

RESILIENCY ASSESSMENT



ACKNOWLEDGMENTS

A special thanks to all the community members, elected officials, and others who contributed their time, energy, and enthusiasm. Their voices ensured this assessment reflects who Marquette was, is, and desires to be as the City continues its resiliency journey. This document is just the start and the opportunities identified in this assessment can be used to better inform future endeavors into enhanced community resiliency.

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SECTION 1

PURPOSE

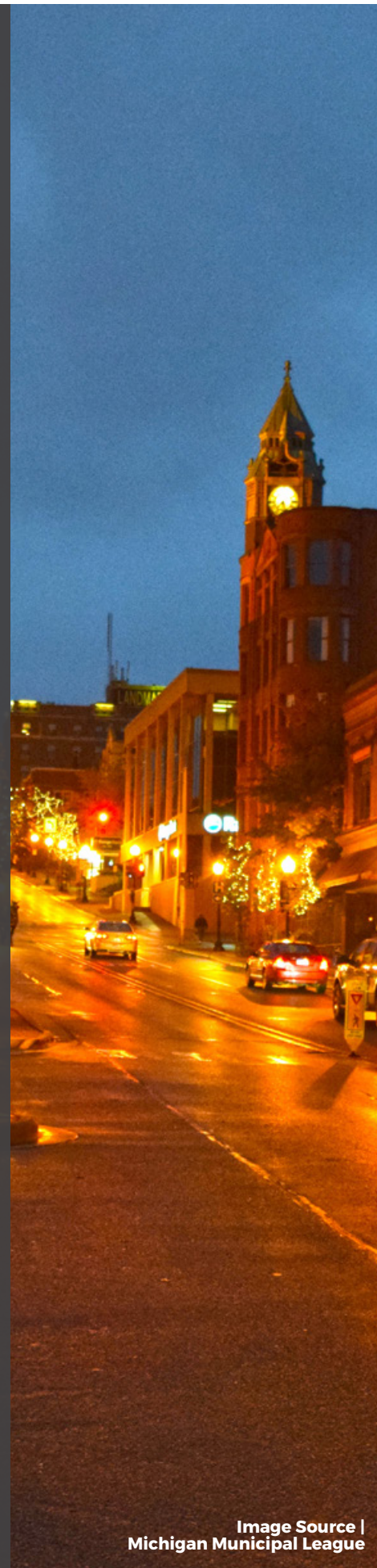
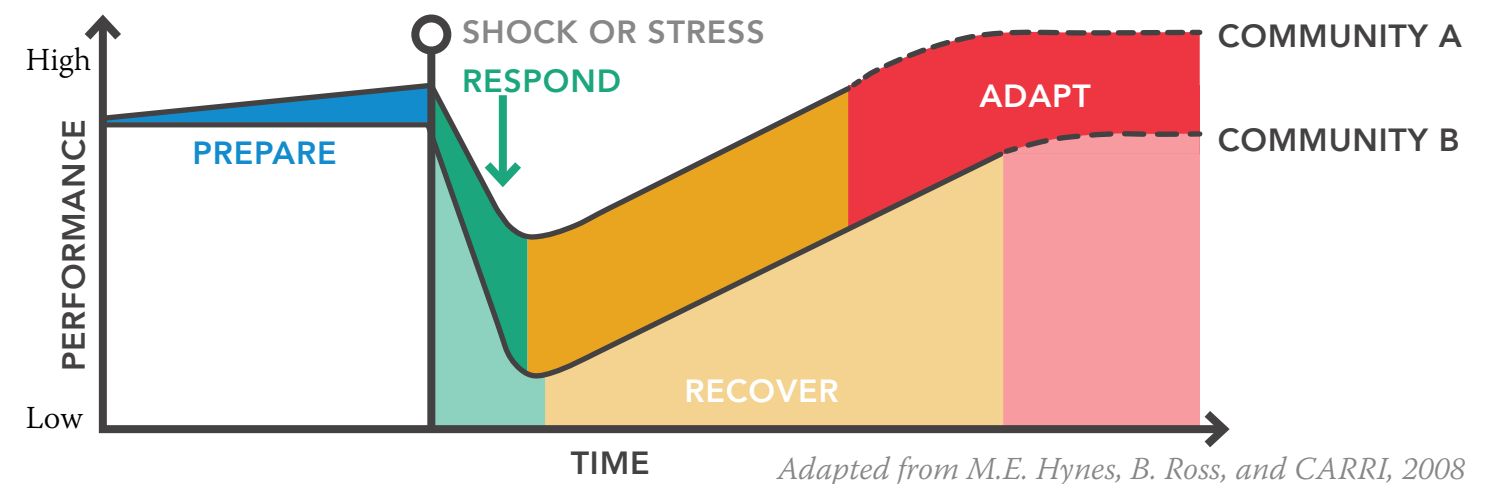


Image Source | Michigan Municipal League

The importance of building and maintaining resilient communities has never been more evident than in recent times. Marquette has seen just how resilient and adaptable community members, city staff, and regional partners are as they have been grappling with the aftereffects of a global health crisis, a national social justice movement, a changing climate and a multimillion dollar deficit. With so many changes happening both nationally and locally, now is a prime opportunity to prepare so the city can respond to tomorrow’s challenges and opportunities. As a leader for the Upper Peninsula, Marquette can set the stage for regional progress.

To support Michigan’s communities as they adapt to this ever-evolving landscape, the Michigan Economic Development Corporation (MEDC) developed and released the RRC Resiliency Toolkit in 2022. The toolkit serves as a valuable resource for communities like Marquette, which are working towards building resilience using the four pillars of resiliency: people, place, infrastructure, and economy. MEDC is partnering with the City of Marquette to assess local vulnerabilities and identify opportunities to build a more resilient community.

The graphic below shows how much faster a well-prepared community can bounce back after an event.



DEFINITIONS

SHOCKS

A shock is a sudden and unexpected event that can cause significant and immediate disruption to a system or community. Examples of shocks include natural disasters such as floods, earthquakes, or hurricanes, as well as human-made events such as terrorist attacks or pandemics. Shocks can have a severe impact on the system or community and can result in long-lasting effects if not adequately addressed.

STRESSORS

A stressor is a slow and gradual event that can accumulate over time, gradually weakening a system or community. Stressors can be environmental, social, or economic in nature, and can include factors such as climate change, economic downturns, or social inequalities. Unlike shocks, stressors may not always be immediately visible, but can have long-term effects that can accumulate over time, gradually reducing the resilience of a system or community.

RESILIENCY

Resiliency is the ability to overcome shocks and stressors. Each community is at a different phase along the continuum of resiliency.

FOUR RESILIENT PILLARS

Resiliency is the ability to overcome shocks and stressors. Each community is at a different phase along the continuum of resiliency, making their individual shocks and stressors unique.

Many components of a city's systems are related and can cause cascading failures that quickly present difficult conditions from which to recover. Managing shocks and stressors can prevent high costs and years of effort in rebuilding broken systems in the community. While several shocks and stressors are actively affecting Marquette today, past shocks and stressors or potential future shocks and stressors are also important to understand.

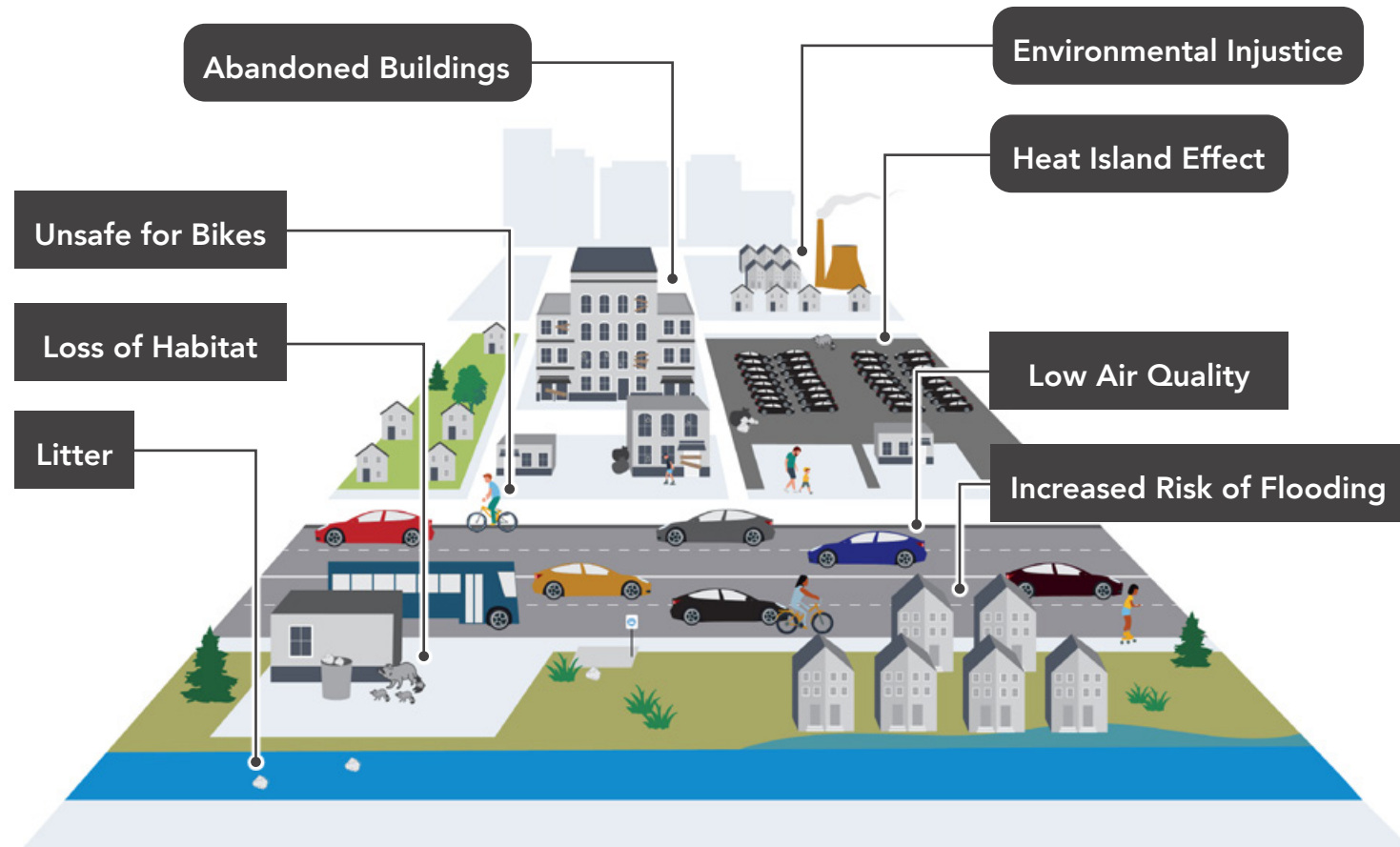
For example, the mining economy that laid the foundation for this city created a necessary economic boom at the time but has since left abandoned buildings and contaminated sites which the city is remediating to create a more healthy environment.

Diverse challenges such as the potential loss of an industry in the region, pressures on the housing market, or a gap in childcare services may seem like distinct issues but are actually highly interrelated and will require coordinated solutions from the City, County, and surrounding townships.

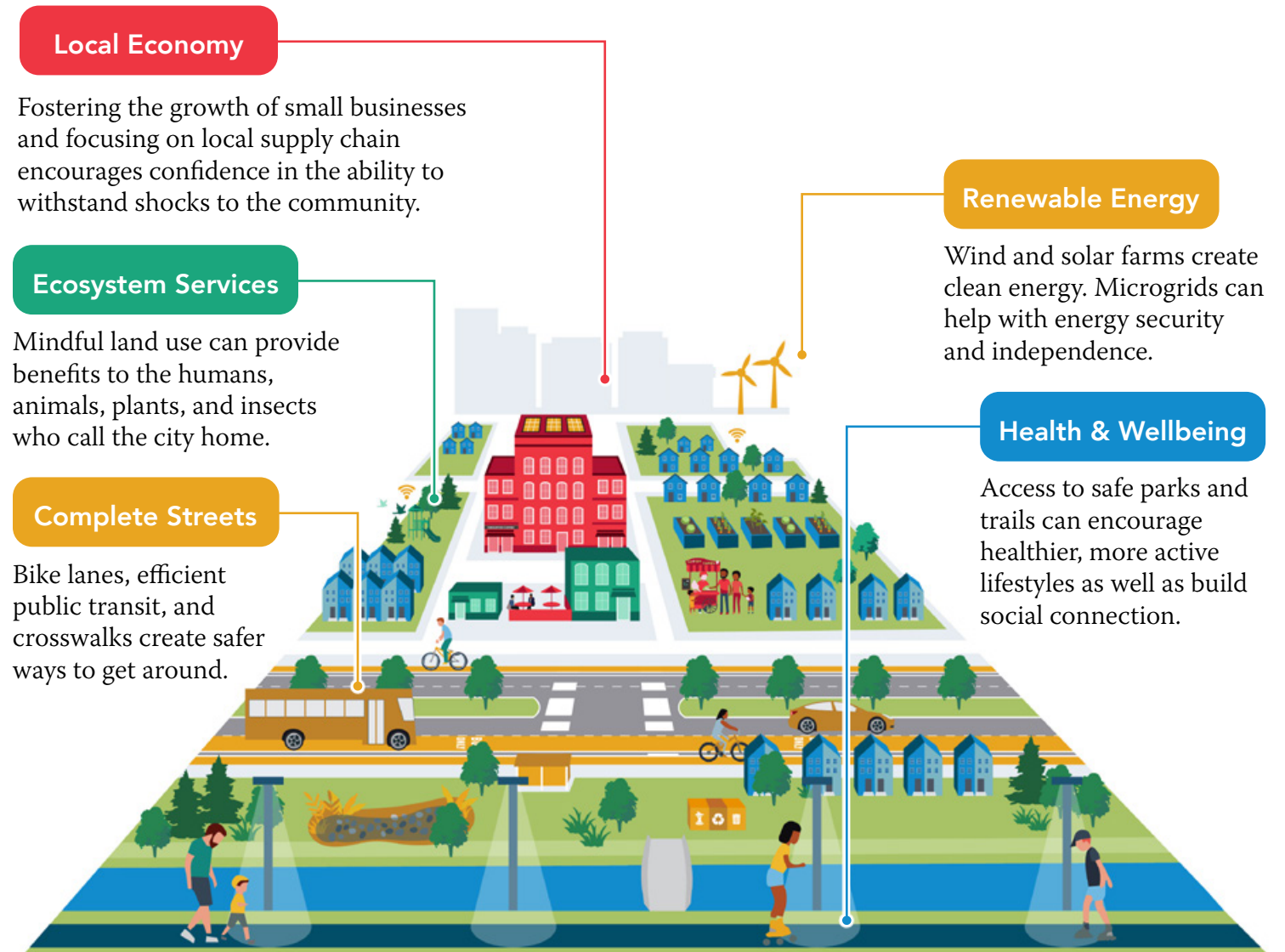
A fully resilient community considers ways to become more resilient across four pillars: place, people, infrastructure and economy. Resilient places focus on buildings and physical spaces, while resilient people refer to the health and well-being of community members. Resilient infrastructure considers the necessary systems that support society,

