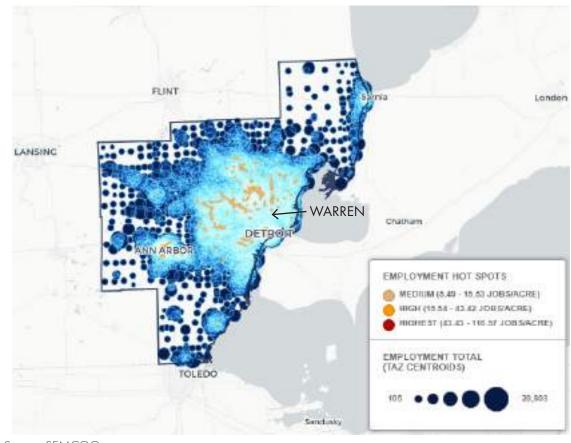


FIGURE 22: EMPLOYMENT DENSITY MAP



Source: SEMCOG

closed, including big brand name chains like Macy's, Sears, and J.C. Penney, and a 33% uptick was predicted for in 2018—outpacing the number of store closures during the Great Recession.⁶ The most prominent theories to explain the record-high closures are that people are buying online at greater rates; the U.S. over built mall space in the previous decades; stagnating wages leave people with less disposable income to shop; and preferences have shifted from spending on material goods to experiences, such as traveling and meals out with friends.⁷ Another potential contributor to declining retail jobs is automation. Meijer and Kroger have already implemented a "scan and go" system that has the potential to leave stores cashier-less.

The land use challenge presented by the retail apocalypse is daunting, because it is directly related to what many think of as "community vitality." For example, many of the participants at the visioning sessions requested a downtown hub of retail and entertainment, and survey respondents strongly preferred traditional downtown-style development over strip mall retail. In order to facilitate that in a meaningful way, the City will need to proceed with caution, recruit companies that are bucking this "apocalyptic" trend, and be open to emerging business uses.

Where Do Warren Workers Commute?

Most Warrenites are fortunate to not have to travel too far for work: over half travel less than 10 miles (54%). When they do have to travel farther than that, the greatest proportion heads due west, followed by northwest. Using SEMCOGs Employment Density heat map, jobs per acre are calculated by employment sector, which shows where Warren workers may travel to reach certain jobs. Outside of Warren (which already has one of the highest concentrations of manufacturing jobs in the region), a high concentration of manufacturing jobs are located northwest of the City in Troy and Pontiac, and directly north in Sterling Heights. Heading west, there are several employment hubs that attract workers: Southfield and Farmington Hills are employment hotspots for wholesale trade, professional, technical, and scientific services, and financial services, and Novi for retail trade.⁸ Detroit, primarily downtown, is the hottest employment center in the region with up to 116.5 jobs per acre. As of 2010, 11% of Warren workers were employed in Detroit, likely for jobs in finance, health care services, leisure and hospitality, and professional, scientific, and technical services.⁹

Wages & Business Development

The influence and impact of wages extends beyond the individual household level. In addition to seriously diminishing the quality of life for workers and those who depend on them, low wages tend to attract businesses that cater to and exploit low-income households. This pattern is obvious when observing low-income areas, where check-cashing, fast-food, and pawn shops cluster in comparison to higher-income neighborhoods. The reasoning behind where businesses locate is based largely on household income and purchasing power. Some cities understand this to mean that an effective strategy is to gentrify: attract high income earners to begin the inevitable process of pushing out poorer folks and the

"undesirable" businesses associated with them. This is not a thoughtful, practical, or equitable solution. First, it does not solve the problem. From a regional perspective, it is counterproductive for each municipality to plan on pushing low-income households outside of its boundaries. From a city perspective, removing unwanted businesses does not necessarily leave behind a building footprint that is conducive to better quality development or wealthier folks coming to take their place—absent an improvement in the overall economic environment, it may simply result in a vacancy.

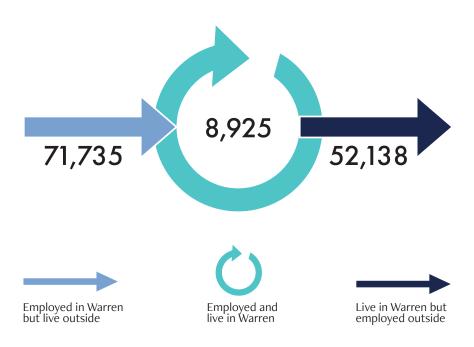
Despite their impact on land use, wages are outside the jurisdiction of land use planning, and municipal oversight in general (with some exceptions such as a livable wage ordinance). But there are some actionable connections. To mitigate inequitable effects of business development, the City can upgrade and enforce the standards along commercial corridors so that some parts of the City do not have diminished access to safe and beautiful spaces. In addition, business development incentives with a land use connection, such as tax abatements and real estate contributions, should be assessed against the criteria of improving prosperity for as many existing citizens as possible—not just a few potential employees or neighboring property owners, and certainly not with the chief goal of attracting outsiders. Rather, by adhering to as many good planning principles as possible rather than tailoring the City's offerings to meet the specific demands of an individual developer, these incentives can be used to achieve the greatest overall prosperity.

JOBS IN WARREN

According to the 1966 Master Plan, Warren was a major employment center in the metropolitan area, providing more than 45,000 jobs and projected to grow. It's not hard to believe its modern history began as an economic hub, considering that in 1950 General Motors built the \$200,000,000 Technical Center and accompanying offices there, and the population doubled for two decades in a row. Tied to employment centers is the high volume of commuters entering the City: as of 2015, 71,735 people came to Warren for work, 52,135 people lived in Warren and left the City for work, and 8,925 people lived and worked in the City. Those who hold jobs in Warren tend to travel a bit farther to get there, mainly from places north of the City. Almost one in five jobholders in Warren travel 25 miles or greater, some from outside of the region as far as Flint or Lansing.

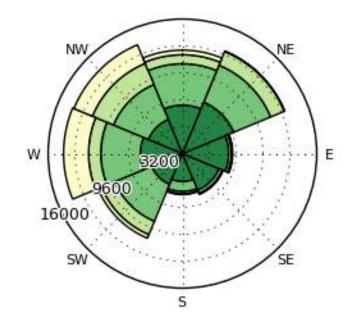
Also, a higher percentage of jobholders who commute into the City earn more than the workers who live in the City and commute elsewhere. In 2015, 58% of jobholders coming into Warren earned more than \$3,333 per month, compared to 39% who earned that amount by working outside of the City, meaning that the "daytime" median wage is higher than the residents' median wage. That many people coming to the City for a wage that is higher than the median household income (\$44,017), indicates that Warren does offer decent jobs. One potential problem is that the better-paying jobs seem to be more accessible to non-residents, give that over one-third of residents leave daily for employment, and the equivalent of half the City's population commutes inward for work.

FIGURE 23: COMMUTING PATTERN



Source: U.S. Census, LEHD

FIGURE 24: WARREN RESIDENTS' JOB DISTANCES



Source: U.S. Census, IFHD

CORPORATE **HEADQUARTERS**

Android Industries

Art Van Furniture

Big Boy International Restaurants

Cold Heading

Dana Corporation

Gardner-White Furniture

General Motors (20,000+ employees)

Futuramic Tool & Engineering

lafrate Construction

Iroquois Industries

Lipari Foods

Metro Credit Union

Proper Tooling Group

SuperSteel Treating

The Paslin Company

Warrior Sports

Wico Metal Products

ESRI Business Analyst's "Business Summary Report" records that in 2018 there were 4,176 businesses with just over 80,000 jobs in Warren. Similarly, the Census' On the Map platform reported that in 2015, there were 80,660 jobs in Warren, suggesting that business growth has stayed about the same in the last three years. Using the North American Industrial Classification System, ESRI's report shows that Warren jobholders are concentrated in the same employment sectors as Warren workers, but in different proportions. Professional, scientific, and tech services employ one-quarter of job holders in the City (24.9%), followed by manufacturing (12.8%), and retail trade (10.8%). Its position in the region and proximity to freight trains and interstates has attracted numerous corporate headquarters to the City.¹⁰

Manufacturing in Warren

The histories of General Motors and Warren are intimately linked, and investment in the 710-acre GM Technical Center and the Vehicle Engineering Center has cemented the longevity of its link to the City. On this site alone, an estimated 8,000 automotive engineers and technicians are working to design the future of GM vehicles. GM also announced in 2017 that it will investing another \$1 billion, part of which will be used to design a studio for developing autonomous vehicles.¹¹ Similar to a college campus, the Tech Center showcases how modern industry works: a variety of skill levels and educational backgrounds work together to create an innovative product. This is similar to typical new economy ventures like the campuses that "build" software in say, Silicon Valley, with a key difference being that the final product still needs to be manufactured. Three daily shifts of workers at Chrysler's

TABLE 18: TOP INDUSTRY: WORKERS VS. JOBHOLDERS

WARREN WORKERS		WARREN JOBHOLDERS	
SECTOR	%	SECTOR	%
Manufacturing	23.4% (14,169)	Professional, scientific, management, admin and waste management	26.8% (21,473)
Educational services, healthcare, social assistance	19.4% (11,752)	Educational services, healthcare, social assistance	16.3% (13,029)
Retail	10.6% (6,409)	Manufacturing	12.8% (10,234)
Professional, scientific, management, admin and waste management	10.3% (5,984)	Retail	10.8% (8,608)

Source: ACS 2016 5- Year Estimates and ESRI

Dodge City manufacturing complex produce 1,400 vehicles per day. It has been Warren's strength to modernize with industry and respond quickly to a changing economic climate. For example, the City successfully redeveloped the former 135-acre Detroit Arsenal Tank Plant within seven years to open for new business,¹² a precedent that will be helpful for redeveloping and repurposing properties throughout the City.

MARKET ANALYSIS

One way to gauge demand for products and/or services is to examine where and how residents spend their money. ESRI compiles consumer spending data by category, and then compares it to the national average. The table on consumer behavior shows where Warrenites are spending more than households nationally, though it is important to note that the choices recorded are just as much an indication of what is available as what is preferable. For instance, spending \$100 at a convenience store on a monthly basis may represent a preference for this type of shopping, or it may also demonstrate a dire need for better food access. Based on a consumer survey, data is collected on adults' "psychographics," a term used in market research to understand consumer's attitudes, aspirations, and buying habits. Relative to the country as a whole, buying American products is important to Warrenites. Warren residents also stated that price is usually more important than name brand, and that they tend to use coupons for brands they buy often.

When consumers leave the City to shop, a retail leakage ensues. A leakage refers to a sector that is losing money; in this case, it represents the money that leaves Warren to be spent in retail options elsewhere. For example, the "leakiest" retailer segments in Warren are clothing /accessory stores; electronics / appliance stores; and sporting goods / hobby / book / music stores, to the estimated tune of \$7,343,0273 in just those three sectors. The retail gap, or the difference between what is supplied and what residents demand, underscores the potential success certain retailers could have in such a large city. In contrast to "leaky" retail are the "surplus sectors:" retail sectors that draw customers from outside of the City. Where Warren flourishes is in motor vehicle and parts; furniture / home furnishings; health / personal care; food / beverage; building materials / garden equipment / supply stores; and gas stations.

Planning for economic development strategies should be data-driven. With this information, Warren is better armed for business recruitment, can better advise the inquiries of potential business owners, and can adjust permitted land uses to ensure that demands are properly accounted for in the Zoning Ordinance. For example, the residents' vision for local businesses in a walkable environment would be well-served by planning and zoning activities when the standards for location, dimensions, parking, circulation, and landscaping are purposely crafted to make that experience come to fruition.

TABLE 19: WARREN CONSUMER BEHAVIOR COMPARED TO THE U.S.

PRODUCT/CONSUMER BEHAVIOR	COMPARISON TO U.S*
Shopped at convenience store	+4
Bought/changed motor oil	+5
Fast food drive through	+6
Owns two TVs	+6
Owns a pet	+6
Household has no landline	+7
Spent less than \$500 on home computer	+7
Have a smart phone	+9
Drank cola	+11
Spent \$100 at convenience store in last 30 days	+12
Reads a daily paper	+18
Play video/electronic game	+21
Bought cigarettes at convenience store in last 30 days	+45

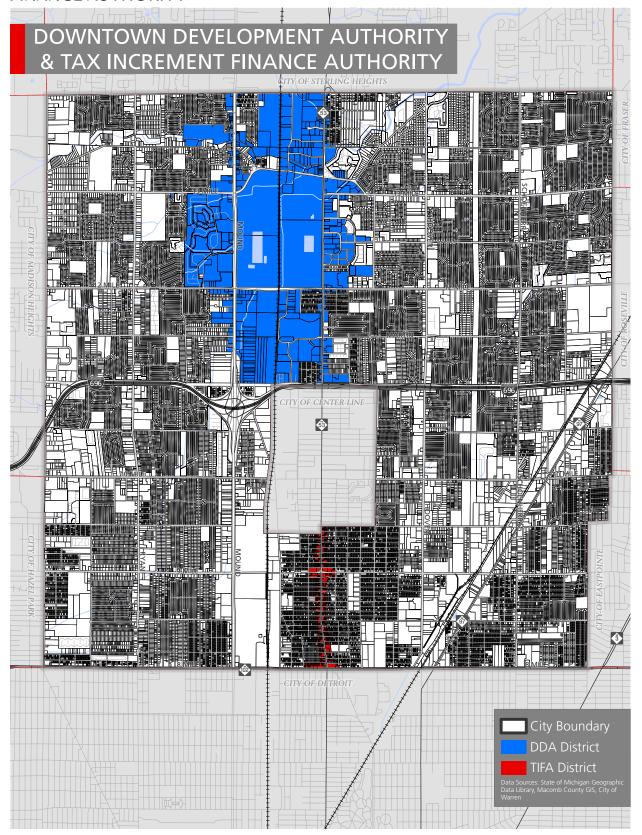
^{*} The column "Comparison to U.S." measures the relative likelihood of the adults or households in the specified trade area to exhibit certain consumer behavior or purchasing patterns compared to the U.S. where 100 represents the U.S. average. The consumer behavior that says "+4" means that in the Warren trade area means that consumers in this trade area 4% more likely to exhibit this behavior.