from water to wi-fi, and resilient economies consider the job opportunities, incomes, and services of Marquette's workforce. This assessment focuses on the opportunities for Marquette to enhance resilience across each of these pillars, taking into account current trends, staff capacity, potential partners, and other initiatives which are already underway.

CHALLENGES A CITY FACES WITHOUT RESILIENCE PLANNING



BENEFITS RESULTING FROM RESILIENCE PLANNING



METHODOLOGY

This assessment was conducted by using a self-assessment survey completed by community leaders, a workshop with city staff and stakeholders, an analysis of local and national trends, and best practices. These sources resulted in a set of recommendations that reflect the extensive work of the City and its regional partners as well as the opportunities available that are specific to Marquette and its needs.

The data provided through the following chapters was collected using several sources. Click on the links beneath each fact to learn more. It is important to note that much of the data comes from the American Decennial Census, which is conducted every 20 years, or the American Census Survey Estimates, which are conducted every 5 years.



PHASE 1
DEFINE EXISTING CONDITIONS

Self-assessment survey and city staff work sessions.

PHASE 2
ASSESS VULNERABILITIES

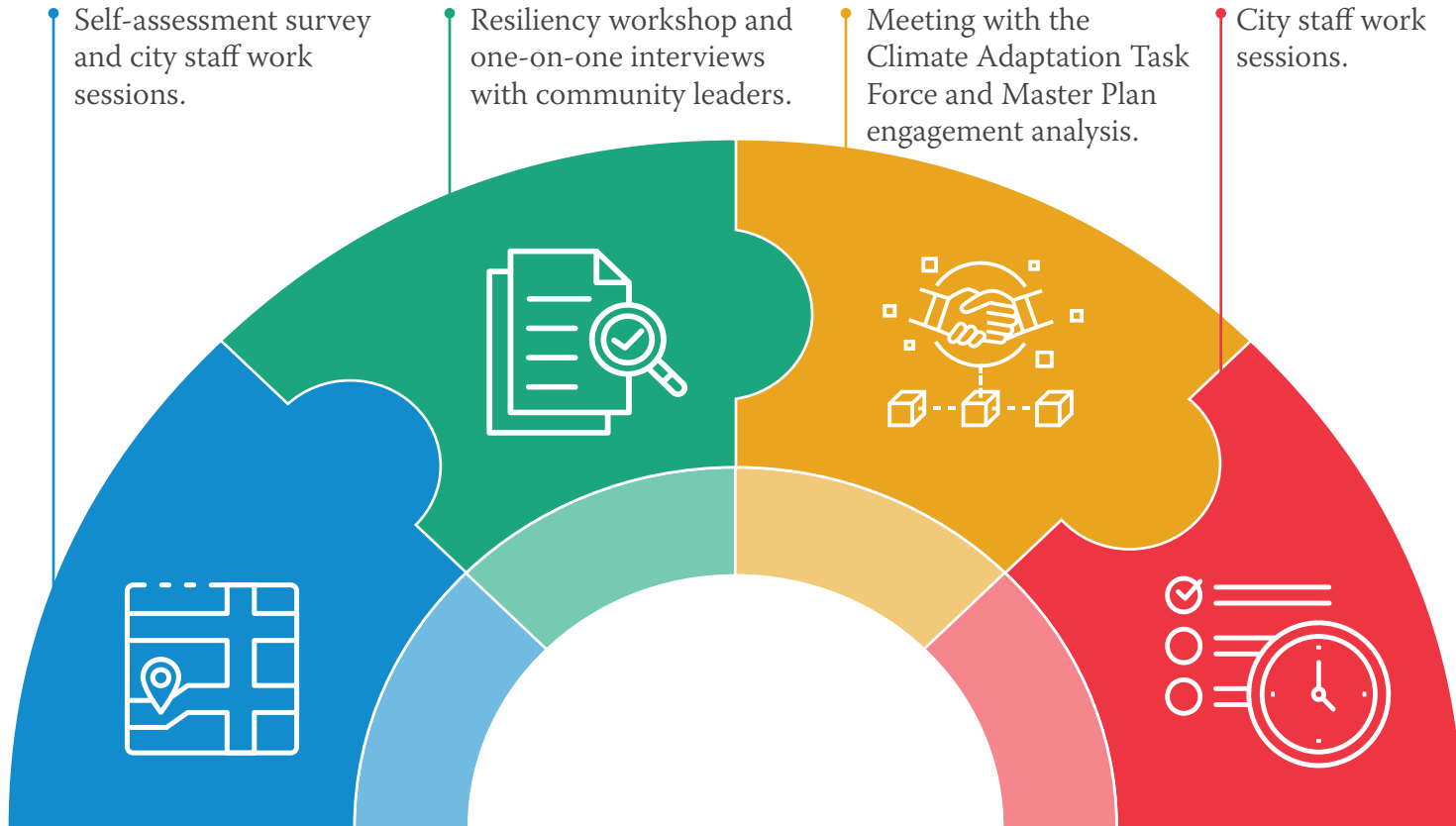
Resiliency workshop and one-on-one interviews with community leaders.

PHASE 3
IDENTIFY OPPORTUNITIES

Meeting with the Climate Adaptation Task Force and Master Plan engagement analysis.

PHASE 4
PRIORITIZE STRATEGIES

City staff work sessions.

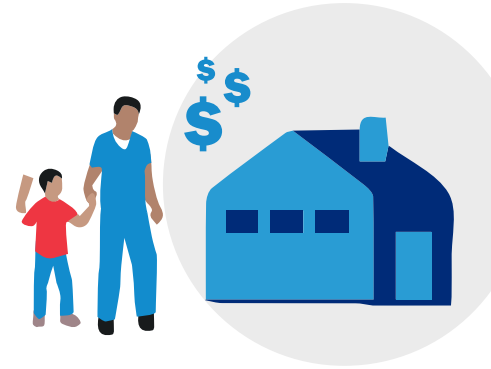


TOP PRIORITIES



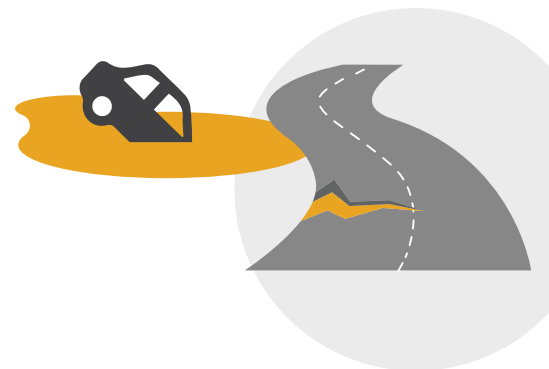
PLACE

- Increased frequency/intensity of storms
- Shoreline encroachment



PEOPLE

- Resource crisis
- Housing cost burden



INFRASTRUCTURE

- Flooding
- Age of infrastructure



ECONOMY

- Economic & local industry-specific downturns
- Lack of childcare

TOP ACTIONS

To start tackling these priorities, there are several key actions that could be used to boost community resilience in the near and long term. Learn more about the specific data, partners, and recommended timelines behind each of these actions in the following chapters.



Look for the starred items throughout the plan to learn about these and other key actions for tackling your biggest concerns!



PLACE

- ★ Continue supporting mixed-use area development, infill development, and redevelopment.
- ★ Evaluate public parklands and the potential use of parks for climate adaptation as part of the Parks & Recreation Plan update.

PEOPLE

- ★ Create partnerships to make good food more widely available to community members in need.
- ★ Provide clarity for the incentivization and production of housing in a way that is clear to both the community and commission members to assist with the approvals process.
- ★ Commit to meaningful and inclusive public involvement processes.

INFRASTRUCTURE

- ★ Improve multimodal, interconnected trade, supply chain logistics, and systems to enhance redundancies in transportation services and access to resources.
- ★ Implement future land use and zoning recommendations to encourage personal services in localized areas and near access to transit and adequate bike and pedestrian infrastructure.
- ★ Continue retrofitting existing streets to incorporate green infrastructure best practices.
- ★ Create a community energy plan with a focus on sustainable energy choices and measurable outcomes for success.

ECONOMY

- ★ Complete industry sector value chain and market analysis studies for locally targeted industries.
- ★ Approach larger employers about developing in-house programs around benefits for employees.

SECTION 2

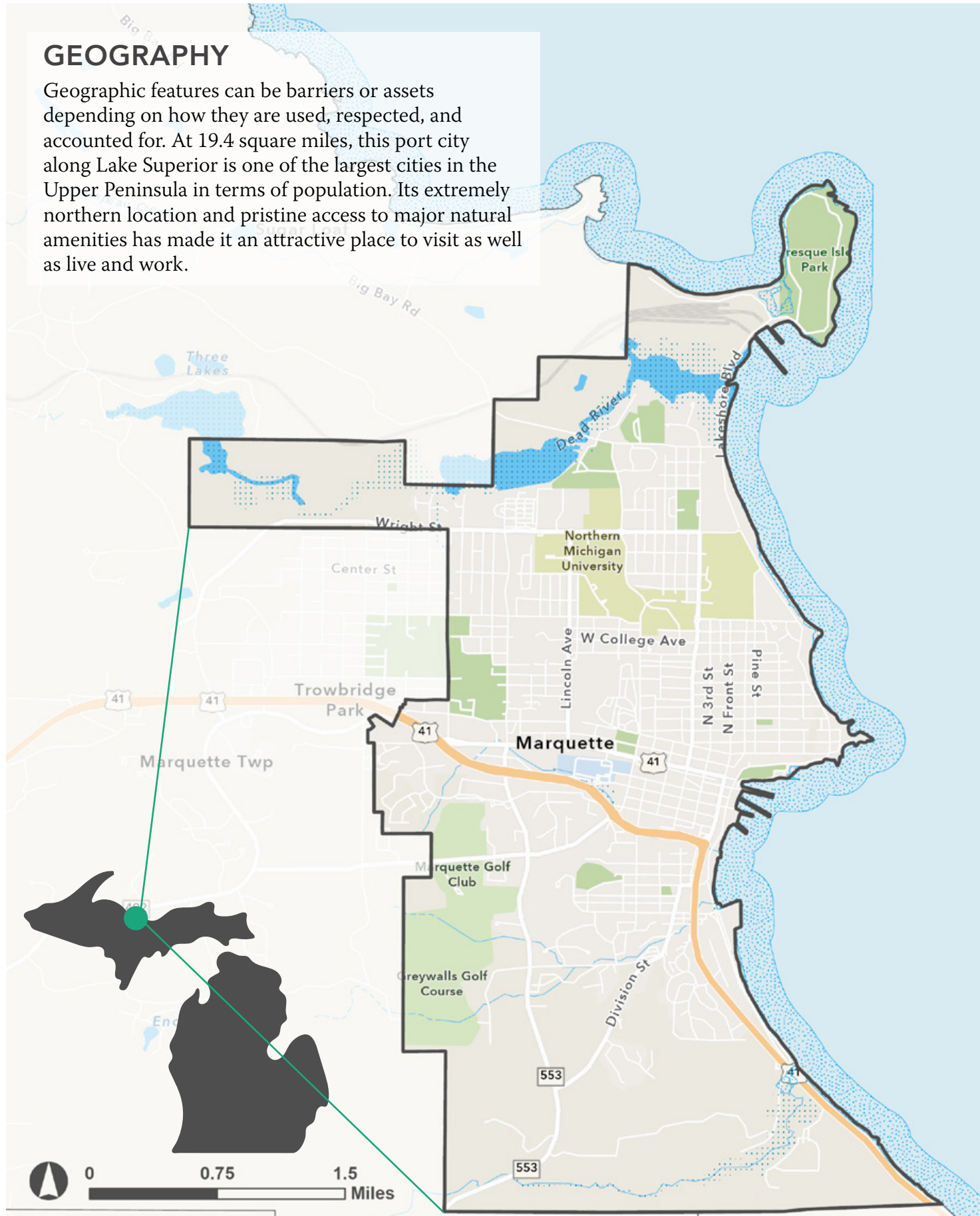
CONTEXT



Image Source
Aaron Peterson of National
Trust for Historic Preservation

GEOGRAPHY

Geographic features can be barriers or assets depending on how they are used, respected, and accounted for. At 19.4 square miles, this port city along Lake Superior is one of the largest cities in the Upper Peninsula in terms of population. Its extremely northern location and pristine access to major natural amenities has made it an attractive place to visit as well as live and work.