Source: ESRI Retail Market Potential

TABLE 20: WARREN RETAIL INDUSTRY ANALYSIS

INDUSTRY	SUPPLY	DEMAND	GAP	SURPLUS OR LEAKAGE
Clothing and accessories	\$26,941,492	\$71,665,376	\$44,723,884	Leakage
General merchandise	\$185,142,524	\$220,411,015	\$35,268,491	Leakage
Sporting goods, hobby, book, music	\$20,691,302	\$37,780,839	\$17,089,537	Leakage
Electronics and appliances	\$33,298,539	\$44,915,391	\$11,616,852	Leakage
Miscellaneous	\$42,177,816	\$52,882,586	\$10,704,770	Leakage
Non store retailers	\$18,262,702	\$26,596,953	\$8,334,251	Leakage
Health and personal care	\$ 1 <i>7</i> 1,95 <i>5</i> ,401	\$104,942,810	-\$67,012,591	Surplus
Furniture and home furnishings	\$72,353,238	\$46,140,692	-\$26,212,546	Surplus
Gasoline stations	\$265,075,083	\$167,686,856	-\$97,388,227	Surplus
Motor vehicle and parts	\$407,529,290	\$307,288,203	-\$100,241,087	Surplus
Building materials, garden equipment and supply	\$128,321,990	\$100,365,485	-\$27,956,505	Surplus
Food and beverage	\$350,166,434	\$256,735,388	-\$93,431,046	Surplus
Food services and drinking places	\$177,613,595	\$145,938,610	-\$31,6 <i>7</i> 4,985	Surplus

MAP 23: DOWNTOWN DEVELOPMENT AUTHORITY & TAX INCREMENT FINANCE AUTHORITY



DOWNTOWN DEVELOPMENT AUTHORITY (DDA) EFFORTS

A DDA is an authority that is enabled by the state to manage a pre-determined area known as the community's downtown district. In their inception, DDAs were intended to fund public improvements that create a vibrant and welcoming core in typically distressed areas. In Warren, the DDA boundaries go from Eleven Mile north to Fourteen Mile Road, encompassing the GM Tech Center and City Hall. To the west it extends to include Heritage Village but is largely bordered by Mound Road, and to the east, Van Dyke Avenue.

Another economic development tool is called Tax Increment Finance, which is managed by a Tax Increment Finance Authority (TIFA). A TIFA functions similarly to a DDA in that its boundaries are defined and is rooted in economic development. A TIFA has the power to authorize planned debt financing to be repaid by the future spike in tax revenues from new investment within a specific boundary. It is one of the few ways communities can jumpstart a waning tax base and focus the resulting prosperity in a contained geography. In Warren, the DDA and the TIF boundary do not overlap. Warren's TIFA was formed in 1986 on Van Dyke between Eight Mile and Stephens Road with the hope that public investment would spur private growth within its boundaries and the increase in tax dollars will be captured to repay the original debt. The mission statement reads that the TIFA is charged with eliminating blight, generating tax revenue, creating jobs, and raising property values.¹³ Any gains made before the initial debt is paid off are typically reinvested in infrastructure and general improvements to garner compounding positive effects.

TIF: Financial mechanism used to correct and prevent the deterioration of the downtown (or defined TIF district)

TIFA: The authority that manages the TIF. They are beholden to a Development Plan that outlines what projects will be completed within the TIF district.

<u>DDA:</u> The authority that manages the downtown district to help correct a market failure. If the TIF and DDA have the same boundaries, then the DDA can manage the TIF. The DDA is also beholden to a Development Plan so that money accrued is spent on projects within the district.

Source: Michigan Downtown Association

STRATEGIES

Town Center

The proposed Warren Town Center would take advantage of the popular and iconic City Hall's civic space and adjacency to the GM Tech Center. A key feature of this development is an eight-story hotel to accommodate the numerous visitors related to Warren's automotive industry, and its physical connection to the GM Tech Center by an above ground walkway across Van Dyke. Next to the hotel would be another anchor, a full-service grocery store, with spaces available for small- to mid-sized retailers to move in along the walkable Main Street. The retail analysis conducted prior to the site plan approximates demand for over 73,000 square feet of retail and restaurant space. Surrounding the town center would be 400-500 residential units, building up the necessary density to support these retailers. The buildings are considering office or residential space on the upper floors to develop a truly mixed-used core. This proposal goes far in accomplishing what many Warrenites voiced a longing for in the visioning session: a recognizable center. Additionally, zoning requirements that help make the Town Center a place that is inviting to people will be crucial to the successful development of the space.

Placemaking with Art

The Town Center would be one very visible way to create "place." Other placemaking endeavors can be dispersed throughout the City so there is a touch of vibrancy in all corners. Public art, because it comes in so many different forms, can be tailored to specific places and add color and interest that would intrigue visitors. Philadelphia has the oldest established program in the U.S., developed by the Philadelphia Redevelopment Authority (PRA) in 1959 through the Percent for Art Program, that requires developers building on land acquired and assembled by the PRA to use 1% of the total construction costs for an original piece of art.¹⁴ When the City of Warren issues a Request for Proposal for a site, it could add public art as a selection criteria to ensure that new buildings incorporate it. Instead of the shortsided thinking of "another developer requirement," consider that over half of Millennials and Generation Xs say that they strongly consider whether a community's art scene is rich before deciding where to locate for a job.¹⁵ In between major developments spawning new art, the City can work with creative nonprofits to develop temporary displays that feature local artist's work in City Hall and in parks, or work with Michigan Municipal League to convert under-used spaces into pilot spaces to test how design and art impact visitors' experience.

Van Dyke Corridor Study

Physical improvements are another contributor to economic development. The Van Dyke Corridor, between Eight Mile Road and I-696 in the TIF district, could use public investment that would create an enticing approach to the mixed-use development. The investment would be a win-win in that it polishes the public realm, improves the user's experience, and could motivate private sector investment along the corridor. The corridor study identified



Town center rendering



Public art installation in Philadelphia

Source: America for the Arts

pedestrian enhancements such as intersection crossing enhancements, refuge islands, access management, sidewalk improvements, and shared parking arrangements, among others. There was also a call to make the corridor more social, to make the route part of the attraction and not just a means to an end. The elements of sociability mentioned coincide with design principles that make pedestrians feel safer: lighting, fixed sidewalks, graffiti removal, green space, and improved appearance of store facades. A physical transformation could encourage walkability and drive more foot traffic to the retail hub. While the improvements make sense in the TIF district, it would also be worthwhile for the City to spend money enhancing the section of the Van Dyke Corridor near where the new town center is proposed. Similarly, an inviting approach could increase the number of people who will visit the new development.

FIGURE 25: RRC SELECTION PYRAMID



Redevelopment Ready Sites

Redevelopment Ready Communities® (RRC) is a program managed by the Michigan Economic Development Corporation as a voluntary certification designed to help cities attract investment and residents. To participate, the state agency requires that cities follow the RRC "best practices," which are based on improving planning, zoning, and development processes to signal to potential investors that a municipality has a thoughtful, practical, consistent, and efficient system for managing development. One important task on the list of best practices is to identify and prioritize sites that are vacant, obsolete, or underutilized in areas that have a large impact. The difference in this approach is that the process is community-driven, as opposed to waiting for the private market to come to the City with a satisfactory idea.

To start, a city of this size must first develop a process for identifying potential redevelopment sites. Department heads who regularly deal with property could form a Redevelopment Ready Certification subcommittee that includes planning, zoning, assessing, building, historic commission, DDA, and other relevant groups that are dedicated to meeting regularly to record and discuss problem properties. While an inquiry can be sent to all departments on potential redevelopment sites, this group would be the leaders and overseers of this project. Together, they would compile a list of sites that are vacant, abandoned, or for sale and assemble basic information such as the property owner contact information, square footage of the building or lot, zoning, and any details that a potential developer would want to know. A good place to start is with the City's property tax roll.

The sites for RRC should be selected by consensus, but the program offers some guidelines to start compiling promising candidates. Redevelopment possibilities can be a range of mis- or poorly-used parcels, including:

- » Vacant land
- » Surface parking lots
- » Former industrial sites
- » Brownfields
- » Historic rehab or adaptive reuse
- » Vacant storefronts
- » Vacant upper stories

Once the list is developed, the subcommittee can form a matrix of criteria that help determine the likelihood and rough timeline that a property could be redeveloped. Some examples of these criteria are:

- » Does the site already have utilities?
- » Does it require environmental clean-up?
- » Is the property owner local and have a good working relationship with the City?

After running properties through the matrix and scoring them, it becomes clearer which properties are low-hanging fruit and which will take longer. The subcommittee can then prioritize the sites, develop a preferred vision for each, identify potential resources and incentives to help complete that vision, and proactively market the sites to developers who would appropriately develop the space. This approach is designed to accomplish more desirable outcomes because it is community supported, well researched, and proactively targets developers with the expertise to complete such a vision.

SUMMARY

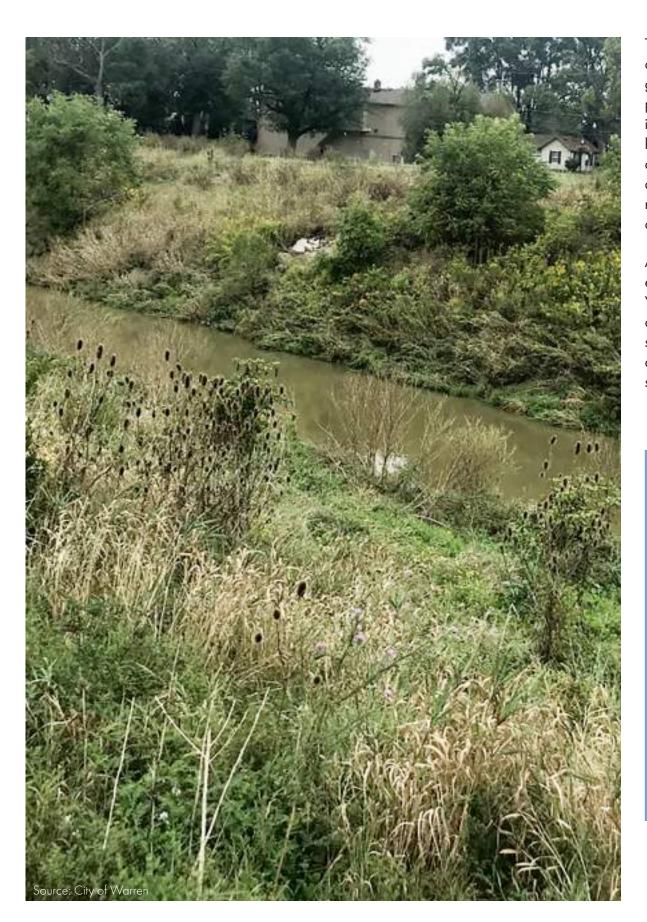
With a rapidly changing global economy, Warren must adjust to the trends, preferences, and practices emerging throughout the country. In terms of the local Warren economy, the City must ensure that the types of businesses permitted along commercial corridors include retail options that are in demand. Van Dyke avenue is a good place to start by targeting public investment along this corridor, starting closer to the proposed town center and moving outward along the corridor and in the TIF district. Warren might also consider using DDA funds to offer incentives to local entrepreneurs as a way to cultivate and retain talent such as providing training on how to write business plans, sharing relevant market and propertyspecific data with them, and providing financial incentives for the types of business the City wants to see develop.

The Redevelopment Ready Communities program offers prime economic redevelopment opportunities for Warren. The first step for the City is to compile a list of potential redevelopment properties and to assemble information on each site. Once this list is complete, Warren should create an attractive packet of information for priority sites and create a community visioning strategy for potential redevelopment properties. Once the community has established its vision for these sites, the City should market the sites to reputable developers who understand the community's vision and the market analysis.

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The term "resiliency" is most often thought of in relation to climate change, but a more comprehensive definition refers to how a community responds to shocks and stresses in general. Good planning will always address this as a matter of understanding future predictions and the necessary preparations for them. For example, the economics chapter identifies stressors such as stagnating wages that create under-resourced sections of the city, hindering quality commercial investment, and the challenge of filling vacant buildings. It also addresses shocks such as the lingering impact of the Great Recession on the housing market and the "retail apocalypse." Socially, the demographic and economic divide between north and south Warren shown in indicators such as housing value, income, and race is a community stressor that becomes harder to solve as the divide becomes more entrenched.

At the time of this writing, it is indeed the environmental dimension that is expected to experience the greatest degree of unanticipated, and in many cases unwelcome, change. Yet it is important to understand that the effects of systemic disturbances are not limited to only one of these systems. The complexity of the problem is the interrelatedness of these systems, offering the potential for a domino effect of sorts if a shock is forceful enough to degrade all systems at once. On the flip side, the advantage of such all-encompassing shocks is that solutions can have the same wide-ranging results in a positive direction.

DEFINITION OF RESILIENCY

Community resilience measures the sustained ability of a community to utilize available resources to respond to, withstand, and/or recover from adverse situations." It refers to the ability to adapt quickly to change in a way that includes the most vulnerable people and structures. By 2050, if migration trends continue, 75% of the global population could live in cities, while climate change is expected to worsen.² It is incumbent on cities to prepare for what is predicted to come their way because the problem is comprehensive in scope with long-range and mighty impacts—a perfect storm that planners are trained to handle.

Source: The Rand Corporation

ANTICIPATED CHANGES: EXTREME HEAT AND FLOODING

Significant changes to the Earth's climate have already been detected, according to climate scientists. The Great Lakes Integrated Sciences and Assessment Program (GLISA) is funded by the National Oceanic and Atmospheric Administration (NOAA) and has predicted that precipitation will increase and will be concentrated into more intense rain or snow events, likely extending periods of drought and flooding.

Temperatures are also expected to increase, lengthening the growing season. This may have positive impacts on Michigan's great agricultural resources, and it may also invite new pests. In terms of human life, heat is deadlier than hurricanes, tornadoes, floods, and lightning combined.3

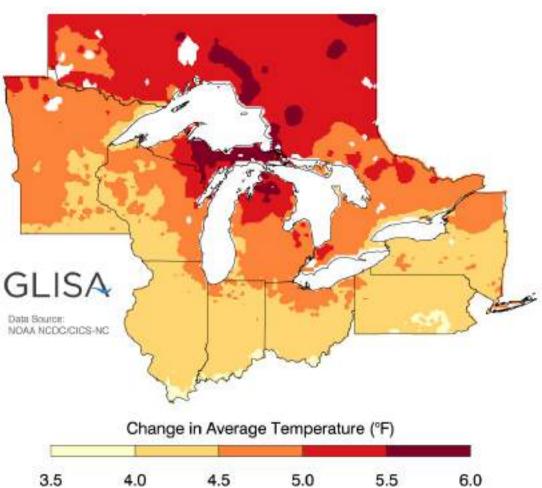
WHAT AND WHO WILL BE AFFECTED?

An inventory of people, land use, community services, and natural features are typical of a Master Plan. Looking at them through a resiliency lens helps ascertain who, what, and where is most likely to be adversely affected by climate change. Familiar terms used in this type of analysis—"sensitivity," "exposure," and "vulnerability"—have specific definitions in this context. Sensitivity refers to the degree to which a person or structure can withstand a stressor, and is described by the degree of potential impact on the subject. Exposure refers to factors that increase the likeliness that a shock or stressor will occur to a particular place, structure, or person. Vulnerability combines these two concepts, and refers to a degree of impact that exceeds the subject's ability to cope with or recover from the stress. The magnitude of the subject's vulnerability is shaped by its capacity to adapt (sensitivity), and by the character and the size of the stressor (exposure).

The analysis in the following pages looks at the land, structures, and people in the context of these three concepts. When all three categories are compiled onto one map, it elucidates Warren's total vulnerability in a land use framework.⁴ This geographic reference provides the City with a starting point to ideally make investments that will reduce its vulnerability prior to a crisis, and to mitigate the effects of unavoidable crises.

All of the maps in this section are created with a methodology used by the Michigan Association of Planning and the Michigan Department of Environment, Great Lakes, and Energy in a pilot program designed to integrate resiliency into a community's land use governance policy. Variables indicating sensitive people, sensitive structures, and exposed land were identified, and maps were created for each variable using the natural breaks distribution in a Geographic Information System (GIS) software. This distribution is an algorithm that groups data into classes based on clusters of values, as opposed to grouping them into equal intervals. These groupings are then each assigned a number on a scale of 0 to 5, where 0 represents the lowest sensitivity or exposure and 5 represents the greatest sensitivity or exposure. The variables for each category (people, structures, land) were then combined to show overall sensitivity or exposure. In the final step, data for all three categories are combined to show the total vulnerability of each place in the City of Warren.

FIGURE 26: FUTURE HEAT PROJECTIONS FOR MIDWEST REGION, 2041-2070





Source: Great Lakes Integrated Sciences and Assessments Program (GLISA)

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Urban Heat Island Effect

PEOPLE, STRUCTURES, AND LAND

People

Who is affected by changing environmental conditions? The short answer, according to the 2016 US Global Climate Change Research program report is that, "every American is vulnerable." However, some groups disproportionately suffer from changes to the climate, and—barring a course correction—this is a problem that is guaranteed to worsen as climate predictions come true. The variables used to determine who is most sensitive reflect those who have been historically marginalized from mainstream American culture (with the exception of households with children), and for that reason, their ability to recover from the effects of changing climate is compromised. Those who have financial resources, education, physical ability, and substantial interpersonal networks are best positioned to rebound from stressors; the inverse of these characteristics, by definition, indicates sensitivity.

Sensitive People

Each sensitive population group was analyzed at the block level and indexed according to the natural breaks distribution. Blocks were ranked based on their proportions of each

VARIABLES USED TO DETERMINE WHO IS MOST SENSITIVE:

Low-income

Aged 65 or older

Minority population

Households with children

No high school diploma

population. For example, the group "percentage of the population aged 65 years and older" would score higher on the index where there were higher concentrations of senior citizens.

These groupings are then each assigned a number on a scale of one to five, except for "low-income," which has a scale of one to three. The low-income variable is the only number not drawn directly from the census. Using the Housing and Urban Development's definition of low-income thresholds for housing subsidies, there are three numbers assigned to this index: "very low-income" households, defined as households earning 50% of the area median income, received two points; "low-income" households that earn 80% of the area median income received one point; and households earning the median income or higher received zero points. Again, all of these variables are overlaid and superimposed onto a map to see the spatial clustering and distribution of all the sensitive populations. Given what is already known about the socioeconomic disparities between north and south Warren, the darkest red blocks representing the most sensitive populations are predictably concentrated in the south. There are some exceptions that interestingly demonstrate overlap with sensitive lands, like the wetlands west of Mound Road and the floodplains near the border. These highlight the conditions which are selected to site homes expected to be of lower value in a community.

Impacts on People

Heat: Increased temperatures have huge health implications for people, and a spectrum of adverse health impacts are directly related to heat stress. Heat rash is a mild impact; heat stroke is a moderate impact; and the most severe impacts include damage to the brain, kidney, and heart as well as death.⁶ Warmer air is a more conducive environment for the proliferation of air- and water-borne illness, and it exacerbates the effects of air pollution, especially for those with pre-existing conditions, inflaming respiratory reactions and resulting in emergency department visits and hospitalization. For low-income residents or renters who may not have access to climate control, there is little escape from the heat, and greater exposure increases the chances of negative health outcomes.

Flooding: The most recent devastating storm in 2014 caused the deaths of two people, both of whom had a sensitive characteristic: an elderly woman drowned in her flooded condominium basement, and another woman had a seizure in her vehicle before it became trapped under water.⁷ Increased risk of flooding also indirectly puts people in harm's way as run-off pollutes bodies of water and spreads water-borne illnesses and infections. If contaminants infect the drinking water, thousands of people could be affected simultaneously.8 If flooded homes are not promptly repaired, mold could develop and cause a range of health symptoms, the most severe for people with allergies or a weak immune system.9

Structures

The built environment is the landscape that we live in, the conduit that enables goods and services we require to survive, and the infrastructure we move through to flee a crisis. The variables used in this analysis are proxies that are highly correlated with the quality of residential, commercial, and industrial structures. Structures with higher assessed values are assumed to be both constructed of higher quality materials, and to have had occupants with greater means for regular maintenance. They therefore tend to be in better shape and consequently are better guardians of people's health and safety. The age of the building gives some indication of the types of materials used: in Michigan, typically structures built prior to 1940 were made of a more porous concrete that allows more water to enter into the structure's foundation. As building standards have improved over the decades, some of which specifically protect buildings from flooding, new homes are generally better suited to withstand nature's curveballs.

Sensitive Structures

The sensitive structures analysis maps variables describing residential, commercial, and industrial buildings. In this scenario, the higher the assessed value, the lower the number on the index, under the assumption that properties with greater value are both more sturdily constructed and better maintained, as noted above. Residential structures were also assigned points based on their assessed value and broken down using natural breaks. Commercial and industrial structures were assessed by cost per square foot to normalize buildings with wide-ranging footprints, but the same process follows: lower points are assigned to higher assessed values. The assessment of residential, commercial, and industrial

VARIABLES USED TO DETERMINE MOST **SENSITIVE STRUCTURES:**

Assessed value of the property

Age of residential building

MAP 24: SENSITIVE POPULATIONS



MAP 25: SENSITIVE STRUCTURES



structures occurred at the parcel level based on recent assessment data, but the points for all categories were totaled by parcel, then aggregated and averaged by block to align with the rest of the analysis.

The map shows that the GM Tech Center is highly sensitive to potential climate variation, in particular flooding due to its proximity to the floodplain, which was made apparent in the hundreds of millions of dollars of damage incurred from the infamous 2014 storm. The other dark red blocks on the map correspond to large stretches of commercial and industrial areas near the two railroad lines and along Van Dyke Avenue and Mound Road. These properties and their relatively lower assessed values indicate that owners will likely face higher costs in preparing for extreme weather events or dealing with their aftermath.

Impacts on Structures

Heat: The urban heat island (UHI) effect peaks in urban cores where asphalt and concrete are concentrated. In these areas, temperatures are higher than in the greener hinterlands or rural regions. Absorbing heat over protracted periods can, in extreme cases, cause roads to buckle, as was the case in seven separate instances around Michigan between June 30 and July 4 of 2018¹⁰—a scenario that is not only dangerous but costly. Structures without air conditioning lose value in this scenario as well, where access to cooler temperatures could be a matter of life or death. Increased air conditioning use puts pressure on the electrical infrastructure, which may not be equipped for increased demand. Another negative externality is prolonged power outages that are critical for essential public services and businesses.

Flooding: Predictions of greater intensity storms means that floodplains are likely to expand, and that an unknown but greater number of structures will be subject to flooding. This is no surprise to Warren, where the wide-scale property damage from the massive 2014 storm affected 10 times the number of parcels than the floodplain encompasses. The damage to people's homes was collectively calamitous, but even more work has to be done to upgrade infrastructure below ground: most of southeast Michigan's sewer systems are over 40 years old and were not built to handle six inches of rain at once. According to a 2001 SEMCOG report, the projected cost of maintaining and improving sewer infrastructure through 2030 could reach up to \$26 billion.11 In Warren, during a wet weather event, homes with footing drains contribute more water to the sanitary sewers that flood basements. The cost of removing footing drains is estimated at half a billion dollars, a price tag that hinders implementation.

Land

This analysis focuses on the features of the land that increase exposure to negative effects from climate change. Before federal and state legislation was enacted in the latter half of the 20th century, the prevailing wisdom was that natural features were generally considered to have no monetary value unless exploited. This view resulted in their efficient removal from developed areas, with negative compounding outcomes from a resiliency perspective. Building in a floodplain, for example, not only disrupts natural processes, but it also exposes the built structure to increased chances of flooding, and then consequently exposes its inhabitants to negative effects of that flood. Such misuse of land diminishes the environment's ability to provide free ecoservices that mitigate the effects of intense rainfall: floodplains and wetlands, at no cost to taxpayers, absorb and clean water through processes that manmade infrastructure mimics for millions of dollars. A modern city needs both built and natural systems in order to function properly, and attention to the synergy between them benefits both.

Exposed Lands

Tree canopy was calculated by blocks and rated accordingly: low tree canopy coverage received higher points because it has greater negative exposure. Higher points were also given if hydric soils were present, which are defined as soils that are likely pond at least 80% of the time. The proportion of impervious surface on each block was ranked using the same logic: the greater the concentration of impervious surface, the greater the tendency for flooding and runoff events to occur, and the higher the points it received. By contrast, blocks with wetlands received fewer points, because their efficient ability to handle precipitation makes them less negatively exposed. Blocks without wetlands received more points because of their inability to handle and mitigate water events. Floodplains have a hierarchical point system based on their likelihood of flooding: one point for 500-year floodplains (least likely to flood), two points for 100-year floodplains, and three points for regulatory floodways since they flood most often. What the map shows is that the darkest red areas in the northern part of the City, the commercial and industrial areas along M-97 and M-53, and the southern part of Mound Road are the most exposed to the predicted increases and intensity in precipitation. Until the revised FEMA Flood Insurance Rate Map is completed that reflects the extent to which the floodplain has grown over time, properties adjacent to it should not be developed in a business-as-usual fashion. Development in the orange and red areas should be prioritize implementing natural features that can catch, absorb, and convey excess water appropriately to mitigate the effects of flooding.