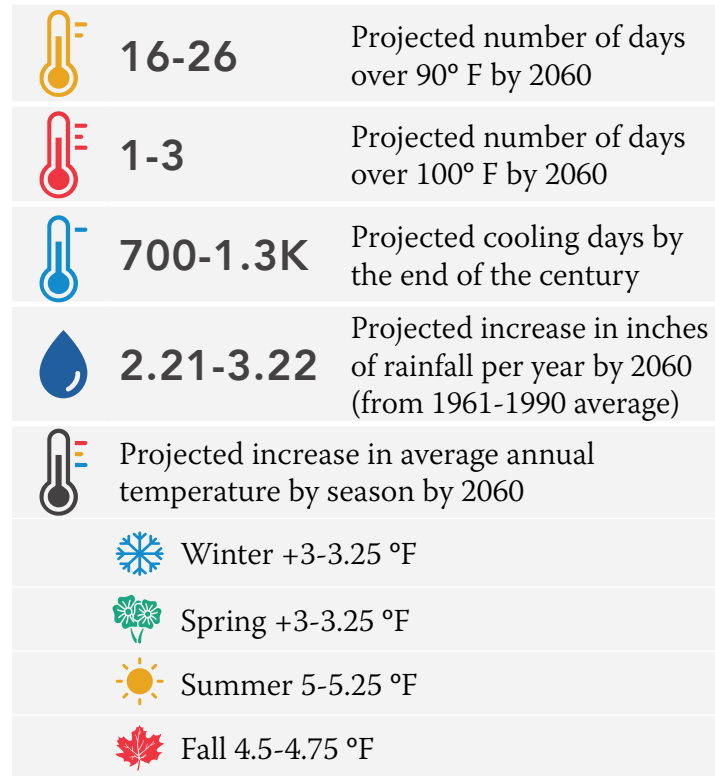


CLIMATE

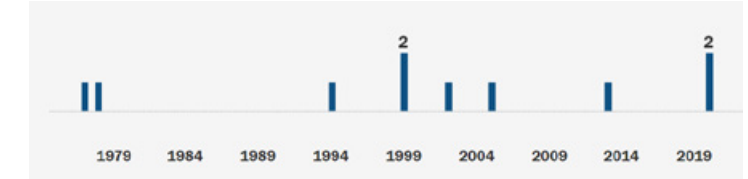
The U.S. has sustained 348 weather and climate disasters since 1980 where the overall damages or costs of each singular event reached or exceeded \$1 billion when adjusted for inflation. The total cost of these 348 events exceeds \$2.510 trillion.¹

In Michigan alone, the governor has declared a major disaster 32 times since 1977, 10 which impacted Marquette County. As the climate shifts, it has the potential to dramatically impact daily life. Increased heating days (days with temperatures over 100 degrees) will impact native ecology, tourism months, and more. Marquette infrastructure and systems will need to be prepared to handle the needs of the community today and the stress of the future climate as well.²

IMPACTS ON MARQUETTE^{3,4}



DISASTERS BY YEAR²



DISASTERS BY TYPE²

Marquette County, Michigan
10 Disaster Declaration(s) since 3/2/1977

Incident Category	Incident Subcategory	Count
Other*	Biological	2
	Drought	1
Flood		2
Snowstorm		2
Fire		1
Tropical Storm*	Hurricane	1
Winter Weather*	Freezing Temperature	1

The projected impacts on Marquette at left show a range of Lower Emissions to Higher Emissions. The difference in these numbers shows stabilization of current emissions versus what could happen if emissions continue to increase without action.

Marquette could see 1 additional month of warm temperatures by 2060.

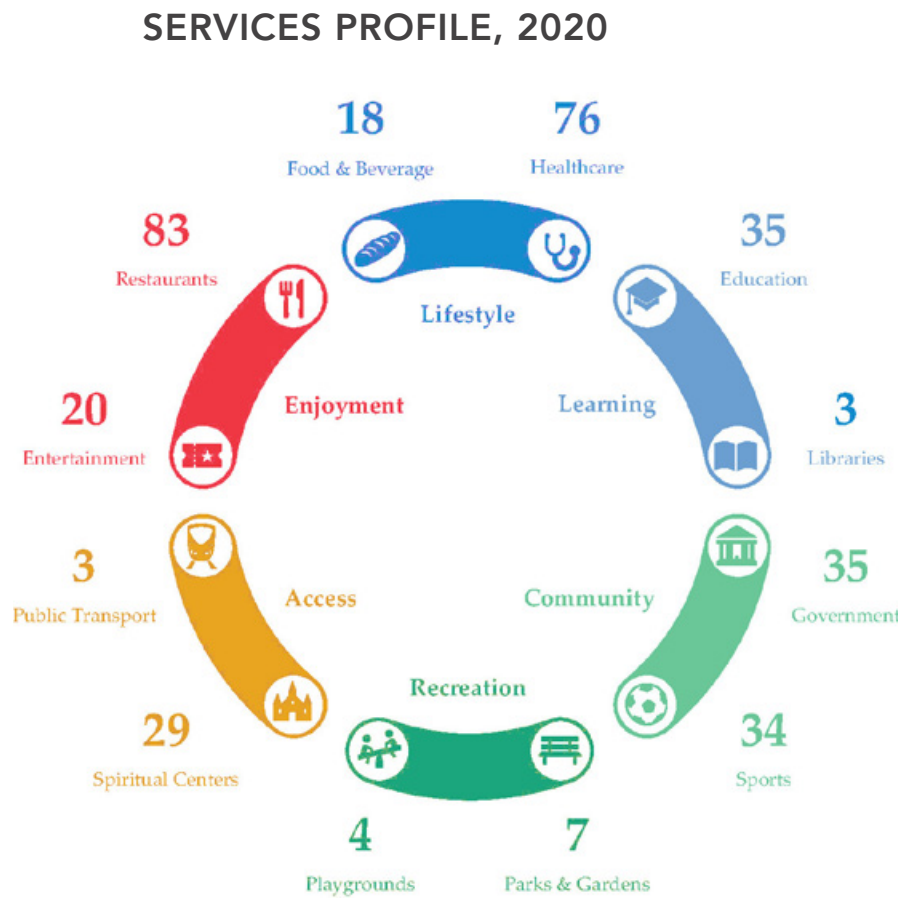


1 NOAA NCEI [U.S. Billion-Dollar Weather and Climate Disasters](#) (2023)
 2 FEMA [Disaster Declarations for States & Counties](#) (2023)
 3 NOAA [Climate Explorer](#)
 4 GLISA [Great Lakes Regional Climate Change Maps](#)

DEMOGRAPHICS

Most of Marquette businesses and services are based in the healthcare, food, and education industries.

Source: 2020 Decennial Census



Marquette is seeing increased interest in the area as more people move to the Upper Peninsula, with double the rate of immigration than the state average.

Source: 2020 Decennial Census

20,592

Total Marquette Population

2.7%

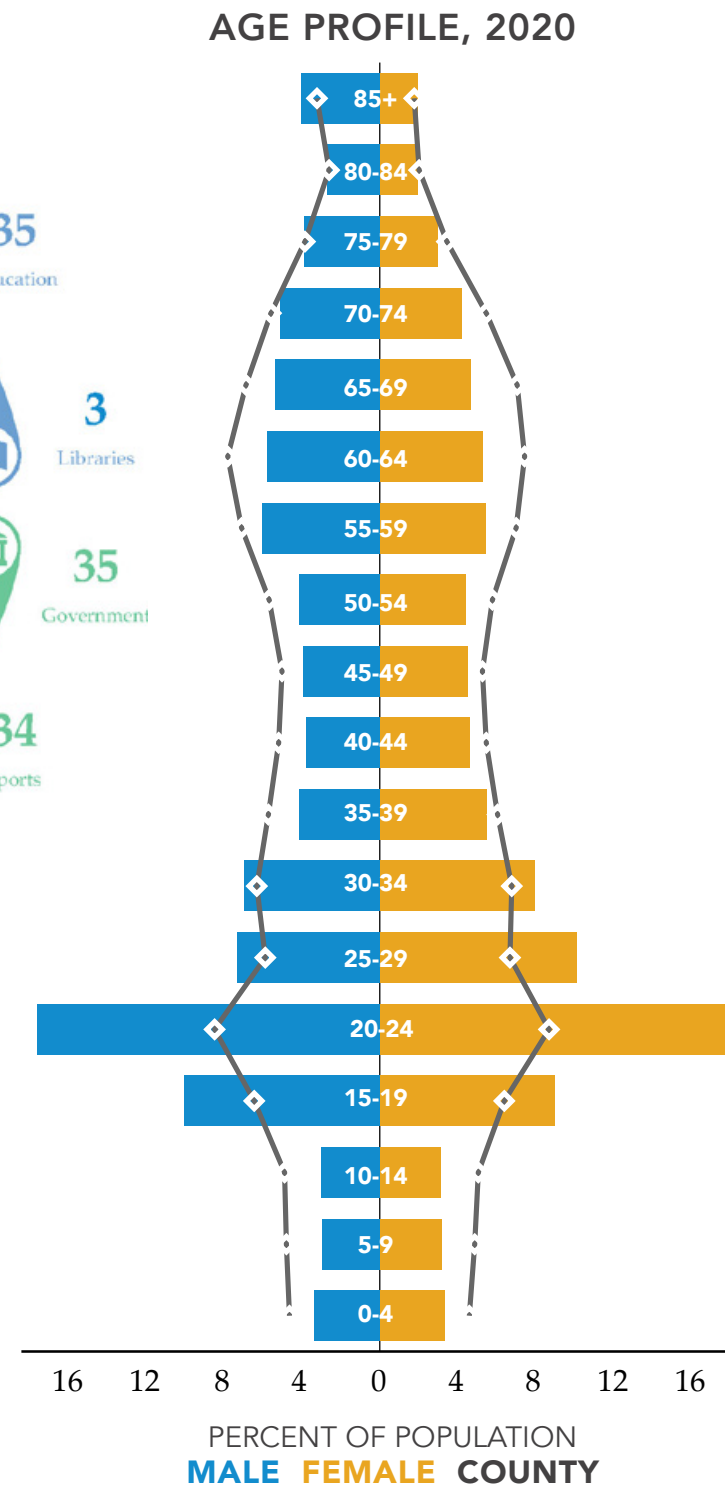
Moved from a Different State to Marquette

1.4%

Moved from a Different State to Michigan

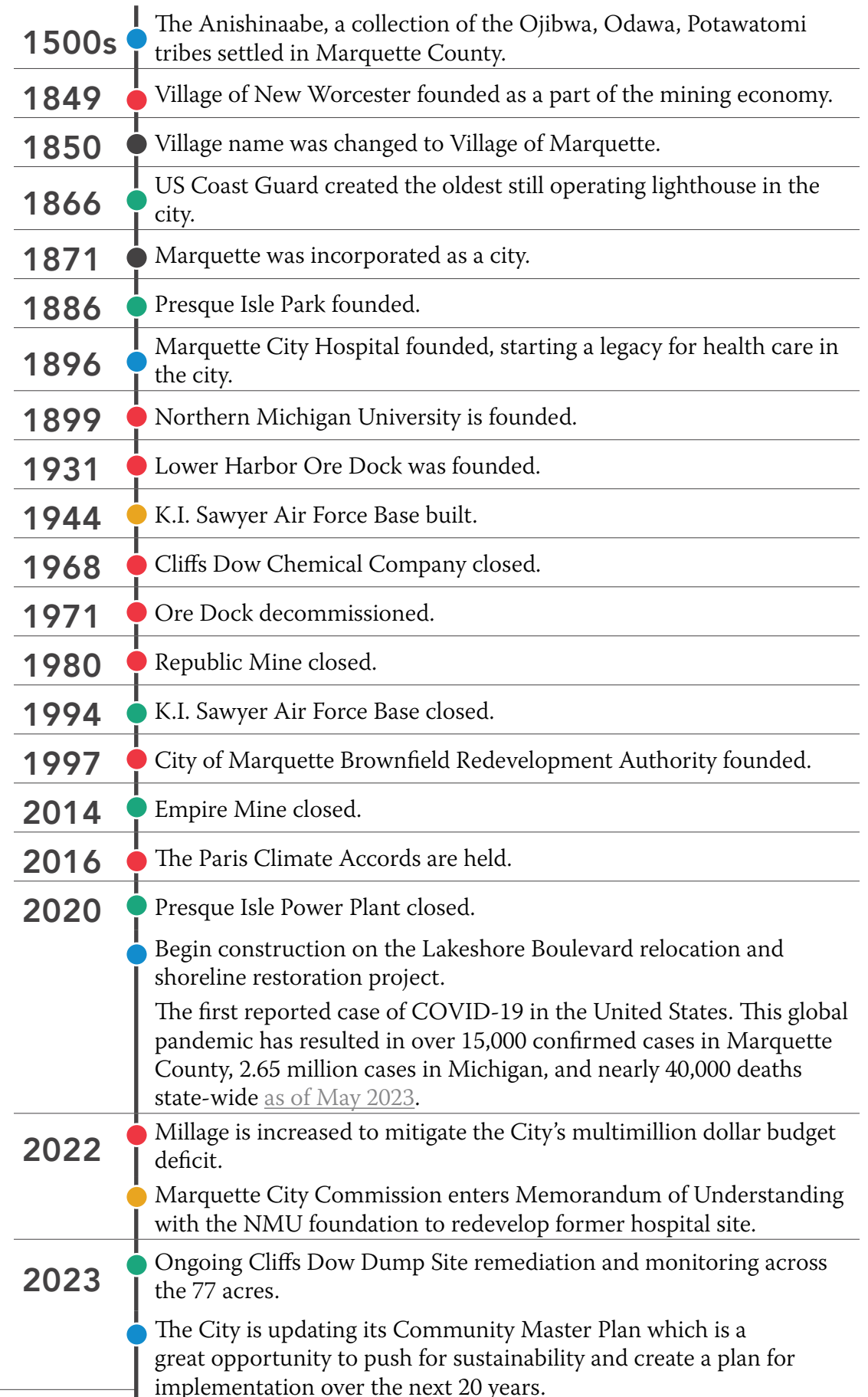
Almost 1 in 5 (16%) of the population in the city is age 20-24 due to student enrollment at the college, far more than the surrounding area.

Source: 2020 Decennial Census



HISTORY

Knowing the timeline of shocks, stressors, and significant events in a community help establish trends and show the long-term effects of actions. Several events have shaped Marquette into the community it is today.



Shocks/Stressors

- Place
- Social
- Infrastructure
- Economy

PRIOR PLANS

City plans establish priorities for staff to meet resident needs. A variety of these plans can and should be related to resiliency factors. This section analyzes what is currently included in plans and what could be included in the future.

Plans

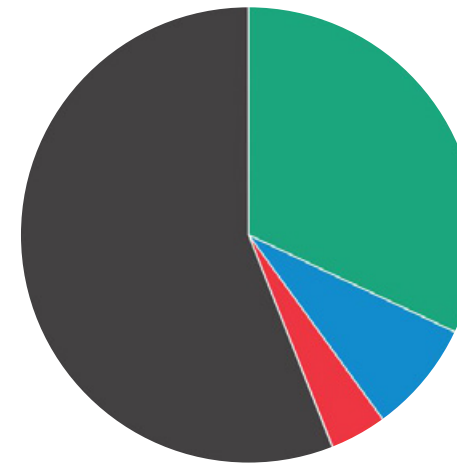
- Place
- Social
- Infrastructure
- Economy

- STATE**
 - [Michigan Healthy Climate Plan \(2022\)](#) was developed by EGLE's new Office of Climate and Energy. It lays out an economy-wide carbon neutrality plan to achieve by 2050 specifically a 28% reduction of greenhouse gases (GHG) by 2025 (of 2005 levels) and 52% by 2050. While not a resiliency-focused document, the Plan represents the State's progress towards addressing climate change.
 - [Climate and Health Adaptation Planning Guide for Michigan Communities | U.S. Climate Resilience Toolkit \(2020\)](#) offers case studies and ideas for building resilience in Michigan municipalities, focusing on Marquette as a pilot community.
- COUNTY**
 - [Michigan Climate and Health Profile \(2015\)](#) discusses current and future health and climate concerns facing the state of Michigan and identifies regional challenges and areas of focus for communities in those areas.
 - [Marquette County Climate Adaptation Task Force \(CATF\) – Superior Watershed Partnership & Land Conservancy Work Plan \(2023\)](#)
 - [Childcare and Homelessness Needs Assessment \(2022\)](#)
 - [Marquette Area Climate and Health Adaptation Guidebook - Volume I: Stakeholder Engagement and Visual Design Imaging - Climate Change \(2019\)](#) identifies community concerns and priorities and offers ideas for how the built environment can be adapted in response to these issues.
 - [Marquette County Climate Adaptation Plan \(2014\)](#) looks at past data, current and future vulnerabilities, and forecasting and modeling for future climate conditions and determines goals and strategies for Marquette County.
- CITY**
 - [Historical Climatology Marquette, MI | GLISA \(2014\)](#) offers a summary of observed changes over time as well as projected climate conditions.
 - [Adapting to Climate Change and Variability | Marquette, Michigan | U.S. Climate Resilience Toolkit \(2013\)](#)
 - [Get Involved | Northern Climate Network](#) offers a database of information collected regarding climate action in the Marquette area and at NMU.

SURVEY RESULTS

A self-assessment survey was taken by planning commission, city commission, city staff, and local and regional leaders in a variety of specialties ranging from affordable housing to job development.

Over half of survey respondents were from community organizations.



- 32% Planning Commission Member
- 8% City Commission Member
- 4% City Planning Staff
- 56% Other Community Leaders

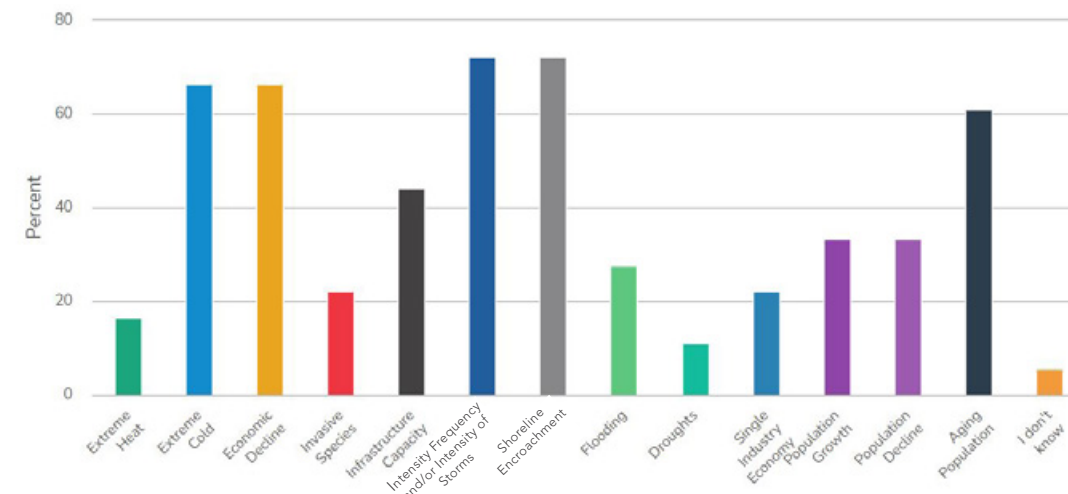
The survey asked what words and projects around resiliency are received positively. Education, affordability, and housing were top answers.



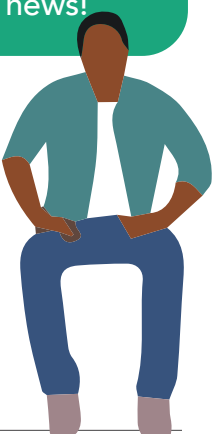
When asked which words or projects are received negatively, high costs and big developments were most mentioned.



Storms, shoreline encroachment, and economic decline were the top shocks and stressors respondents believed have the greatest potential to impact the community.



Respondents agree the City and resiliency partners are aware of the need to prepare for shocks and stressors. This is great news!



SECTION 3 PLACE

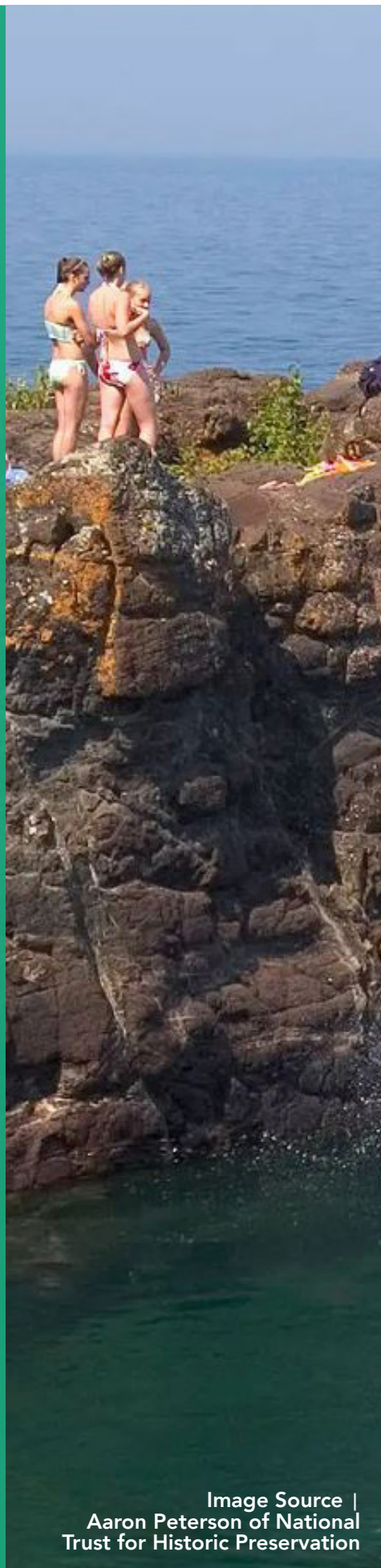


Image Source | Aaron Peterson of National Trust for Historic Preservation

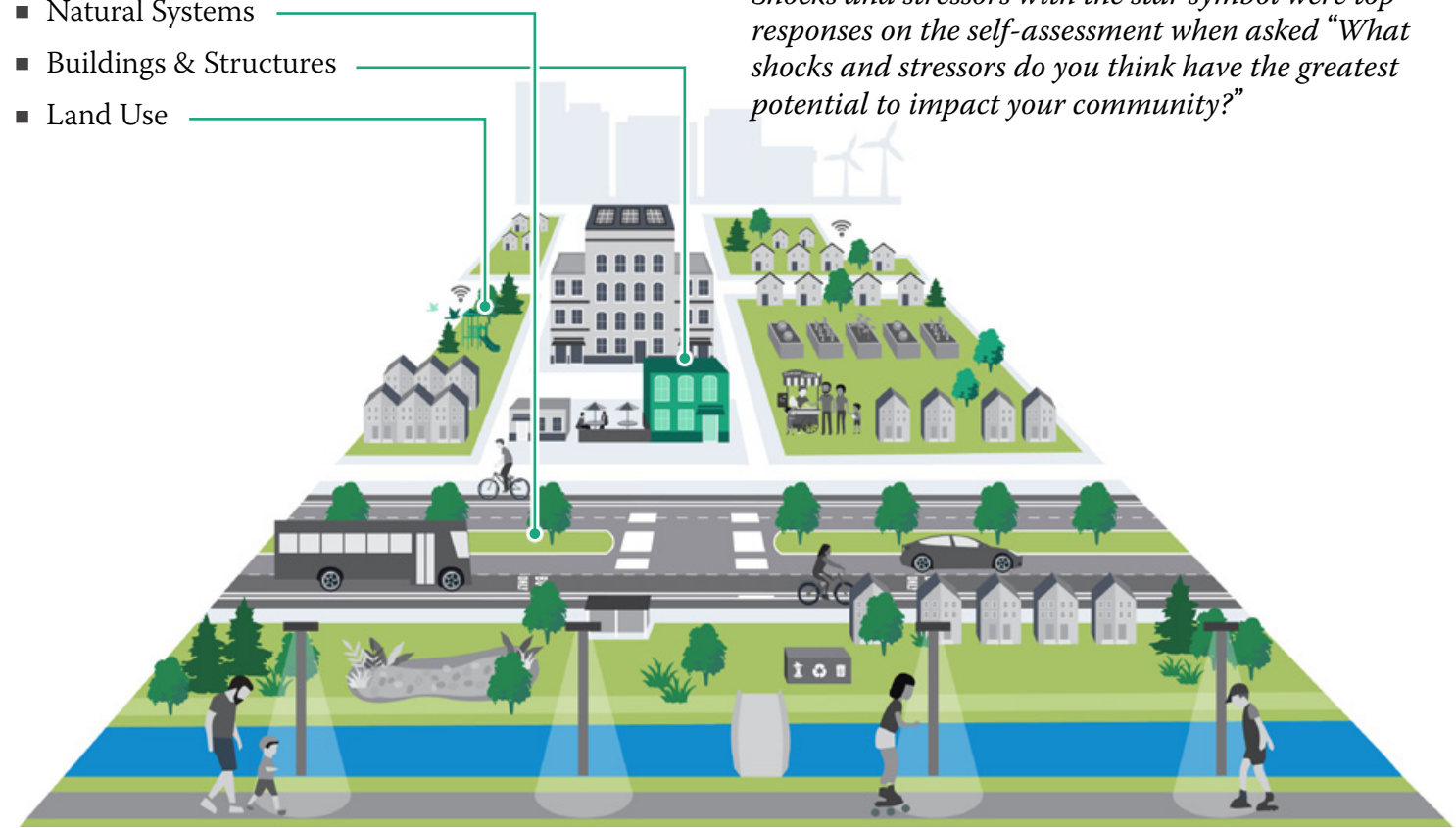
Resilient places include the spaces, structures, systems, and environments that our communities occupy.

These places are physical parks and open spaces, and cultural and historic buildings, but these are also the natural and manmade environments that support and impact our daily lives. They are influenced by the land use, development, and land management policies and practices of our communities.