VARIABLES USED TO DETERMINE MOST EXPOSED LANDS:

Wetlands Tree canopy

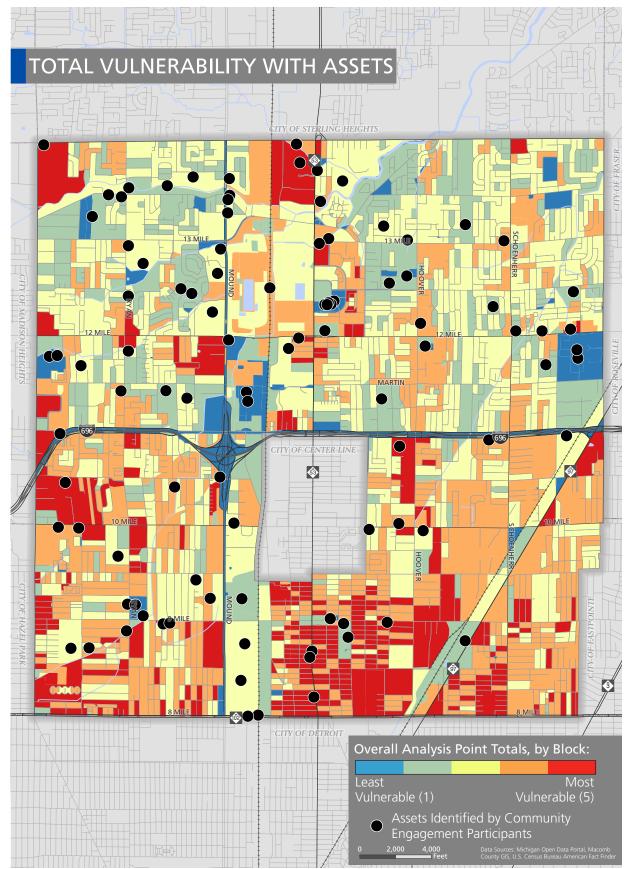
Floodplains Ponding soils

Impervious surface

MAP 26: EXPOSED LANDS



MAP 27: TOTAL VULNERABILITY WITH ASSETS



Impacts on land

In general, land takes care of itself and is governed by its own adaptation processes. For planning purposes, the greatest concern is the effect of these processes on human activities. These relationships are undergoing a great re-consideration as the prevailing wisdom begins to account for the beneficial impacts of land in addition to its exploitative potential. In many instances, protecting natural features is a major part of the solution to fighting climate change; at the same time, those features experience a changing climate right along with the structures and people.

Heat: Global warming will change landscapes such that ecosystems will either adapt or die. Agricultural systems were mentioned at the beginning of the chapter. Though there is no farmland in Warren, everybody eats; a disruption of the food supply will manifest itself as an economic issue and will be of grave consequence to all. It's also possible that if water temperatures change enough, the species that live there will not survive and the effects will ripple up the food chain. New species, both water-borne and air-borne, may not be welcome as temperature changes allow "mosquitoes, ticks, and other disease-bearing insects to proliferate, adapt to different seasons, migrate, and spread to new niche areas that have become warmer." 12

Flooding: Increased instances of rainfall will expand floodplains, which will change the shape of the landscape and vegetation that will grow in it. Where hydric soils do not permit a swift transition from stormwater to groundwater, increased rainfall volumes will flow faster and deeper and will pond longer, potentially altering the landscape further.

Total Vulnerability

Once all three measures of exposure and sensitivity were produced, the results were combined to generate one overall vulnerability map. Each of the point totals for sensitive people, lands, and structures were aggregated to highlight the most and least vulnerable parts of the City. The "Total Vulnerability" map illustrates that most of the City is at least somewhat vulnerable with very little exception. The northeast quadrant is the least vulnerable because it has the least number of dark red polygons, but still many blocks fall into the mid- and high-vulnerability ranges. The deepest swaths of dark red are in residential neighborhoods on both sides of Van Dyke between Eight and Nine Mile Roads, and in the southern corners of the City. The map confirms that south Warren is the most the vulnerable section of the City, even though it is the furthest from the floodplain. Its structural deficiencies and sensitive populations mean that this area will struggle to respond to and recover from climate shocks. When the community-identified assets are included, more than a dozen of residents' most beloved places are located within the most vulnerable blocks. Not only would those physical structures and the people in them suffer, but the way the remaining residents see and experience the City will change for the worse as well.

HOW TO RESPOND

Actions that increase resiliency come in two forms: adaptation and mitigation. Adaptations are actions that help a community respond to change. It implies an acceptance that negative effects are either inevitable or already present, and that we must build infrastructure or social networks to protect ourselves from potential consequences. An example would be to open cooling centers to provide space for those without air conditioning on increasingly hot summer days. Mitigation efforts are aimed at reducing greenhouse gases, the cause for this crisis. Creating ordinances and incentive programs that transition residents to renewable energy sources to curtail emissions would be an example. Many strategies satisfy both, and communities find themselves in a win-win situation wherever they overlap. One example given in the Planning for Community Resilience in Michigan Handbook is how sourcing food locally through urban agriculture reduces vehicle miles traveled (mitigation) and also helps break our reliance on food grown in other parts of the world (adaptation). There are several ways that Warren can employ new strategies that fulfill both aims and improve the lives of its residents.

Mitigation Recommendations

Before major efforts can realistically be pursued, a committed group of professionals must be dedicated to this cause. Piecemeal efforts run by volunteers are unlikely to reach the scale of changed need to address the mitigation of greenhouse gases. Michigan's largest cities, in general, have made formal commitments to sustainability. Grand Rapids has long maintained a Sustainability Plan, and Sterling Heights has adopted one as well. Detroit implemented an Office of Sustainability in 2018; Ann Arbor has an Office of Sustainability and Innovations. Real change begins with resources in time, money, and expertise.

Solar Energy

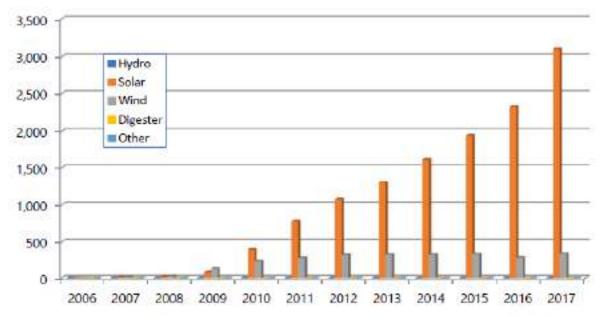
Renewable energy is quickly becoming a cost-effective way to heat and cool buildings. It is a common misconception that Michigan does not have enough sunny days to warrant investment in solar energy systems: it receives more solar radiation than Germany, a country that already produces 27% of its energy from renewable sources. According to the National Renewable Energy Laboratory, the hard costs (hardware, i.e. AC/DC inverters) of residential solar systems fell from \$3.50 to \$1.00 per watt, while the soft costs (installation, permitting, taxes, overhead) fell from \$4.80 to \$1.80 per watt between 2010 and 2017. The drop in cost has had positive economic impacts on Michigan's economy: the state is 15th in the U.S. for solar-related jobs with over 4,000 jobs in the field. Statewide, the total capacity of solar installations increased by 35% in 2017, and Macomb County is one of four counties with the highest number of solar customers.¹³ According to the best estimates of Warren's building department, less than 1% of all properties in the City are using solar electric technology.

One of largest challenges to the continued growth of solar power is simply that local zoning ordinances do not provide for them.¹⁴ If the city were interested in an urban solar farm, a first step should be a solar suitability analysis showing which building footprints would

experience at least six to eight hours of direct sunlight when the terrain slopes due south. With that information, Warren could see first where it makes sense to permit solar panels and then adjust the ordinance accordingly. Another option is for the city to permit solar panels on residential, commercial, and industrial rooftops so that residents and business owners can install them when they see fit. The large manufacturing land use in the City of Warren represents an opportunity for meaningful change. General Motors has made a commitment to sustainability, potentially serving as a model. Its 2017 Sustainability Report, which tracks changes from a 2010 baseline where possible (and from more recent data otherwise), shows a healthy climb of renewable energy use, from 21.48 megawatts (MW) in 2010 to 371.2 MW in 2017.15

Solar, of course, is only one form of renewable energy. A Climate Action Plan (CAP) could delve into other ways to reduce emissions and set concrete goals. For example, Ann Arbor's CAP committed to reduce its greenhouse emissions by 25% by 2025 (using the year 2000 as a baseline year), and one strategy was to pass a resolution to prioritize solar installation on emergency responder buildings. Because emergency responders are always "on," and cannot be susceptible to a power outage, Ann Arbor has passed a resolution to require the appropriate parties work together to identify the optimum solar energy efficiency needed to reduce their carbon footprint and improve their ability to respond to emergencies where traditional power sources may be imperiled.

FIGURE 27: MICHIGAN DISTRIBUTED GENERATION PROGRAM INSTALLATIONS BY TECHNOLOGY



Source: Michigan Public Service Commission

Other Energy Emission Reduction Actions

Other ways to reduce the amount of energy used is to convert to LED lighting. In January 2014, through a grant and city contributions, 588 street lights were converted to LED for an annual savings of \$75,000. The city recouped that investment in just 2.3 years. The City is on track to convert all of its lighting to LED by the end of 2019. City buildings can be weatherized to reduce the amount of energy they need to stay warm and switch its fleet of vehicles to hybrid or electric. Some cities provide small grants to homeowners to weatherize their homes to not only reduce their emissions, but also their monthly bill. In some areas of parks and open spaces, sod can be replaced with low-mow lawns and other carbon-friendly landscapes. Yale University estimated that the U.S. uses more than 600 million gallons of gas to mow and trim lawns per year. Ensuring that zoning regulations permit alternative options to the standard lawn is a very low-cost way to reduce the amount of carbon dioxide the City releases into the atmosphere.

Land Use Mitigation Efforts

Land use has a hard-to-quantify but potentially significant influence on how often people drive as opposed to walk, and how much valuable land is consumed when it could be providing ecosystem services. Simply put, density is a key component to reducing emissions. Mixing land uses in a dense format gives people the option to walk to grab a carton of milk instead of driving to a big box store three miles away. This does call for a fairly transformative look at land use in Warren. Typically, major corridors are a good place to start building up dense residential housing on top of or next to essential commercial uses. The concept of transit-oriented development (TOD), building density near transit stops, could point Warren into looking first at its corridors with SMART bus lines. In California, where climate change has already hit hard, the state senate approved a bill that would set up the Bay Area Rapid Transit to use its land to build housing. Using the principles of TOD, another 20,000 units could be built along the rail lines.¹⁸ This has the added benefit of growing a city or region's population without skyrocketing emissions.

Adaptation Recommendations

Flooding

Rain gardens are an example of green infrastructure that helps to relieve the stresses of excessive stormwater. Recently in Warren, the Eagle Scouts installed two rain gardens, one in Licht Park and the other at Halmich Park. Rain gardens, when placed correctly, slow, absorb, and clean stormwater while beautifying areas and even increasing biodiversity, such as the butterfly garden in Licht Park. For only \$1,000 and a dozen or so volunteers, the rain garden was completed in just three weekends. The City of Warren can play an active role in the private implementation of green infrastructure. Washtenaw County, for example, offers training courses to teach homeowners one-on-one how to design a rain garden for their property. The City of Ann Arbor goes one step further to incentivize homeowners to install gardens or barrels by offering credits toward your stormwater bill. In addition to reducing

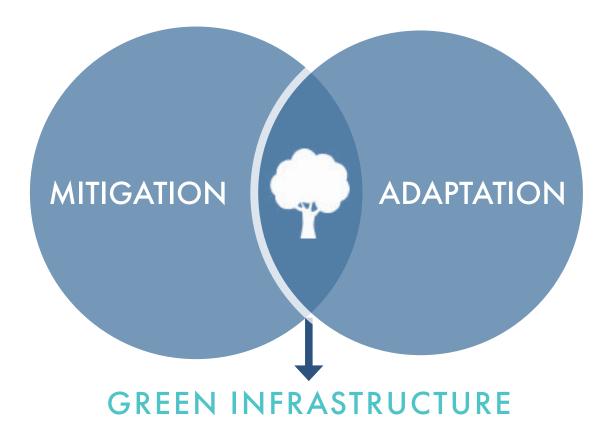
run-off, these solutions build attractive features onto the property and lower the amount of contaminants reaching creeks, streams, and rivers. Rain gardens take a few years of oversight to become self-sustaining. For those on public property then, it is important to have a dedicated fund and responsible party to tend to the gardens or their installation is ill-fated.