CATEGORIES

Several categories fall under resilient places. This chapter features trends and recommendations for the following:

- Natural Systems
- Buildings & Structures
- Land Use



SHOCKS

- Flooding
- Loss of historic structures
- Drought
- ★ Increased frequency/intensity of storms
- Extreme temperatures
- Economic downturn

STRESSORS

- Declining building systems
- Fragmented habitat and systems
- Rising temperatures and heat islands
- Aging population
- High energy use (CO2)
- Brownfields/contamination
- Sprawl
- ★ Shoreline encroachment

Shocks and stressors with the star symbol were top responses on the self-assessment when asked "What shocks and stressors do you think have the greatest potential to impact your community?"

NATURAL SYSTEMS

Role in Resiliency

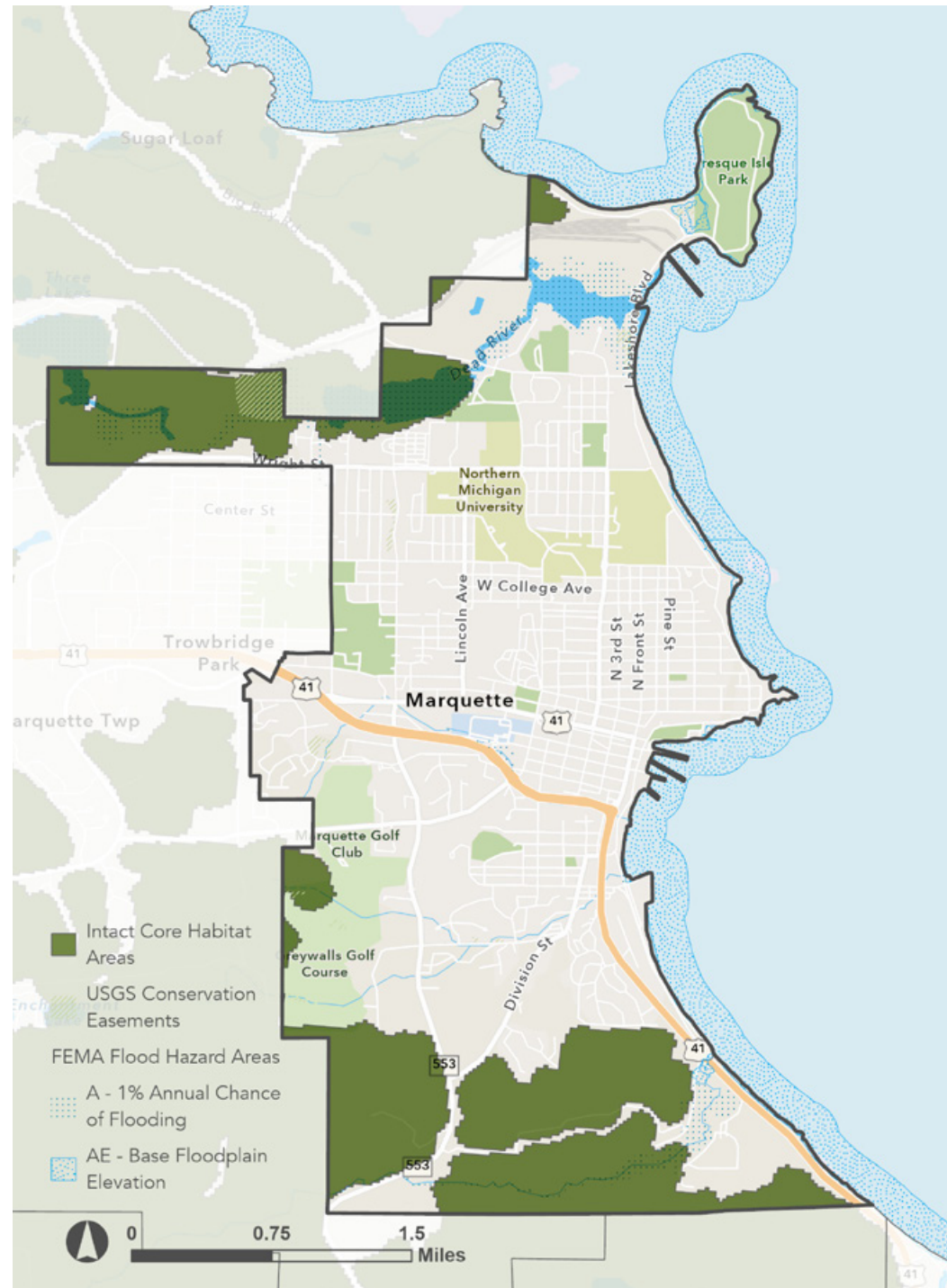
Marquette has an abundance of natural and diverse environmental resources. These provide a foundation for the culture, local economy, and recreation. A healthy set of natural systems contributes to enhanced quality of life, improved resident health, and provides a boost for the eco-tourism economy.

Trends

The City of Marquette is surrounded by flourishing core habitat areas to the north and south, which create a serene sense of arrival to the city and contribute to overall area health. Maintaining these spaces should be a regional priority.

Source: USGS

1 in 4 self-assessment survey respondents believe shocks and stressors to natural resources have the greatest potential to impact the community.



Opportunities

GOALS	ACTIONS	TIME-LINE	RESPONSIBLE PARTY
Air Quality Ensure outdoor air quality is healthy for all segments of the population.	<ul style="list-style-type: none"> Collaborate with regional entities to review data and make recommendations on improving air quality and point source emissions over time to determine which regional efforts will be necessary to decrease the impacts of emissions on the City of Marquette and Lake Superior. Use the EPA Air Quality Monitor website to collect data. 	Near	Marquette County Climate Adaptation Task Force Northern Michigan University
Green Infrastructure Maintain a network of GI that integrates with the built environment to maintain ecological systems and functions.	<ul style="list-style-type: none"> Continue to include evaluation of green infrastructure potential during early site reviews of proposed developments and subdivisions. 	Near	City of Marquette Department of Community Development (Zoning) - Engineering
Biodiversity Promote biodiversity and manage or prevent the proliferation of invasive species.	<ul style="list-style-type: none"> Update code language to include a minimum requirement of native vegetation for development to promote biodiversity, especially for projects near vital natural features such as the shoreline. Implement a framework to encourage or require tree plantings and canopy retention as part of new development and construction practices using a diversity of suitable tree species to decrease vulnerability by reducing susceptibility of disease transmission among trees of the same species. Requires cooperation between Public Works Departments, the Zoning Departments, and any potential future committees such as a community tree committee. 	Near Mid	Marquette County Conservation District Superior Watershed Partnership City of Marquette Department of Community Development (Zoning) City of Marquette Department of Public Works
Urban Heat Island Monitor and mitigate the urban heat island effect.	<ul style="list-style-type: none"> Incentivize green roofs to reduce heat island effect on larger developments and encourage the use of green roofs or solar roofs for public buildings. Green roofs are an excellent way for municipalities to simultaneously address stormwater management and quality, reduce air pollutants, increase energy efficiency of buildings, mitigate the urban heat island effect, and provide green space, habitat, and a potential food source. (APA, 2020. P. 27, D.5.4) 	Long	City of Marquette Department of Community Development (Planning)

Tracking Metrics

- Acres protected land
- Hydrology factors (Army Corps of Engineers)

BUILDINGS & STRUCTURES

Role in Resiliency

Marquette is a mostly built out city with only 10% of structures built in the last 20 years, compared to an average of 16% across the state. Building repairs and investments in existing infrastructure will have the most impact on the future resilience of buildings in the city.

Source: *B25034 | 2021 American Community Survey Estimates*

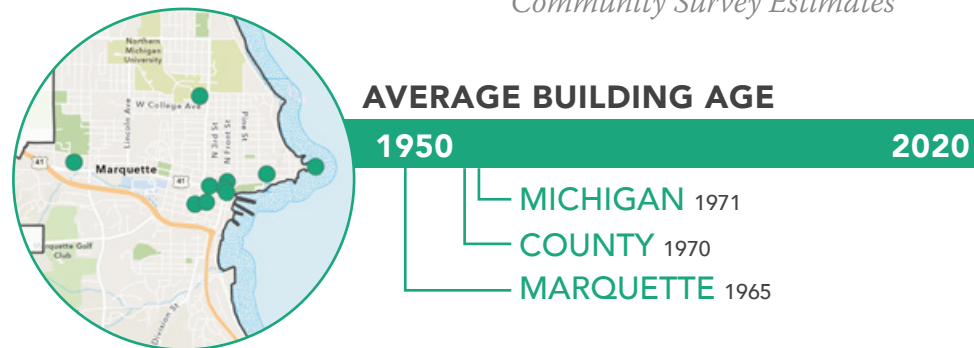
Trends

Marquette has 10 buildings listed on the National Register of Historic Places, but plenty of other structures still hold historic value.

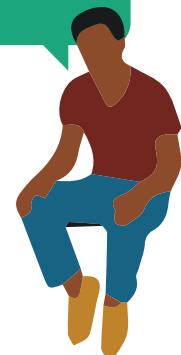
Source: *Michigan History Center*

As Marquette's buildings age, they will need to be brought to code and advanced with the latest technology for energy efficiency and safety.

Source: *B25034 | 2021 American Community Survey Estimates*



When asked which of the following goals the city master plan should address, residents answered...



Community members want the city to prioritize existing infrastructure.

Protect lakeshore views and public access	80%
Protect natural assets and climate	73%
Encourage more housing types and price points	47%
Preserve historic character of buildings	46% ★
Prioritize redevelopment over new buildings	38% ★
Invest in all types of transportation	37%
Preserve neighborhoods character	33% ★
Recruit new business	26%
Encourage vibrant downtown development	26%
Improve recreation	22%

Source: *City of Marquette Master Plan Survey*



Image Source | Aaron Peterson of National Trust for Historic Preservation

Opportunities

GOALS

Building Energy Efficiency

Ensure new and existing buildings are energy efficient.

ACTIONS

- Support lobby efforts for building code updates at the state level to require more energy efficient building materials and designs.

TIME-LINE

Near

RESPONSIBLE PARTY

State Building Codes

Historic & Cultural Assets

Preserve, conserve, renovate, and adapt historic structures and sites to retain local, regional, and national history and heritage, and community culture.

- Advocate for adaptive reuse of existing, structurally sound, and/or historically significant buildings around institutional or commercial hubs such as Downtown and near Northern Michigan University using *tools* such as design guidelines, adaptive reuse incentives, and listings of culturally-significant buildings. Adaptive reuse of older buildings helps preserve structures while also reducing carbon emissions.

Mid

Marquette Regional History Center

Marquette Downtown Development Authority

Northern Michigan University

Tracking Metrics

- Square footage of sustainable rated city owned and operated facilities
- Change in energy use over time (Marquette Board of Light and Power)

LAND USE

Role in Resiliency

Marquette is well known for its charming neighborhoods and walkable city center, which is due in large part to historic development patterns and land use. The City has worked to modernize land use and zoning to meet best practices for equitable, compact community design. Building on this strong legacy in the city and the surrounding region will be key to maintaining a dynamic, active sense of community.

Tracking Metrics

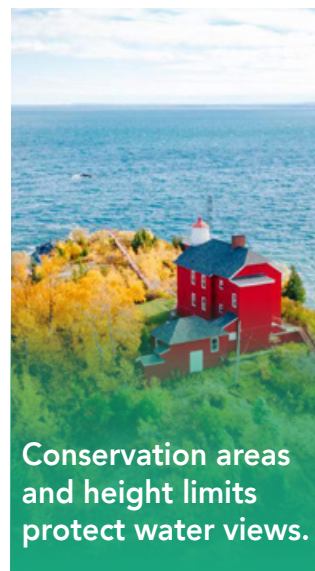
- ▣ Acres vacant land
- ▣ Acres publicly owned land
- ▣ Acres of parks and open space

Trends

Land use plays a role in a lot of the things residents want to see. When asked which of the following goals the city master plan should address, residents answered...

Protect lakeshore views and public access	80%	★
Protect natural assets and climate	73%	★
Encourage more housing types and price points	47%	★
Preserve historic character of buildings	46%	★
Prioritize redevelopment over new buildings	38%	
Invest in all types of transportation	37%	
Preserve neighborhoods character	33%	★
Recruit new business	26%	
Encourage vibrant downtown development	26%	★
Improve recreation	22%	★
Improve arts/culture	19%	
Promote Marquette as year-round destination	17%	

Source: *City of Marquette Master Plan Survey*



Conservation areas and height limits protect water views.



Design standards preserve building character.



City zoning leaves space for a variety of housing types.

Opportunities

GOALS	ACTIONS	TIME-LINE	RESPONSIBLE PARTY
Local Agriculture Encourage private, local and community agriculture at a variety of scales.	<ul style="list-style-type: none"> ▣ Continue to promote preservation of prime agricultural and forested land as a natural green belt around the city, which would help create a sense of arrival and place, assist with carbon sequestration, and support and local food security, especially in light of the supply chain issues inherent with a far northern location. This would require partnership with surrounding townships to preserve open land to the north and south. 	Near	Marquette County Conservation District Marquette Township Chocolay Township Sands Township
Redevelopment Focus growth and redevelopment in infill areas, increased density, and mixed-use development to reduce sprawl.	<ul style="list-style-type: none"> ★ Continue supporting mixed-use area development, in-fill development, and redevelopment by: streamlining the development review process, ensuring regular training for commission members or board of zoning appeals on regulatory requirements, such as fair housing laws, budgeting, etc in partnership with agencies and organizations such as MAP and MSHDA, and creating clear public procedures to ensure alignment between community opinion and best practices. 	Long	Michigan Association of Planning (MAP) Michigan State Housing Development Authority (MSHDA)
Environmental Impacts Minimize human encroachment and impact on natural features and systems.	<ul style="list-style-type: none"> ▣ Continue to engage in restoring and maintaining the health of Lake Superior, its tributaries, and the buffer zones that protect those water bodies through grant funding and partnerships. ▣ Provide educational materials about how relevant development types that meet Master Plan values and development approvals can be used to enhance ecology, affordability, build into neighborhoods seamlessly, and protect the waterfront. For an example see page 20 of the Las Vegas Master Plan land use types and impacts. 	Near	Superior Watershed Partnership
Parks & Open Space Provide a system of accessible and quality parks, recreation, and open space that meet the needs of the community.	<ul style="list-style-type: none"> ▣ Conduct a study regarding the economic impact of public parklands on the local economy to understand their contributions to community satisfaction and tourism, as well as the adverse impacts said tourism may be having on the local ecology. ★ Evaluate public parklands and the potential use of parks for climate adaptation (especially those in flood plains) as part of the Parks and Recreation Plan update. Survey residents for their preferences for park and recreation programming as it pertains to green infrastructure interventions, publicly accessible amenities such as food sources and WiFi, and enhancing naturalized land to contribute to more holistic resiliency interventions. 	Near	Marquette County Chocolay Township Marquette Township Marquette County Conservation District SmartZone Local Development Finance Authority

SECTION 4

PEOPLE



Image Source | Michigan Municipal League

Resilience depends on providing all people with fair access to the resources needed to ensure a stable, secure, and well-rounded quality of life.

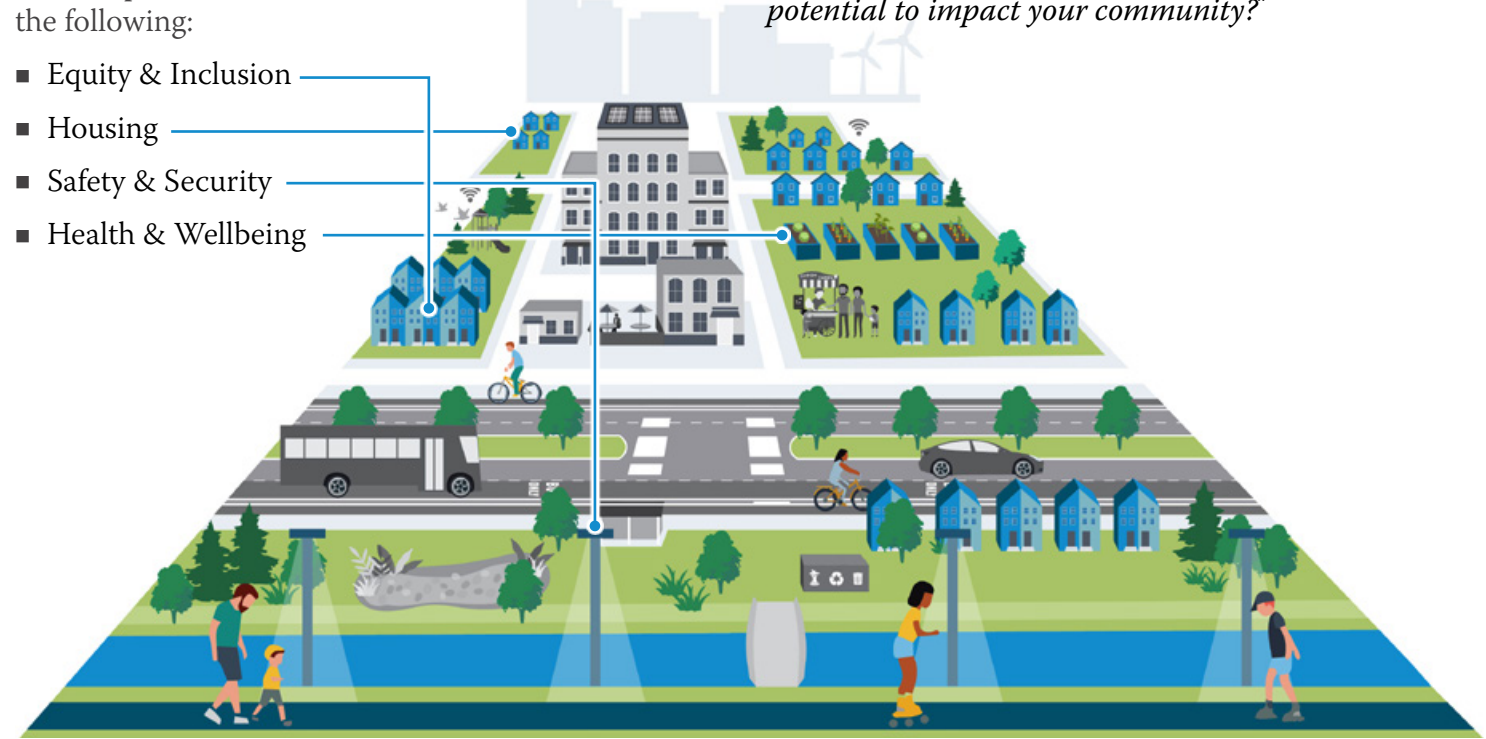
People are the foundation of a community. As individuals, residents exercise their voices, actions and rights in diverse ways, while collectively, the cultures, social groups and organizations they form provide support and momentum for the lives of Michiganders.

CATEGORIES

Resilience in a community depends on how people experience and interact with their environment.

This chapter features trends and recommendations for the following:

- Equity & Inclusion
- Housing
- Safety & Security
- Health & Wellbeing



SHOCKS

- Health emergencies + COVID-19
- Loss of employment + financial burden
- Educational
- ★ Resource crisis
- Communication failure
- Unreliable transportation/evacuation routes

STRESSORS

- ★ Housing cost burden
- Access to health care
- Poor diet and exercise/food insecurity
- Less education + training/unemployment
- Lack of wealth
- Lack of family and social support/isolation
- Violence/community safety
- Structural racism

Shocks and stressors with the star symbol were top responses on the self-assessment when asked "What shocks and stressors do you think have the greatest potential to impact your community?"

HEALTH & WELLBEING

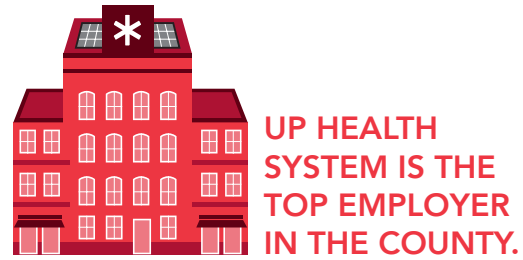
Role in Resiliency

Marquette has a strong connection to health with the presence of the UP Health System. Resilient communities prioritize health not only through proximity to health care and facilities, but also through mental health services, access to recreation, and healthy food.

Trends

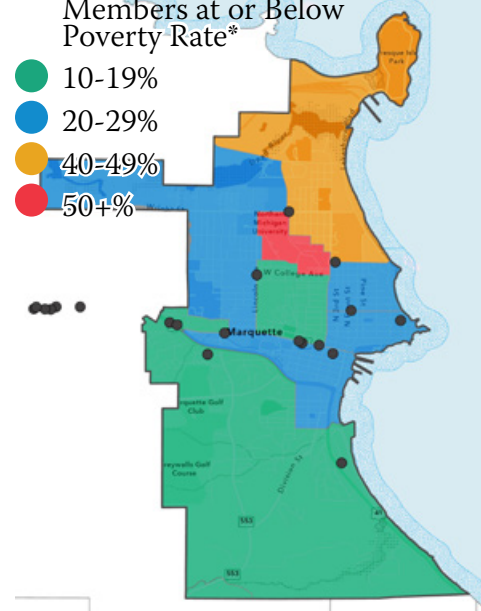
Public health is a major part of the daily life and economy in the city.

Source: *Lake Superior Community Partnership*



ACCESS TO HEALTHY FOOD

- SNAP Facilities
- Percentage of Community Members at or Below Poverty Rate*
- 10-19%
- 20-29%
- 40-49%
- 50+%



Most full service grocery stores are just outside the city or along Highway 41, which limits access for community members to the north and south of the city.

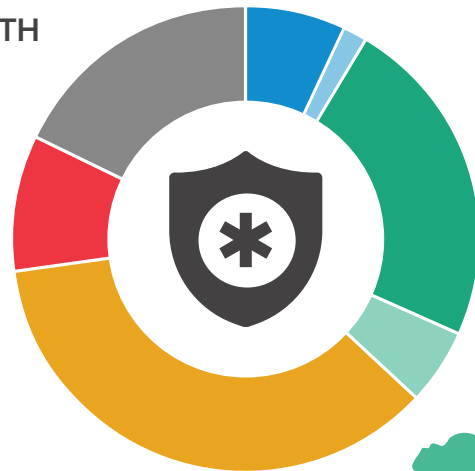
Source: *Food Access Research Atlas, U.S. Department of Agriculture*
*Click [here](#) to learn more about this category.

While only 5% of Marquette residents don't have health insurance coverage, which is typical for the state, there are racial inequities in health care coverage.

Source: *S2701 | 2021 American Community Survey Estimates*

POPULATION BY RACE WITH NO HEALTH INSURANCE

- White
- Black
- American Indian
- Asian
- Some Other Race*
- Two or More Races
- Hispanic or Latino



*Click [here](#) to learn more about this category.

The region has strong infrastructure to support active lifestyles, although access to those facilities could be enhanced.

44.2%
of residents exercise at home 2+ times a week

Source: *2021 American Community Survey*

342
miles of trails in Marquette County

Source: *Rails to Trails Conservancy*

33
parks and trails maintained by the city

Source: *5 Year Parks and Recreation Plan*



Opportunities

GOALS	ACTIONS	TIME-LINE	RESPONSIBLE PARTY
Health Care Access Provide high quality local health systems that are accessible and responsive to community needs.	<ul style="list-style-type: none"> □ Lobby to increase support for non-profit health care organizations that receive federal funding and deliver comprehensive care to uninsured, underinsured, and vulnerable patients regardless of ability to pay. 	Near	NMU UP Health System
	<ul style="list-style-type: none"> □ Collaborate with organizations such as Northern Michigan University (NMU), UP Health System, and Lake Superior Community Partnership to implement strategies to recruit medical professionals to the community or to areas of need in the community. 	Near	Lake Superior Community Partnership Marquette County Health Department
	<ul style="list-style-type: none"> □ Identify and address existing disparities in access to healthy opportunities, including healthy foods, green spaces, opportunities for exercise, and active transportation. (APA, 2020. P. 32, E.7.3) 	Near	
Active Living Promote active lifestyles for adults and children to integrate physical activity into their daily routines.	<ul style="list-style-type: none"> □ Develop and expand a community center with programs for people of all ages—from toddlers to centenarians (AARP "Livability Roadmap: Health"). Community centers can also act as cooling and heating shelters. 	Mid	Marquette United Way
	<ul style="list-style-type: none"> □ Provide assistance for low-income users to access and use public parklands and programming through subsidy, scholarships, and discounts. □ Partner with Marquette Area Public Schools to enable joint use of school-based recreation facilities during non-school hours. 	Mid Near	Marquette Area Public Schools
Healthy Foods Ensure that adults and children of all income levels have physical and economic access to fresh and healthy food and have opportunities to learn about nutritious eating and food safety.	<ul style="list-style-type: none"> ★ Partner with the Marquette Downtown Development Authority (MDDA) and affiliated partners such as United Way to create a food rescue program, as in public-private partnerships between restaurants, hotels, and other venues of large food production, to make good food more widely available to community members in need. 	Mid	MDDA United Way of Marquette County

Tracking Metrics

- Asthma, food deserts, and medically underserved populations (EPA EJ Screen)
- Populations at risk (Center for Disease Control)

HOUSING

Role in Resiliency

Housing is the foundation of strong neighborhoods and key to high quality of life. Strong housing networks are well connected to neighborhood necessities and amenities such as grocery stores, schools, and parks. They are physically and financially accessible. Marquette's housing market is extremely stretched, and could become even more strained as ecotourism and climate refugees are expected to be on the rise.

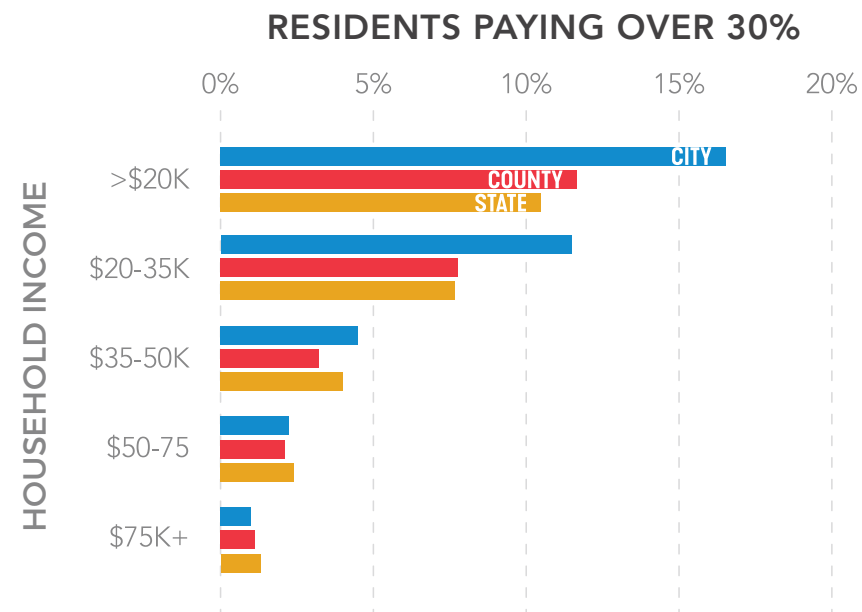
16.6% of Marquette residents making less than \$20K are spending more than 30% of their income on housing.