Neighboring communities like Madison Heights and Ferndale already require new construction to retain stormwater on site to prevent an overload on the city's system.²¹ Chicago, suffering from similar strong storms, has considered converting vacant land into rain gardens or using rain barrels to capture water that could otherwise flood residents' basements. It is estimated that diverting downspouts into a rain garden or a barrel could reduce runoff by 5% to 20%. That's enough to make the difference on an individual property, and if the whole neighborhood followed suit, the chances of flooding could be significantly lower.²² To encourage the use of rain barrels, the City can develop programs to incentivize and distribute rain barrels to residents. Working with the water department to determine the extent to which the system experiences relief during a heavy rainfall as a result of the rain barrels would be a metric that gauges the program's success.

Impervious surfaces are one of the major culprits of flooding in urban areas. It is a wall that blocks nature's ability to absorb water, instead conveying it to a low point where it ponds. Similarly situated, Detroit has recently updated its Zoning Ordinance to reduce impervious

TABLE 21: PURPOSE & GENERAL LOCATIONS FOR INCREASING TREE CANOPY AND LANDSCAPING

PURPOSE	GENERAL LOCATIONS
Aesthetics	» Plant trees adjacent to large industrial footprints to reduce their visibility
	» Landscaping requirements in commercial areas
Pedestrian-friendly environment	» Tree planting allow commercial and residential ROWs » Planter boxes and perennials vegetation in the central business district
Flood mitigation	 » Add greenery to highly impervious parcels » Build rain gardens on vacant parcels » Encourage homeowners to build rain gardens on their property
Improved air & water quality	» Increase tree canopy coverage to 40% city-wide » Concentrate trees near riparian corridors and on public property



area within off-street parking areas by incentivizing green stormwater infrastructure. Part of the change is a new drainage rate based on the amount of impermeable surface on a property, with the goal of increasing vegetation on lots to reduce the level of contamination that hits the stormwater system and reduce the load put on the system.²³

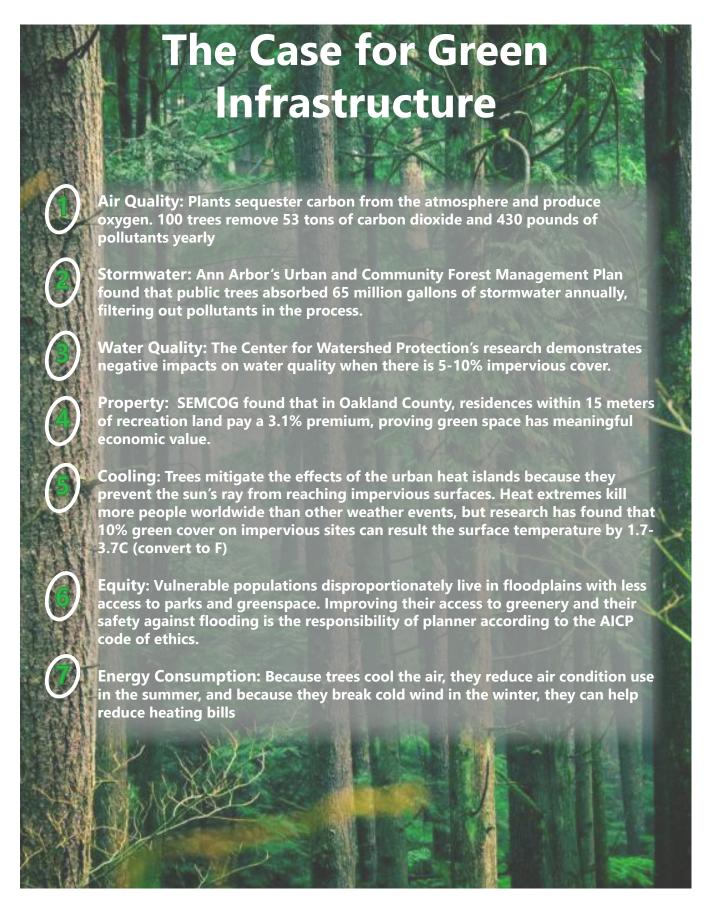
Heat

Warren has three cooling centers that are open to the public during the day and night.²⁴ It is recommended that the City work with the County to assess whether more cooling centers are needed to accommodate the growing number of people who will need this service as temperatures rise.

Adaptation and Mitigation

The sweet spot for resiliency planning is represented by actions that satisfy both mitigation and adaptation approaches. The short answer for "what satisfies both?" is green infrastructure. Trees are indispensable in the fight against climate change. The "case for green infrastructure" shows how trees and wetlands remove carbon from the atmosphere and water from the stormwater system. In those ways alone, they help cities mitigate their impact and adapt to predicted climate variability.

The City can take a proactive stance in tree planting on "public and institutional" spaces and create a strong tree preservation ordinance for developers on commercial or industrial spaces.



On public land, the City can set an example of a greening city. Based on an analysis by the software hosted by the USDA Forest service, iTree, Warren's tree canopy coverage stores 27,775 tons of carbon and removes 4.1 million gallons of water from entering the storm drains, a combined value of close to \$5 million.²⁵

Increasing tree canopy in the industrial and business districts will require much stronger landscaping standards in the development review process, whereas riparian and right-of-way tree coverage will be the result of public investment. To assess the desired level of tree canopy coverage, SEMCOG's regional policy follows the standards set by the American Forest, an eminent nonprofit dedicated to forest conservancy. American Forest recommends that cities should strive for 40% tree canopy coverage. Canopy restoration should be focused on urban areas where the tree canopy is less than 20%; land uses along industrial properties, riparian areas, and central business districts; and on roadways and parking lots.²⁶ In these areas, trees will have the biggest impact in beautification and stormwater management.

In Warren, the densest tree canopy sits adjacent to the Red Run River, fulfilling its role as a natural riverbed stabilizer, but outside of this "natural zone," tree canopy coverage rarely exceeds 15%. For example, the lack of tree coverage primarily around Mound Road and M-97 directly corresponds to "impervious hotspots." Macomb County conducted a thorough spatial analysis of tree canopy coverage by land use that demonstrates tree clusters in residential areas, leaving commercial and industrial corridors bare.

Wetlands serve a similar function as trees in that they help to store carbon and are efficient at absorbing water. It would be wise for Warren to seriously investigate the areas identified as potential wetland restoration areas. Any effort to retain wetlands will only help to retain the surplus of water predict to fall on the City.

SUMMARY

Warren, like many cities, could be much better prepared to respond to the two most predicted changes to the region's climate: increased temperatures and intense precipitation. The spatial analysis identifies areas that should be in receipt of intense funding and resources to mitigate the effects of those changes, namely in south Warren where the population and structures are in need of assistance to withstand a major stressor. Most of those actions will be nature-based, such as implementing green infrastructure projects to absorb excess stormwater and protecting what natural resources remain. In terms of heat, an inventory of who lacks air conditioning and how to better provide that to sensitive populations will be increasingly helpful.

There are also other steps that the City can take to reduce emissions and improve the community's chances of recovery from a large storm, such as transitioning to a renewable energy system. Not only will this slow the City from its contribution to the overall problem, it is a more resilient approach to have multiple forms of energy that can be used when peak demand is high.

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Many neighborhoods in Warren would benefit from a greater tree canopy.

Source: City of Warren



PRESERVATION



In 1966, Congress passed its first ever legislation dedicated to historic preservation after the loss of untold number of buildings. The National Historic Preservation Act of 1966 required the implementation of State Historic Preservation Offices (SHPO) to oversee preservation efforts, before the passage of this act.¹ Michigan is proud to have predated the nation with the establishment the Michigan Historical Marker Program in 1955.² Between 1999 and 2011, close to \$1.5 billion was funneled into historic rehabilitation projects through the State Historic Preservation Tax Credit.³ After just over a decade, the program was scrapped, and SHPO was moved under Michigan State Housing Development Authority (MSHDA) during a tax restructuring. With the reduction of the 25% tax credit, fewer property owners are able to make necessary repairs to keep these properties functional and beautiful, and cities are left to figure out other ways of protecting these assets.

Public awareness of historic preservation has grown after seeing one-of-a-kind architecture and city landmarks deteriorate due to lack of funding and capacity, especially during the last economic crisis. It is recognized that a city's history lends itself to placemaking, which comes with economic benefits of stabilizing neighborhoods, enhancing property values, slowing the spread of blight, and attracting visitors or new residents to the area. For established residents, a growing sense of pride could result from efforts that protect the city's uniqueness. Preservation is also environmentally friendly: due to materials and energy savings, the greenest building is one that is already built. Yet for all its benefits, a common tension tends to crop up between developers and preservationists, as the former sees themselves as bringing new and needed economic activity to the City, and the latter sees themselves as guardians of landmarks that are irretrievably lost if demolished. As the State Historic Preservation Plan points out, expanding education opportunities to relevant parties and integrating historic preservation into local and regional planning process could help reduce potential conflict between these two "opposing" groups.

WHAT IS CONSIDERED HISTORIC?

There are different historic designations at the local, state, and national level—not everything aged is treated the same. The National Register of Historic Places is the official list of places that have met criteria established by the Secretary of the Interior, deeming them worthy of preservation. To make it on the national register, the property must first go through SHPO, which is the body responsible for assessing whether it meets one of four criteria: age (generally at least 50 years old), integrity of its original form, distinctive design or physical characteristics, or association with an important event, activity, or development of the past.⁴ At least one of these criteria must be met, but is it important to note that anything that is 50 years or over does not automatically qualify; age of the structure is more of a guideline, as demonstrated by structures that are younger but have already attained historic significance.

Joining the national register opens that property up to federal preservation grants with the caveat that if the property owner accepts federal assistance, then s/he gives up some rights as to what can then be done to the property. Warren has two sites on the National Register: the GM Tech Center, built by architect Eero Saarinen and completed in 1955, and the Warren Township District #4 School built in 1875. In addition, there are state historic programs that protect places and structures or places that may have not made it to the national register, of which Warren has nine (including the two on the National Register). Locally, the Historical Commission also places markers on sites that are historically significant and preferably at least 75 years old. Occasionally a resident will bring to the Commission's attention a researched site to be selected as a local marker, and the Commission encourages residents to come forward with potential buildings to preserve. Other sites were selected based on City Council's request that markers be placed at a City park every other year.⁵

WARREN'S LOCAL HISTORIC EFFORTS

In Warren, the nine-member Historical Commission appointed by the Mayor has roots as deep as the City's origins: when Warren first incorporated, the City Charter recorded that the City would establish a Historical Commission.⁶ The Historical Commission has the power to acquire, collect, own, and exhibit articles of historic interest and value. They may also, with the approval of City Council, acquire, gift, or bequest historic real and personal property. The Commission meets monthly to fulfill their regular duties, which are to promote the interest in the City's history and to preserve it with the tools at their disposal. For fiscal year 2019, the Commission was awarded a little under \$15,000 to maintain the Warren Historic Gallery and the Hubert Leech Research Center. The Commission had placed historic markers at over 19 significant local sites throughout the City, and nine are placed by the Warren Historic District Commission (discussed later).

The Historic Commission's markers do not impose any rules on the property owners to preserve the property exactly as it is. Only state or federally awarded sites, or local zoning regulations, can enforce limitations on how the site is maintained or improved.

In February 2019, the Warren Historical Commission applied for a Community Assessment Program through the Michigan Historic Preservation Network (MHPN), a program is designed to "gauge the historic preservation ethic of the community."⁷ In its entirety, it is a four-month, two-phase process that collects and analyzes data from resident surveys, community leaders, document review, and site visits to ultimately develop professional recommendations for improving historic preservation efforts in Warren. Unfortunately, the City was not selected for this program but was offered assistance to complete phase 1 of the program where one person from the local government would complete the survey and submit it to the Michigan Historic Preservation Network. The MHPN staff will review the results and generate some recommendations for strengthening preservation efforts in Warren.

The Historical Commission has identified a "historic focus area," outlined by a dotted line on the "Historic Inventory" map in the southern part of the City surrounding Van Dyke. This area was identified for a couple of reasons. On the corner of Van Dyke and Fisher Avenue sits the Base Line Feed Store, constructed in 1877.8 As the name suggests, it formerly sold food for animals common in the area at that time but now focuses on exotic pets. This area

WARREN SITES WITH NATIONAL HISTORIC **REGISTER MARKERS:**

GM Technical Center

Warren Township District No. 4

MICHIGAN HISTORICAL **MARKERS:**

GM Technical Center

Warren Township District No. 4

Detroit Arsenal Tank Plant

Detroit Memorial Cemetary

Warren Union Cemetary

Warren Village Historic District

Birthplace of Governor Alex Groesbeck

John Theisen House

POTENTIAL BUILDINGS **ELIGIBLE FOR THE** NATIONAL REGISTER:

Detroit Arsenal Research & Development / Plant

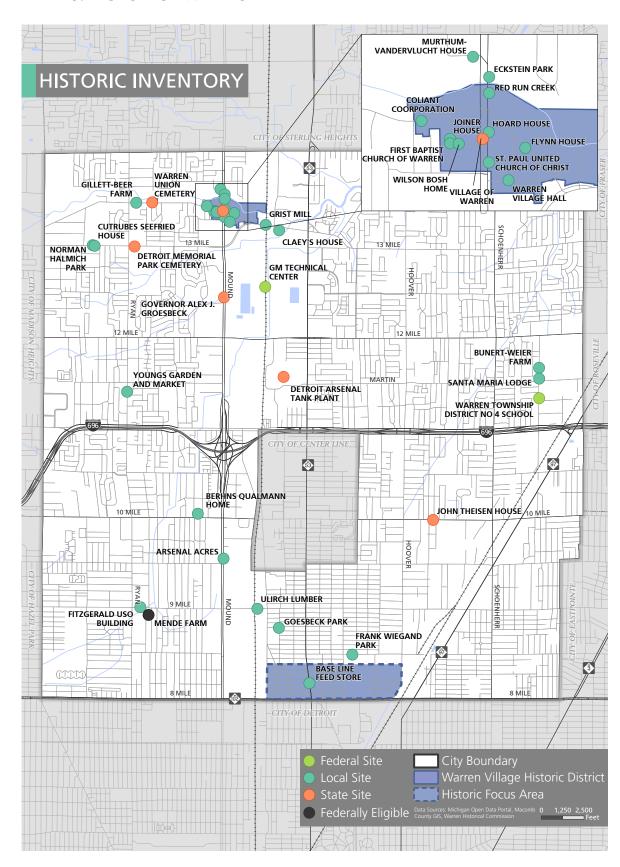
Mende Farm

Warren Union Cemetary

John Theisen House

The Village of Warren Historic District

MAP 28: HISTORIC INVENTORY



LOCAL HISTORICAL MARKERS:

*current use in parentheses

Arsenal acres (Salvation Army)*

Behrns Oualmann Farmhouse

Base Line Feed Store

Claeys House (Children't Home of Detroit)*

Coliant Corporation

Cutrubes-Seefried Home

First Baptist Church of Warren

Fitzgerald USO Building

Flynn House

Gillett-Beer Farm

Groesbeck Park

Henkel Woods / Toepfer Park / Frak Wiegand Park

Hoard House (Lyle Elliott Funeral Home)*

Joiner House

Murthum-Vandervlucht House

Norman Halmich Park

Red Run

Santa Maria Lodge

St. Paul United Church of Christ

The Peck Farm

Ulrich Lumber Company

Village / Eckstine Park

Warren Village Hall

Site of former Warren Co-operative Company

Wilson-Bosh Home

Young's Garden Market (Kutchey's)*

has already lost what would have been a historic post office, and the urge to prevent such demolitions is top of mind. While the Base Line Feed Store building has been preserved and has received a local historic marker, others in the area have not yet, and could be from the same era with a similar history. Considering it's one of the oldest parts of Warren, it is an indication that an inventory could begin here and resources dedicated to preservation then funneled here.

Another area for consideration is south of Nine Mile and Van Dyke, an older subdivision that predates the City's incorporation. It features street names with the automobile companies from the 1920s: Packard, Ford, Cadillac, etc. This is an indication that older buildings are concentrated around there. In this neighborhood is the Maybelle Burnette Library, which served the community as a civic anchor since 1965. It is scheduled to close when the new library on Van Dyke (north of Nine Mile, a half a mile up the road) opens, but there are no

current plans to demolish it. If the community wishes to preserve the building, the property can still take on a new use, especially because it sits on a sewer line which makes it easier to repurpose. Citizen efforts to maintain this site's cultural presence have not succeeded yet. Currently, efforts towards moving Habitat for Humanity to the site are being explored because of the jobs and valuable services it provides to South Warren. The hope is that this site will remain an anchor institution for the neighborhood.

HISTORIC DISTRICT

In addition to local historic markers placed citywide by the Historical Commission, Warren is one of 78 communities statewide that has created by ordinance a local historic district known as the Village, with a separate, dedicated Village Historical District Commission (VHDC) that has design review authority to protect the resources designated within those boundaries. As shown on the map, this district has a large concentration of local markers (nine). Moreover, the VHDC accepts and administers grants, advises property owners, evaluates applications to demolish or repair structures, and oversees the marking of historic resources, among several other powers and duties that apply only within this area. The HDC is a seven-member board appointed by the Mayor. The Village was listed as a Historic Marker in 1980, and SHPO determined the Village was eligible for the National Register of Historic Places but is not yet listed there. Its name is derived from the predominantly German community that formed near the toll gate (Chicago and Mound Road) that lead to Detroit and decided to incorporate as a village in 1893.¹⁰

The benefits of a historic district are not just for tourists and visitors to enjoy. According to SHPO, a local historic district guarantees that a home remains in a desirable location. Studies have found that property values in historic districts do not decrease, they remain the same value or appreciate. However, a homeowner should be made aware that there may be limitations on what can be done to the home; for example, renovations or upgrades to the property will have to be approved by the VDHC.

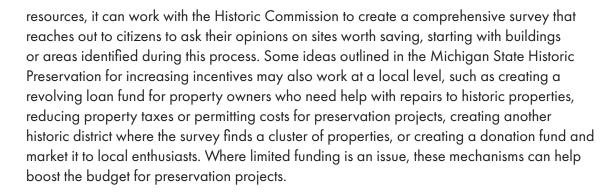
SUMMARY

MSHDA's "certified local government" (CLG) program makes communities eligible for an exclusive pot of financial aid and technical assistance only directed towards CLGs. At least 10% of the Historic Preservation Fund granted to Michigan must be distributed to CLGs, so it places cities into a smaller pool with greater access to money. As of January 2019, 30 local governments in Michigan are now eligible for these funds.

The program is a partnership between all levels of government and is jointly administered by the National Park Service and SHPO. The requirements to qualify for certification are based on responsible planning principles that include enforcing local and state historic preservation laws, maintaining a system that surveys and inventories historic resources, developing four-year historic preservation goals for the City through public participation, and a community that is willing to be monitored to ensure that all responsibilities are met.¹² If Warren's Village Historic District applied for this certification, it may be able to access resources that could better preserve the properties within the district. If Warren is not awarded this program's



Warren Township District No. 4 School Source: Warren Historical & Genealogical Society



Other important places to target preservation resources are public school buildings. As they continue to close due to low enrollment, their historic presence does not have to be compromised. Warren already has a plan to acquire land from closing school properties to continue to provide those recreational facilities to the community; the next step could be to save structures with historic preservation funding to prevent such as an asset from languishing into blight or being bulldozed. An agreement can be worked out that the Historic Commission has the first right of refusal on public schools that come onto the market.

To increase awareness locally, the HDC can create a booklet to share with realtors who can help use this designation as a selling point and explain what it means to be a homeowner in a historic district.

Another long-term goal could be to link bike routes to historic sites so that residents can take a self-guided tour. To get larger historic-related projects completed, the City should consider hiring a full-time staff person or cultivating a dedicated group of volunteers.



St. Paul United Church of Christ Source: Faith Street



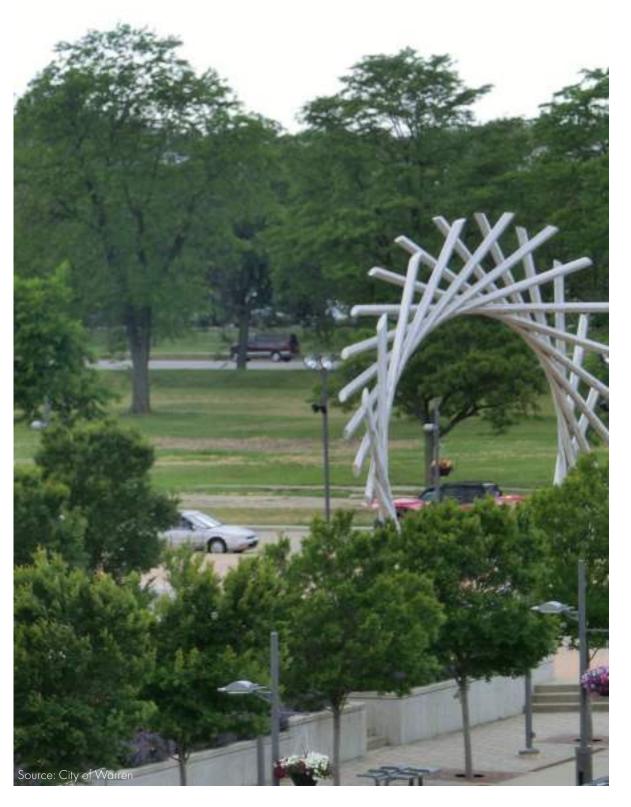
Farm-style home near Chicago Road and Mound Avenue (no historic designation) Source: Google Maps

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X



The City of Warren has been an exemplary instance of 20th century success. Home to a leader in the automotive industry, the dominance of which remade the public realm as well as reorganized private decision-making over the course of a few short decades, it is as prosperous and functional as any community in Michigan. Planning and leadership heavily influenced this success by providing and permitting the conditions necessary to it: industrial zoning, "heavy" transportation investments like rail and freight-bearing roads, exploitation or removal of natural features, land investment to support the parked cars of commercial users, and residential development that is almost exclusively low-density are all examples.

Because this "success scheme" prevailed over the period during which much of what we now know as the City of Warren was constructed, its values are, in a way, embedded in the built environment. This is worth recognizing as the 21 st century matures, and new conditions for success are emerging. The task ahead now is twofold: to understand the new paradigm well enough to succeed within it, and to do the work of adapting, retrofitting, and redeveloping the City to support that success. In two words, Warren's physical environment must become more green and more diverse.

A strong industrial presence no longer provides sufficient economic benefit to overcome its deficiencies in appearance, livability, and environmental degradation (if it indeed ever did). The expanse of concrete, steel, and emissions that cover a significant portion of the City's area must be met with an equivalent antidote in an era of aging infrastructure, heavier rainfall, rising temperatures, and knowledge-based prosperity. The positive contribution made by vegetation to infrastructure management, commercial appeal, mitigation of negative development impacts, environmental improvement, and resident health and satisfaction makes it a tool of almost staggering utility; its under-deployment for these purposes represents a nearly-untapped opportunity.

The concept of a diversified physical environment stands in contrast to an "optimized" environment. Where it once made sense to align the community's decisions around supporting a few select use types and intensities, the emerging downside of that configuration shows that such optimization can leave the whole system vulnerable when the wheel of change turns away from the "selected" configurations. In Warren, this means that streets designed only for motorized vehicles miss out on the trail revolution; vibrant and quirky new business entertainment concepts pass over strip mall sites that don't meet their needs for interacting with the public realm; and young professionals commute into the City from a community that offers attractive attached housing meeting their maintenance preferences.

This section presents a guide to that transition. The Future Land Use Map provides a spatial representation of the desired future, and its categories are used to inform decisions made by Planning Commissioners and staff during the development review process. The Zoning Plan links the Master Plan to its primary tool of implementation, the Warren Zoning Ordinance. The Action Plan presents overarching goals for the various areas under the City's purview, developed directly from the community's input, and objectives and strategies shaped by the findings of this Master Plan.

FUTURE LAND USE

The Future Land Use Map (FLUM) provides a general program of desired land uses and intensities. In a fully developed community such as Warren, it is strongly influenced by the existing built environment as well as the zoning laws that shaped the design of that environment. However, it is distinct from the Zoning Map: the FLUM is a policy document showing future preferences, whereas the Zoning Map is a regulatory tool that prescribes specific uses, configurations, materials, and other details of each site in the City. The Michigan Zoning Enabling Act, PA 110 of 2006, requires that a community's Zoning Ordinance "shall be based upon a plan" and that it "shall be made with reasonable consideration of the character of each district." This is the primary function of the Future Land Use Map. It also serves the Planning Commission directly by offering a signpost toward the desired future, to be used in consideration of requests for rezoning, special land uses, and planned unit developments.

Traditional Residential

Traditional neighborhoods in Warren are made up of detached homes in residential areas. This district also allows complementary uses, such as parks, schools, and green spaces. Where lot sizes are larger, or where demolition has provided an opportunity for lot combination, Warren's traditional neighborhoods can support residential development of a slightly higher density mixed within them, including duplexes and other attached-housing styles that blend within the existing character of the neighborhoods. These housing units should be designed to have a low impact on the existing neighborhood framework: similar in scale to surrounding housing units; entrance locations that mimic single-family units; and landscaping for privacy are all tactics that reinforce seamless integration.

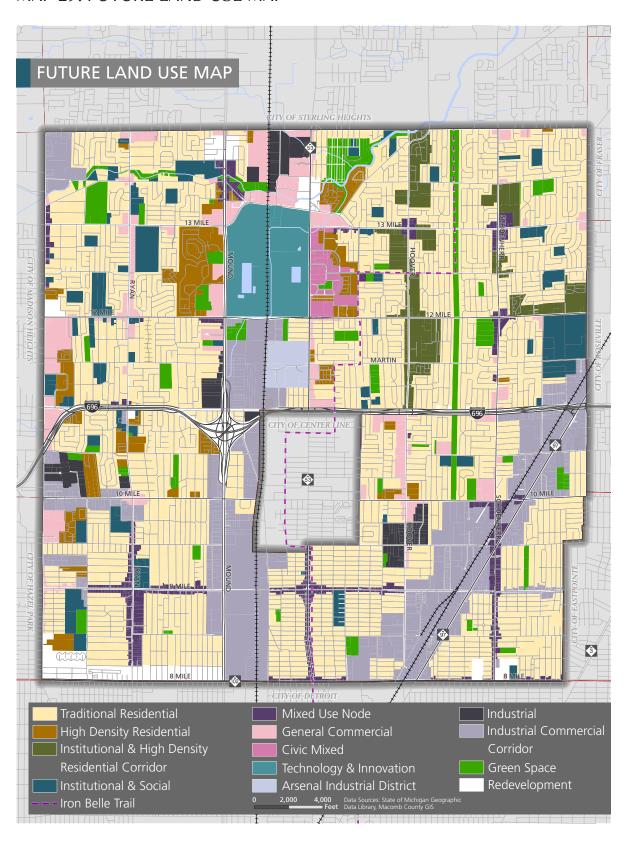
High Density Residential

High density residential areas within Warren are meant to support apartments, condominiums, rowhouses, and other attached-housing formats, often acting as a buffer between more developed uses and the less-dense residential traditional neighborhoods. Given this proximity to dense areas, emphasis should be placed upon increasing walkability and connectivity between high density areas and mixed use nodes or commercial districts. Adequate landscaping, buffers, sidewalks, and multipurpose paths/trails should be incorporated among new developments or updates to existing infrastructure.