This disproportionately affects renters. 55% of renters are spending over 30% of their income on housing costs.

Trends

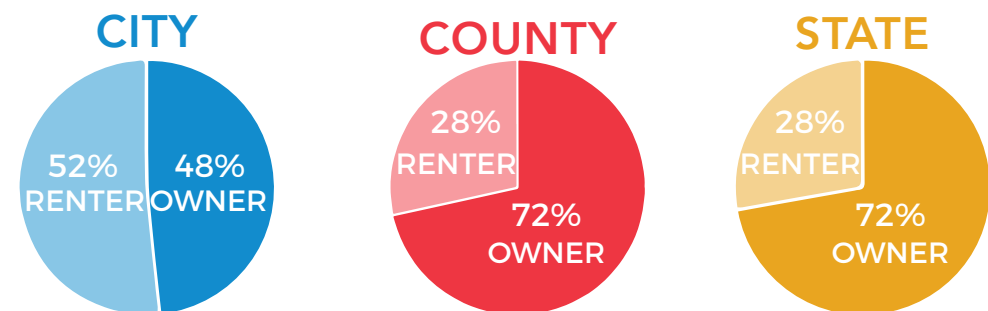
Best financial practices are to spend about 30% of income on housing costs. However, housing costs in the city are expensive and have the most impact on residents with lower incomes. A coordinated regional housing approach will be needed to support these residents.

Source: *2020 Decennial Census*



Marquette has more renters than owners. While this makes sense with the rise of ecotourism and the needs of college students in the area, it also leaves residents vulnerable to getting priced out of the community.

Source: *2020 Decennial Census*



Housing affordability is a top concern.

The majority of self-assessment survey respondents and Master Plan engagement participants said housing costs are a top resiliency challenge the city is facing. When asked which of the following goals the city master plan should address, residents answered...

Protect lakeshore views and public access	80%
Protect natural assets and climate	73%
Encourage more housing types and price points	47% ★
Preserve historic character of buildings	46% ★
Prioritize redevelopment over new buildings	38% ★
Invest in all types of transportation	37%
Preserve neighborhoods character	33% ★

Source: *City of Marquette Master Plan Survey*

SAFETY & SECURITY

Role in Resiliency

Safety plays an important role in community resiliency by providing: quality services and emergency response, pedestrian and motorist safety, safe shared spaces using tools such as lighting and ADA accessibility, and taking special considerations for community members in need of extra supports.

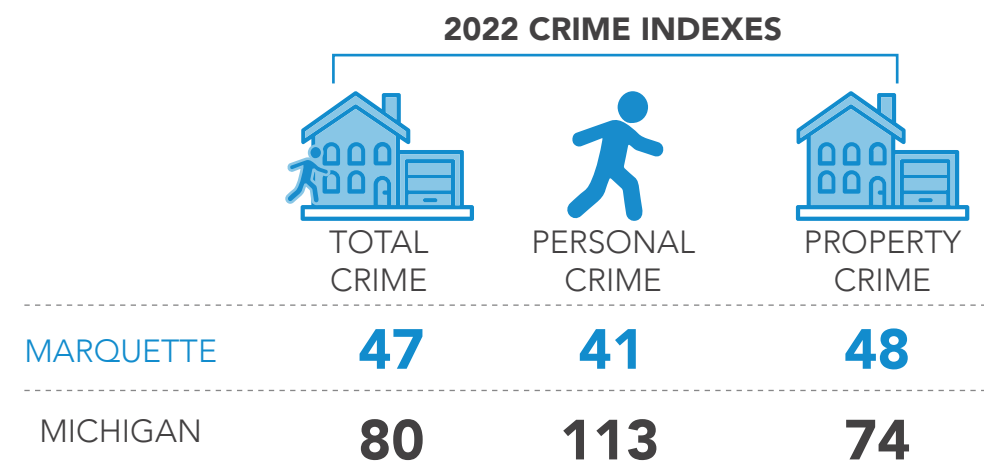
Trends

Some form of disability affects 1 in 5 Marquette community members.

Source: *S1810 | 2021 American Community Survey Estimates*

The crime index in the city is much lower than that of the state.

Source: *Applied Geographic Solutions*



Marquette County has had 598 crashes in 2020 compared to 1,945 crashes in 2010.

Source: *Michigan Traffic Crash Facts 2010 and 2020*



2020 YEAR END MARQUETTE COUNTY CRASH STATISTICS

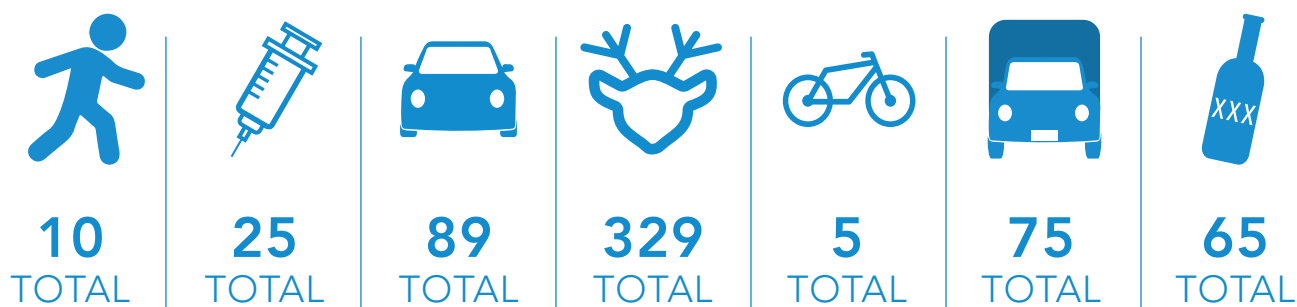


Image Source | Marquette Police

Opportunities

GOALS

Crime & Community Safety

Maintain an environment where people feel safe and welcomed in their communities.

Pedestrian, Bicycle, & Transportation Safety

Provide safe, efficient, accessible pedestrian, bicycle, and vehicular networks.

ACTIONS

- Partner with the Northern Michigan Public Service Academy (NMPSA) to provide mental health and dementia awareness training for first responders and municipal employees (AARP Roadmap to Livability: Health) as well as promote existing programs such as the Employee Assistance Program.
- Partner with the Marquette Police Department to conduct a survey of community perceptions of safety recognizing that some crimes are not reported and to illuminate safety issues that need to be addressed.

- Update the city complete streets policy to include a Vision Zero initiative, which eliminates vehicle-caused pedestrian injuries and deaths.

TIME-LINE

Near

Near

Mid

RESPONSIBLE PARTY

NMPSA
UP Health System
Pathways Community Mental Health

Tracking Metrics

- Survey participants
- Number of training participants
- Number of crashes and accidents

EQUITY & INCLUSION

Role in Resiliency

A truly resilient Marquette will take action to ensure equitable access to opportunities for civic participation; access to resources considering potential physical, language, or visual barriers; and actively work to lower rates of disparity by income, health, or race.

Trends

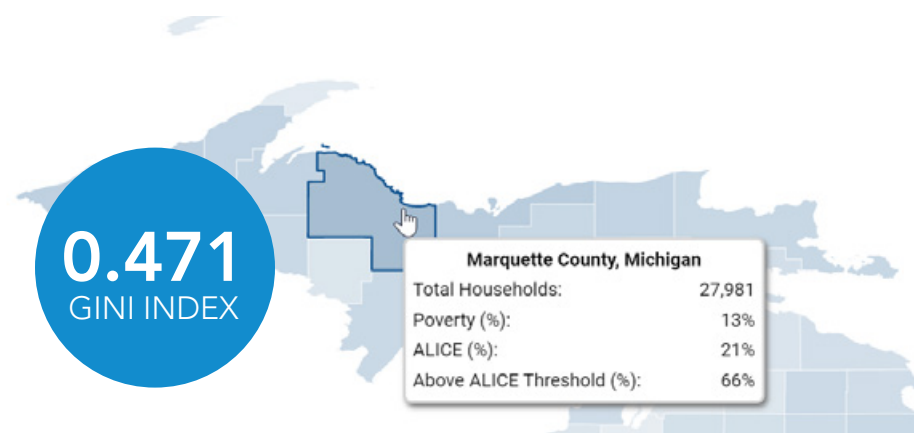
1 in 4 Marquette residents are living below the poverty line, more than double the rate of the state.

Source: *2020 Decennial Census*



Income inequality can be measured using the Gini Index. The Gini coefficient ranges from 0, indicating perfect equality (where everyone receives an equal share), to 1, perfect inequality (where only one recipient or group of recipients receives all the income)

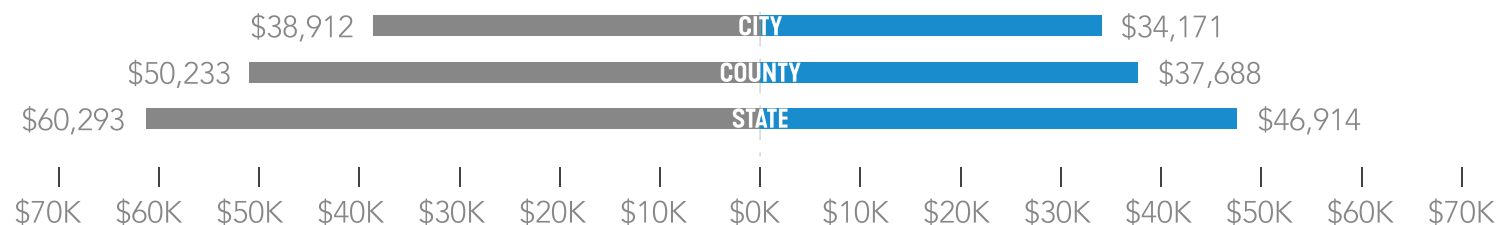
Source: *U.S. Census Bureau*



Gender plays a factor in income inequality for Marquette, but does not appear to have as much of an impact as racial inequality and access to resources.

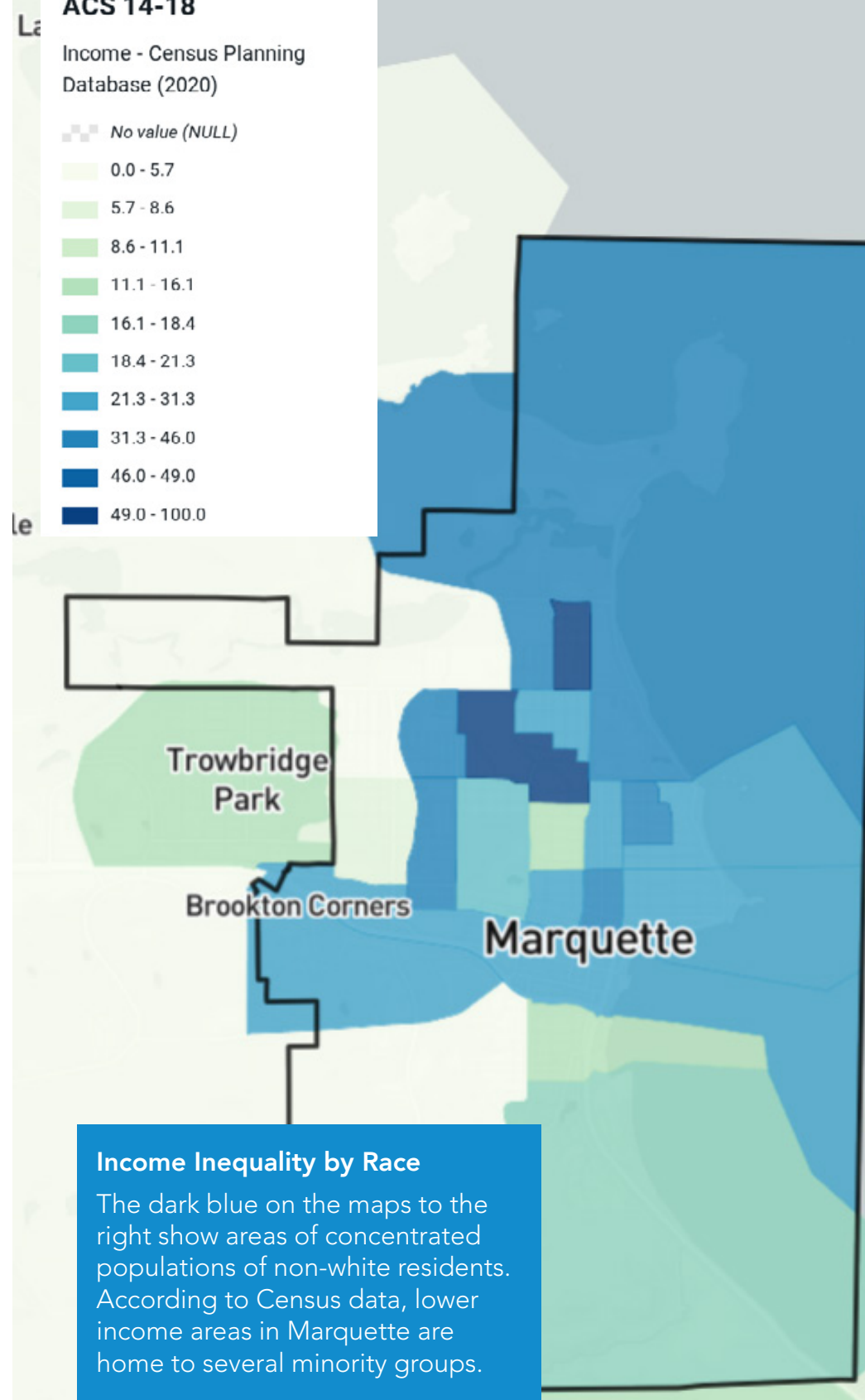
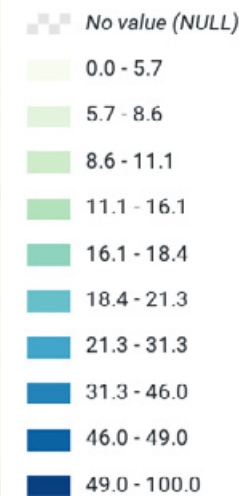
Source: *2020 Decennial Census*