Institutional-High Density Residential Corridor

This new category is designed to facilitate the co-location of institutional uses, particularly schools and medical facilities, with a high-density residential format in order to provide better access to these important uses for non-driving populations, and to reduce the already-large footprint of the institutions by lowering parking demand. While schools are historically understood to be properly integrated into the larger community, the relationship between the built environment and community health is a newer concept; as hospitals are assigned more responsibility for improving population health, this relationship should be emphasized. A range of housing formats should be encouraged that includes but is not limited to the traditional high-rise, including those which

MAP 29: FUTURE LAND USE MAP



provide limited individual access to the outdoors, such as bungalow courts. Nonmotorized connections within the corridor are essential, as is attractive landscaping.

Institutional and Social

The purpose of the Institutional category is to incorporate the public, civic, nonprofit, religious, and educational land uses within the framework of Warren's future land use. These areas serve important functions within their neighborhoods and overall community, often acting as community centers, and provide critical social gathering spaces.

Mixed Use Nodes

This category is intended to provide maximum flexibility in the redevelopment of several subareas throughout Warren. Commercial, office, and residential uses are to be configured and arranged to the mutual satisfaction of the developer and Planning Commission. Uses should be mixed either within an individual building or parcel, such as first floor retail with upper floor residential, or through buildings that may house different uses but are adjacent to each other. Of particular importance, these mixed use areas shall serve as clusters of medium-density uses to serve traditional neighborhoods with an emphasis on walkability and service provision. Considerations of compatibility with surrounding uses and character are vital while new developments cater to the City's specific housing, commercial, and employment needs. In South Warren, this land use category radiates along adjacent corridors to allow for a variety of Missing Middle housing formats as well as other innovative redevelopment proposals.

General Commercial

This future land use category contains the commercial uses that typically surround corridors and intersections, including retail clusters throughout the City. A significant portion are found in strip development that lines the major thoroughfares, comprised of local neighborhood businesses, offices, and larger national retail/restaurant chains. Special consideration should be given to redevelopment in these areas, as most of the commercial activity is found within this category; retrofitting these strip commercial developments in particular with improved landscaping, sidewalks, and facades will improve Warren's commercial areas.

Civic Mixed

The Civic Mixed category incorporates the governmental and institutional uses in the Warren Civic Center and the miscellaneous commercial and public uses that surround it. The District is intended to be flexible in use to allow development that supports the goals and mission of the Civic Center concept. Infill and redevelopment opportunities existing within this District should incorporate uses such as restaurants, entertainment, hospitality, and experience retail.

Technology & Innovation Campus

The Technology and Innovation Campus category is a new category intended to allow a mix of uses geared towards attracting, retaining, and serving innovative technological businesses and companies. It is limited to areas of 100 acres or more under unified ownership. A mix of uses including industrial, office, educational, institutional, and very limited commercial are permitted within the campus, with relaxed internal dimensional requirements and a streamlined permitting process for interior construction. In exchange for this flexibility, the district shall make a positive contribution to the public realm through buffering and landscaping.

Arsenal Industrial District

Designated after the closure of the Detroit Arsenal Tank Plant, this category and corresponding zoning district was implemented to transition the area into productive civilian use. Manufacturing, offices, education, entertainment, and government activities are permitted based on coordinated planning, and parking facilities are shared.

Industrial-Commercial Corridor

The Mound and Groesback corridors are fully developed industrial environments supported by heavy transportation infrastructure. The industrial buffering requirements should apply along boundaries with conflicting land uses; strong vegetation requirements should be used to mitigate environmental impacts; and alternative energy should be encouraged here too. Within the corridor, compatible commercial uses should be permitted, such as business-tobusiness supplies and distribution facilities.

Industrial

These areas are designated for heavy industry, and uses should be well-buffered from the surrounding context. In addition to spatial separation, this buffer should include strong standards for landscaping and onsite stormwater management. Facilities to power these establishments by alternative energy should be encouraged.

Green Space

Areas intended to remain vegetated are indicated as Green Space on the Future Land Use Map. Many serve low-intensity recreational purposes or are designated School-Parks, adjacent to existing educational uses, such as middle schools and high schools. Some are adjacent to institutional uses like Recreation Centers and City-owned facilities.

Redevelopment Sites

Several large or consolidated parcels throughout the City are in transition, and this category provides maximum flexibility in their redevelopment. They are good candidates for planned unit development, offering the rare commodity of space in a fully-developed community. Each of these site should be designated as a Redevelopment Ready Site within the RRC framework, and where a specific community vision is warranted, it should be developed through public and stakeholder engagement.

ZONING PLAN

The City of Warren has committed to a comprehensive review of its Zoning Ordinance upon completion of this Master Plan. As a starting point, this review will refine and implement the following zoning proposals and concerns as outlined in the plan.

Create New Mixed Use Districts

Districts consisting of appropriately blended uses can offer significant transportation savings as well as business synergies and unique environments. This plan contemplates a variety of use combinations. An innovative residential and institutional hybrid recognizes that co-location of community-focused uses such as "eds and meds" and gathering places with the homes that support them is beneficial to each. The inclusion of medical facilities recognizes the enhanced understanding of community design in population health outcomes. The Industrial-Commercial Corridor designation recognizes that the City's cumulatively permissive Zoning Ordinance has allowed these uses to create a unique mixed-use environment over time. The Technology and Innovation Campus category permits a variety of related new-economy uses within a large site that is substantially buffered from the community at large. Conversely, the Office and Professional Business districts, which constrain use to a single specialized type, are envisioned to be abandoned in favor of integrating them into the commercial and industrial environments they support. Finally, wide implementation of a traditional residential/commercial mixed use district along the City's southern corridors allows for flexible redevelopment centered on promoting a vibrant atmosphere.

Increase Permitted Housing Variety

Attached housing formats can be permitted in predominantly single-family neighborhoods using design standards to ensure compatibility and minimize impact.

Increase Public Green Space

The City's few remaining undeveloped areas are identified to signal an intent to find methods of keeping them that way. Preservation may come through a variety of tools, including public ownership and conservation-focused site design.

Strengthen Landscaping Standards

The greening of Warren must come from the public and private sector alike. The landscaping standards for each district should be reviewed and compared against existing conditions. Requirements for tree planting and pervious surface should be increased in most if not all cases, with additional requirements in areas identified in this Plan as tree-deficient.

Modernize Parking Standards

Warren's zoning code and map assign Parking to a distinct district, an outdated practice that can lead to the over-allocation of land for parking. Parking should be tied to the use, not the parcel, and a suite of options to meet access requirements should include bike parking, credit for transit adjacency, consolidated public parking, shared parking, and other tools.

TABLE 22: ZONING PLAN

FUTURE LAND USE CATEGORY	CURRENT ZONING DISTRICT	PROPOSED CHANGES
Traditional Residential	R-1-A, R-1-B, R-1-C, R-1-P, R-2	Permit low-density attached options with standards for neighborhood compatibility
High Density Residential	R-3, R-3-A, R-4, R-5	Landscape standard review
Institutional-High Density Residential Corridor	R-5	New district
Institutional and Social	Preferred in Commercial and Residential districts; permitted in Industrial districts due to cumulative ordinance permissions	Consider SLU permitting in non-preferred districts
Mixed Use Node	C-1, C-2	New district
General Commercial	C-1, C-2, C-3	Landscape standard review
Civic Mixed	CSN, UN, GN	Consider SLU for drive-thrus
Technology & Innovation Campus	M2, M3	New district (BTRC)
Arsenal Industrial District	AID	None proposed
Industrial-Commercial Corridor	M-1, M-2, M-3, M-4	New district
Industrial	M-1, M-2, M-3, M-4	Landscape standard review
Green Space	Various	Expand where possible
Redevelopment	Various	To be determined on a site basis

NEIGHBORHOODS

Most housing in Warren was built during the mid-20th century. There have been very few new housing developments since 2014, and there is a high demand for both more housing and more housing format options. Three-quarters of Warren's housing stock is made up of single-family detached homes; and because so few units have been built in the last decade, the proportion of single-family homes has stayed largely the same since 2010. The dearth of housing variety is problematic, and the community lacks "Missing Middle" housing options.

Increasing density with new housing formats will increase the concentration of people, which in turn, will give neighborhood businesses the prerequisite exposure and foot traffic to make a return on their investment in the community. Together, housing and retail create a complete neighborhood. Furthermore, due to the first increase in population in decades and General Motors' announcement of investment in the Tech Center, in-migration to the City will likely receive a boost. With job growth, however, comes a demand for housing.

Rental units are popular in Warren, and the City has a very low rental vacancy rate. Yet, at the same time, the City has a very high eviction rate. In the past decade, the percentage of cost-burdened renters rose by almost 10%, likely contributing to the high eviction rate. Increasing the number of affordable housing units in the City would be a huge benefit to Warrenites.

The City has taken advantage of numerous neighborhood development opportunities. The Neighborhood Enterprise Zone program created the "Patriot Place District," which provides a property tax abatement to homeowners and developers for the rehabilitation or redevelopment of existing owner-occupied housing. The City has used Community Development Block Grants toward preserving and rehabilitating single-family homes, helping people stay in their homes, and sheltering homeless. Continuation of these programs is essential, as well as pursuing historic certification in Warren's Village Historic District for further historic structure preservation.

GOAL

To create complete neighborhoods.

OBJECTIVE(S)

To enhance existing neighborhoods to include recreational, social, and commercial opportunities within convenient reach.

To create a safe and connected network so that all users can access these destinations.

To preserve historic structures.

ACTION	TIME FRAME	RESPONSIBLE PARTY
Zone mixed-used nodes within residential neighborhoods to permit uses that meet residents' regular needs, with special attention to scale, parking, circulation, and neighborhood-friendly uses.	1-3 years	Planning Commission; City Council
Discourage cul-de-sac style residential development in favor of more walkable grid pattern.	1-3 years	Planning Commission
Eliminate minimum parking requirements for establishments in mixed-used nodes if sufficient facilities for parking are available.	1-3 years	Planning Commission
Use the "historic focus area" to begin a historic audit to prevent further demolition of historic structures.	Ongoing	Historic Commission
Create and market a donation fund for historic preservation efforts that focuses on structures identified as community assets.	Ongoing	Historic Commission; Administration
Share zoning updates with existing establishments within nodes and reputable developers and business owners.	1-3 years	Planning and ED Staff
Strengthen connections to the mixed-use nodes with pedestrian- and bicycle-friendly features. » Create a pilot project: invest in improving physical improvements to nodes and track metrics of success. » Initiate pilot project near a bus stop.	Ongoing	Planning and Administration
Convert selected vacant residential parcels into pocket parks, designed to increase access to green space and reduce maintenance burdens like mowing.	Ongoing	Planning Staff; Park and Recreation
Allow the construction of smaller dwelling units on lot widths between 30 and 60 ft.	1-3 years	Planning Staff; Administration

GOAL

To have a diverse housing stock that accommodates residents through all life stages and all income levels.

OBJECTIVE(S)

To provide "missing middle" housing options at a range of price points.

To integrate new housing types into neighborhoods.

To support organizations that help renters avoid eviction.

STRATEGIES

ACTION		RESPONSIBLE PARTY
Permit duplexes by right in all residential zones.		Planning Commission
Permit small multi-plexes (up to 6 units) as a special land use in all residential zones, subject to design criteria.	1-3 years	Planning Commission
Maximize lot coverage for multi-family units.	1-3 years	Planning Commission
Zone for higher density along corridors with bus stops.	1-3 years	Planning Commission
Work with the school district to convert unused facilities to multi-family housing and mixed use.	Ongoing	Planning and ED staff; schools
Request qualifications from reputable residential developers with experience in missing middle housing.	Ongoing	Planning and ED Staff
Permit accessory dwelling units in residential zones.	1-3 years	Planning Commission
Conduct a housing study to identify current housing types and needs.	1-3 years	Planning Staff; Planning Commission
Investigate participation with a service such as Nesterly, which matches seniors with youth to provide reduced rent in intergenerational housing that benefits both parties.	10+ years	Planning Commission

GOAL

To create and preserve high-quality housing.

OBJECTIVE(S)

To improve the safety and health of residents through physical improvements to substandard housing.

To preserve the uniqueness of historic homes.

ACTION	TIME FRAME	RESPONSIBLE PARTY
Continue to apply for funding to demolish homes that are deemed unsalvageable.	Ongoing	Administration; Planning Staff
Update the design standards for multifamily housing units.	1-3 years	Planing Commission
Design and enforce a rental inspection program.	Ongoing	Planning, Building, and Rental staff
Apply to become a "certified local government" through MSHDA to access additional funding for historic preservation.	1-3 years	Planning Staff; Administration; Historical Commission
Create a revolving fund loan for property owners to help them repair their homes.	Ongoing	Administration; Zoning Enforcement

MOBILITY & TRANSIT

Warren's close history with General Motors, which is now in an expansion phase at its global headquarters, has solidified the region's reliance on vehicular transit, to the detriment of developing a multi-modal network. Almost everyone in Warren commutes by personal vehicle or by carpool (95%), resulting in a high level of greenhouse gas emissions and a high portion of household incomes going toward vehicle costs. Roads, therefore, are the primary means of getting anywhere in Warren, and road quality is deteriorating due to declining funding mechanisms and multijurisdictional road ownership.

Residents who attended the visioning sessions agreed that an ideal future for the City would be bikeable and walkable and have improved public transportation. Improved street design is the first step toward reaching this vision. Instead of focusing solely on efficient vehicular throughput, "Complete Streets" are designed to accommodate the entire spectrum of its expected users: pedestrians, bicyclists, motorists, and public transit users of all ages and abilities. Because most existing roads in Warren are not designed to include them, bicyclists and pedestrians are unsafe in Warren. The Detroit-Warren-Dearborn metro area is ranked in the top 20 of the most dangerous U.S. metro areas for pedestrians, and Warren's biking score suffers from low ridership, poor connectivity, and safety. Warren has adopted a Complete Streets policy via resolution; the next step for the policy is implementation.

GOAL

To design streets that are safe and convenient for all users.

OBJECTIVE(S)

To encourage walking and biking.

To reduce car dependence.

To enhance the nonmotorized experience with corridors that are beautiful "places."

To reduce the number of vehicular accidents with the bicyclists and pedestrians.

To boost bicyclists ridership and pedestrian use of streets.

ACTION	TIME FRAME	RESPONSIBLE PARTY
Adopt a Complete Street Policy.	Ongoing	City Council
Continue to work with school districts to develop Safe Routes to School.	1-3 years	Planning staff; local schools
Update zoning along corridors to require rear parking, landscaped frontages, and better nonmotorized access.	1-3 years	Planning Commission; City Council
Eliminate or reduce parking minimums where possible dedicate additional space to nonmotorized features.	1-3 years	Planning Commission; City Council
Prioritize road repair for those in the poorest condition.	Ongoing	Public Works staff; Macomb County Road Commission; MDOT; Engineering
Develop a Corridor Plan that adopts a Complete Street model.	1-3 years	Planning Commission; Planning & ED Staff; Engineering
Reduce the speed limits in residential areas and major thoroughfares.	4-9 years	Public Works staff; Macomb County Road Commission; MDOT; Engineering; Police
Experiment with temporary configurations such as road diets and protected bike lanes to generate interest and assess effectiveness.	1-3 years	Planning staff; Public Works; Planning Commission; Engineering
Install bicycle racks at popular community destinations from the Asset Map.	Ongoing	Administration; ED Staff
Invest in multi-modal infrastructure based on the "Transportation Investment Priorities" map.	10+ years	Administration; Planning staff
Develop bicycle lanes that are protected from vehicles.	1-3 years	Planning staff; Macomb County Road Commission; MDOT; Engineering

SOUTH WARREN

There is a stark divide between north and south Warren, shown in demographic and economic indicators such as housing value, income, and race. Lower median household incomes are clustered heavily in south Warren with only small pockets of lower incomes above 1-696. There is also a higher concentration of minority populations in South Warren. Additionally, South Warren is the most vulnerable section of the City in terms of its ability to respond to and recover from impending climate shocks.

These themes of division and segregation came through strongly across all Town Hall meetings. Historically, south Warren has received less investment and has thus had reduced access to services. Over the past few years, however, the City has acted to combat years of disinvestment with new key public developments such at the Busch Branch Library, pocket parks, and the Civic Center South development.

GOAL

To redevelop the area along Van-Dyke south of Centerline to create a vibrant district for businesses and residents alike.

OBJECTIVE(S)

To ensure development in South Warren meets or exceeds the quality in the remainder of the City.

To use redevelopment opportunities for innovation.

To support commercial redevelopment with complete neighborhoods.

ACTION	TIME FRAME	RESPONSIBLE PARTY
Develop a mixed-use zone in the vicinity of VanDyke and Nine Mile.	1-3 years	Planning Commission; Administration; City Council; TIFA
Investigate the creation of a new residential zone that allows for the creative re-use of parcels for multifamily residential, true neighborhood-scale commercial, stormwater management, and access to greenspace.	Ongoing	Planning Commission; City Council
Create commercial development standards for landscaping, lighting, and amenities which complements the City's public investment.	1-3 years	Planning Commission
Explicitly permit a range of highly visible uses focused on renewable energy, public art, and access to nature.	1-3 years	Planning Commission
Develop an informational packet for prospective investors specific to South Warren.	1-3 years	Planning and ED staff; TIFA
Track the metrics of success of the NEZ tax abatement program in south Warren.	1-3 years	Planning staff; TIFA
Concentrate experimental projects in this area to draw attention.	Ongoing	Planning staff; Administration; TIFA
Update TIFA Plan	1-3 years	Planning staff; ED staff; TIFA

ENVIRONMENTAL RESILIENCY

The two most predicted changes to Southeast Michigan's climate are increased temperatures and more intense precipitation. The spatial analysis in this Master Plan identifies areas that should be in receipt of intense funding and resources to mitigate the effects of these impending changes, especially in south Warren. It should be noted, however, that almost the entire City of Warren is at least somewhat vulnerable to future unavoidable climate shocks. Surprisingly, the large manufacturing land use in the City of Warren represents an opportunity for meaningful change as General Motors has made a commitment to sustainability, potentially serving as a model for the City.

Actions that increase resiliency come in two forms: adaption and mitigation. Mitigation methods include using renewable energy, creating a climate action plan, converting all lighting to LEDs, weatherizing buildings, minimizing traditional lawn surface area, increasing density, and prioritizing transit-oriented development. Adaptation methods include using rain gardens and rain barrels to relieve the stresses of excessive stormwater, reducing impervious surfaces, and establishing more cooling centers. Green infrastructure is the mechanism that satisfies both adaptation and mitigation, further stressing the need to implement green infrastructure throughout Warren – the importance of trees and wetlands cannot be overstated.

GOAL

To adapt to the negative effects of climate change.

OBJECTIVE(S)

To update infrastructure and policies to reduce the effects of increased temperatures and intensity of flooding.

ACTION	TIME FRAME	RESPONSIBLE PARTY
HEAT		
Encourage businesses to paint rooftops white and provide shaded areas.		Public Works staff; Zoning staff
Use development standards and administrative encouragement to increase tree canopy.	Ongoing	Planning Commission
FLOODING		
Encourage a rain barrel for structures on highly impervious surfaces.	1-3 years	Planning Commission
Update the impervious surface ordinance to encourage green stormwater infrastructure.	1-3 years	Planning Commission; Engineering
Prohibit development on wetlands that are not protected by the state.	1-3 years	Planning Commission
Install porous pavement on public property in flood prone areas.	4-9 years	Administration; Public Works staff
Plant rain gardens with native vegetation in front setback areas and rights-of-way to capture stormwater.	4-9 years	Administration; Planning staff; Public Works staff
Adopt the Green Macomb Planting and Species Guidance Lists, as amended, for planting standards in the City of Warren.	1-3 years	Planning Commission; Planning Staff; Administration

GOAL

To mitigate the effects of climate change by reducing the City's carbon footprint.

OBJECTIVE(S)

To protect and preserve natural assets that absorb carbon.

To be the leader in adopting and implementing renewable energy strategies.

ACTION PLAN

ACTION	TIME FRAME	RESPONSIBLE PARTY
Provide transit-oriented density bonuses on corridors with bus stops.	1-3 years	Planning Commission
Permit alternative options to lawn in residential zones.	1-3 years	Planning Commission
Provide additional points in the RFP process to L.E.E.D. certified projects.	1-3 years	Administration; Purchasing
Expand the tree canopy on public property where canopy is less than 20%.	Ongoing	Public Works staff; ReLeaf; Parks & Rec
Complete a Climate Action Plan.	4-9 years	Administration
Encourage solar use.	4-9 years	Planning Commission
Shade public parking lots and buildings with solar installations.	4-9 years	Public Works staff; Administration
Provide grants/loans to low-income households to weatherize their homes.	Ongoing	Administration: CDBG
Re-landscape public property to reduce the frequency of mowing.	4-9 years	Planning staff; Public Works staff; Parks & Rec
Develop a composting center.	Ongoing	Administration
Encourage businesses of a certain building footprint to generate power for their operations from renewable energy.	10+ years	Planning Commission



A large proportion of Warren is covered in impervious surfaces.

Source: City of Warren

CULTURE, ENTERTAINMENT, ARTS & RECREATION

Warren has the opportunity to expand the cultural, entertainment, artistic, and recreational opportunities in the City. The City has a strong base of historic sites and structures – preserving this historical heritage will stress the uniqueness of the community. Another way to express Warren's uniqueness is through public art, both temporary and permanent. Additionally, Warrenites have long desired a recognized "center" or downtown. The proposed Warren Town Center would take advantage of the popular and iconic City Hall's civic space and adjacency to the GM Tech Center while also offering lodging and other retail opportunities typical of a downtown.

Warren's park and recreation system is on the rebound with the passage of the millage to fund some of the Park and Recreation Department's projects. Based on community survey results, a large majority of Warrenites believes that parks and recreation improve health, make the City more desirable, increase community pride, and strengthen families, among other positive effects. Residents want more access to nature, and almost all survey respondents supported a hiking and biking trail system. The Iron Belle Trail presents an excellent economic development opportunity by connecting Warren to other communities throughout the State and by acting as a local tourist attraction.

GOAL

To expand cultural, entertainment, and artistic opportunities.

OBJECTIVE(S)

Provide all ages with opportunities to engage in the community.

Make Warren a destination for its cultural offerings.

TIME FRAME	RESPONSIBLE PARTY
Ongoing	Administration
Ongoing	Administration; Cultural Commission; Communications
10+ years	City Council; Administration
4-9 years	Planning staff; Cultural Commission
Ongoing	Planning staff
1-3 years	Administration; ED Staff; Cultural Commission
1-3 years	Administration; ITC
Ongoing	Park and Recreation staff
Ongoing	Public Works staff
Ongoing	Planning staff; Administration
1-3 years	Planning Commission & Staff; City Council; Parks & Rec; Clerks
	Ongoing

REDEVELOPMENT

Warren is in a prime position for redevelopment, and the Redevelopment Ready Communities program offers numerous economic development opportunities for the City. The first step for Warren is to compile a list of potential redevelopment properties and to assemble information on each site. Once this list is complete, Warren should create an attractive packet of information for priority sites and create a community visioning strategy for potential redevelopment properties. Once the community has established its vision for these sites, the City should market the sites to reputable developers who understand the community's vision and the market analysis.

Redevelopment also offers the opportunity establish high-quality standards for development in Warren. The Van Dyke corridor is a good place to start targeting public investment by establishing more social and pedestrian friendly amenities and by attracting high-quality development.

GOAL

To attract and retain high-quality development.

OBJECTIVE(S)

To comply with MEDC's Redevelopment Ready best practices.

To improve the appearance and quality of development and redevelopment projects.

ACTION	TIME FRAME	RESPONSIBLE PARTY
REDEVELOPMENT READY		
Compile a list of vacant sites and vacant, abandoned, or underutilized properties.	1-3 years	Planning staff; Assessing; Building; ED Staff
Develop a matrix that records basic information for each site (6.1.2) and score selected criteria to determine priorities.	1-3 years	Planning & ED Staff
Establish a vision for the priorities that matches economic data and community preferences.	1-3 years	Planning Commission; Planning & ED staff
Identify development tools or incentives available for the priority sites.	1-3 years	Planning & ED staff; DDA/TIFA; Administration
Assemble a property information package for at least one site and publish it online. HIGHER STANDARDS FOR DEVELOPMENT	1-3 years	Planning & ED Staff; DDA/TIFA
Develop a tree preservation ordinance.	1-3 years	Planning Commission
Update the landscaping ordinance to encourage native vegetation and increased tree canopy.	Ongoing	Planning Commission; City Council
Require that parking be in the rear of the building and is properly screened from the right of way.	1-3 years	Planning Commission; City Council
Eliminate or reduce parking minimums for most uses.	1-3 years	Planning Commission; City Council
Implement restrictions such as buffers and caps on predatory uses.	1-3 years	Planning Commission
Implement commercial design standards to achieve Warrenites' preferred development: compact, articulated, beautiful, accessible.	1-3 years	Planning Commission