INCOME BY GENDER

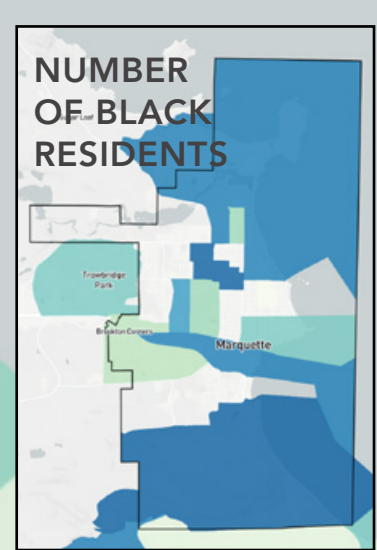
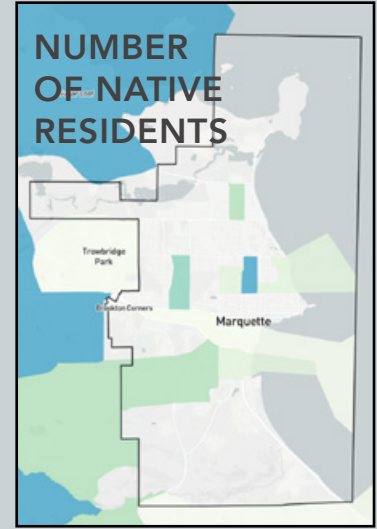


Percent Persons Below Poverty Level ACS 14-18

Income - Census Planning Database (2020)



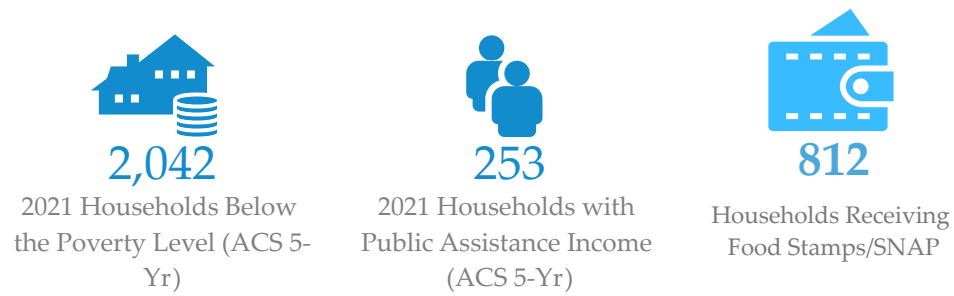
Income Inequality by Race
The dark blue on the maps to the right show areas of concentrated populations of non-white residents. According to Census data, lower income areas in Marquette are home to several minority groups.



Trends

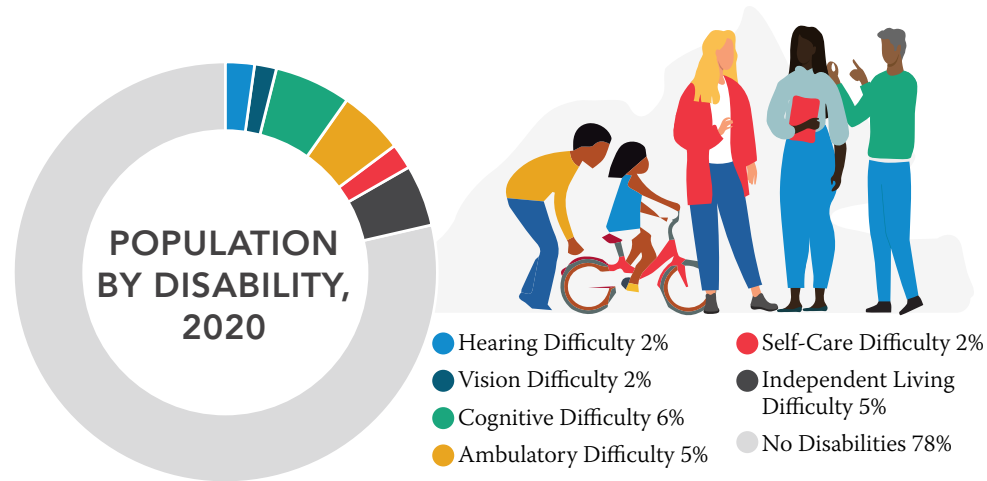
Public assistance and access to resources are both vital components of enhancing equity for the numerous community members who are reliant on these programs.

Source: *2020 Decennial Census*



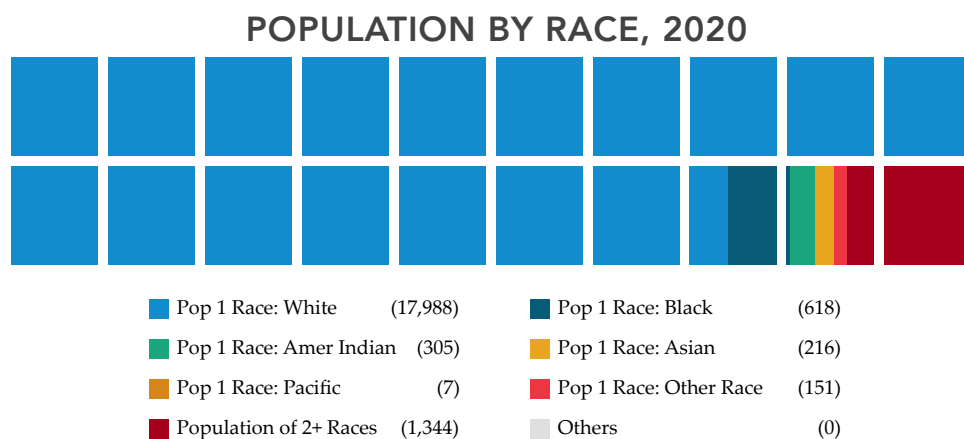
1 in 5 Marquette community members have some form of disability. Proximity to UP Health Systems is vital for these community members, as are potential accommodations during public engagement from the city or unique resources needs.

Source: *2020 Decennial Census*



Marquette is less racially diverse than other Michigan communities, but community members of color are some of the most susceptible people to economic and social shocks and stressors.

Source: *2020 Decennial Census*



Trends

Michigan is the gallicization of the appropriately chosen Ojibwe word, mishigami meaning "large water." Tribal nations play a huge part in the history and culture of Marquette. Two native tribes have a presence in the County.

Source: *State of Michigan*

Keweenaw Bay Indian Community

Sault Ste Marie Tribe of Chippewa Indians

Image Source | Nick Perez of Unsplash

Opportunities

GOALS

Civic Engagement

Facilitate inclusive civic engagement and empower all community members to participate in local decision-making.

Civic & Human Rights

Respect and protect the civil and human rights of all members of the community.

ACTIONS

- ★ Update the City Public Participation Plan to include a commitment to meaningful and inclusive public involvement processes, including collaborative problem solving and participatory planning, working with community partners to put community-based climate action, recovery and resiliency plans into effect (APA, 2020. P. 29, E.1.2).
- Conduct a survey or evaluation to demonstrate existing levels of social capital and community cohesion throughout the community.
- Provide information about community issues, programs, services and activities that is accessible to limited English proficiency residents.
- Continue to provide training for police officers, public responders, and city staff focused on implicit bias, cultural responsiveness, and nondiscrimination.

TIME-LINE RESPONSIBLE PARTY

TIME-LINE	RESPONSIBLE PARTY
Near	
Near	
Near	Marquette PD
Near	Northern Michigan University

Tracking Metrics

- Gini Index (US Census Bureau)
- Alice Score (United Way)

SECTION 5

INFRASTRUCTURE



Image Source | Michigan Municipal League

Robust infrastructure is critical to everyday life. Resiliency includes efficient transportation, a reliable power grid and communications outlets, and safe drinking water.

As infrastructure degrades over time, it is important to consider future shocks and stressors that may determine how effectively upgrades or replacements will serve the community in decades to come. While infrastructure is often a high cost investment, it can also be the source of costly catastrophes unless they are built properly upfront.

SHOCKS

- Heatwaves
- ★ Flooding
- Wind Damage
- Winter Storms
- Cyber Attacks

STRESSORS

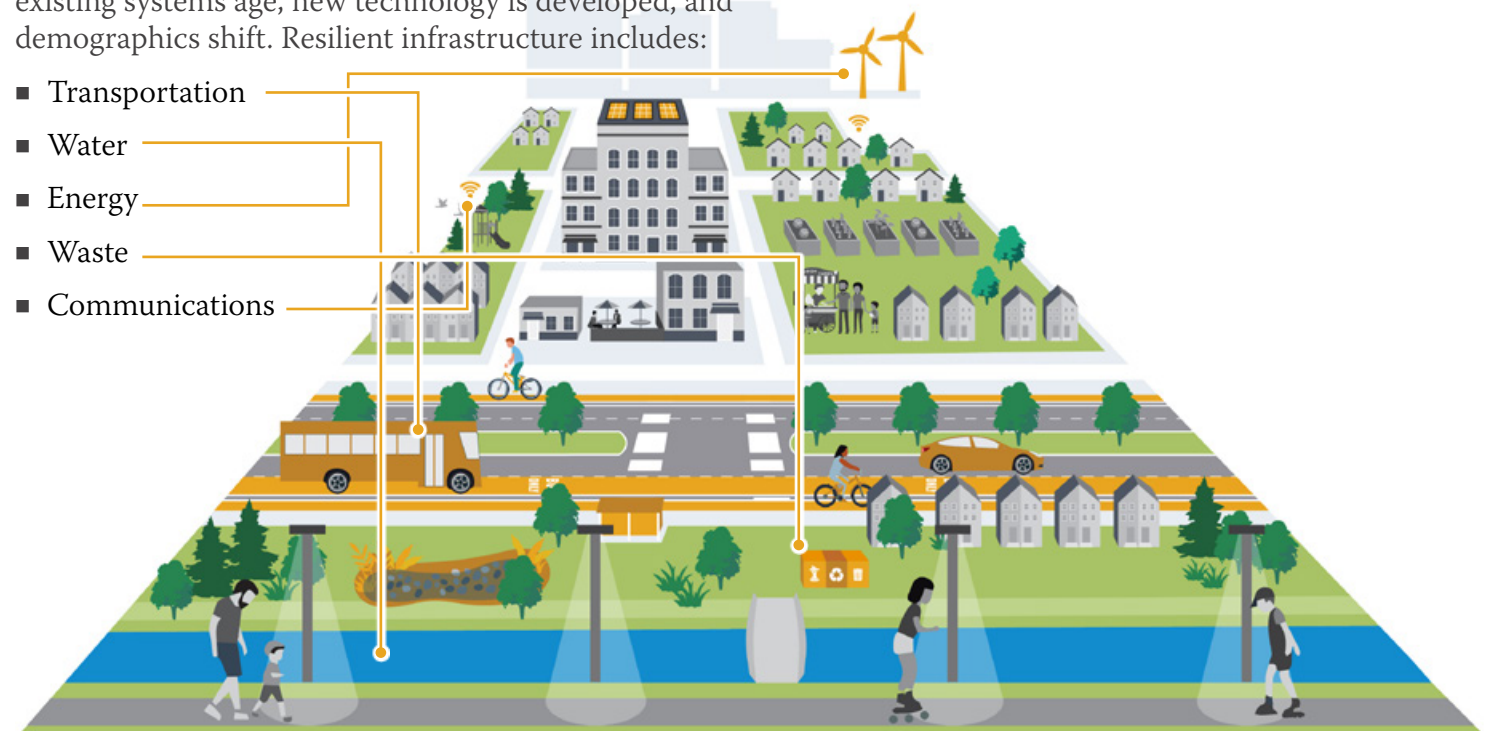
- ★ Age of infrastructure (pipes, wires)
- Deferred maintenance
- Emerging technologies integration (tech synchronization)
- Increasing demand
- Annual average precipitation rise
- Drinking water access

Shocks and stressors with the star symbol were top responses on the self-assessment when asked "What shocks and stressors do you think have the greatest potential to impact your community?"

CATEGORIES

Infrastructure needs are continually evolving as existing systems age, new technology is developed, and demographics shift. Resilient infrastructure includes:

- Transportation
- Water
- Energy
- Waste
- Communications



TRANSPORTATION

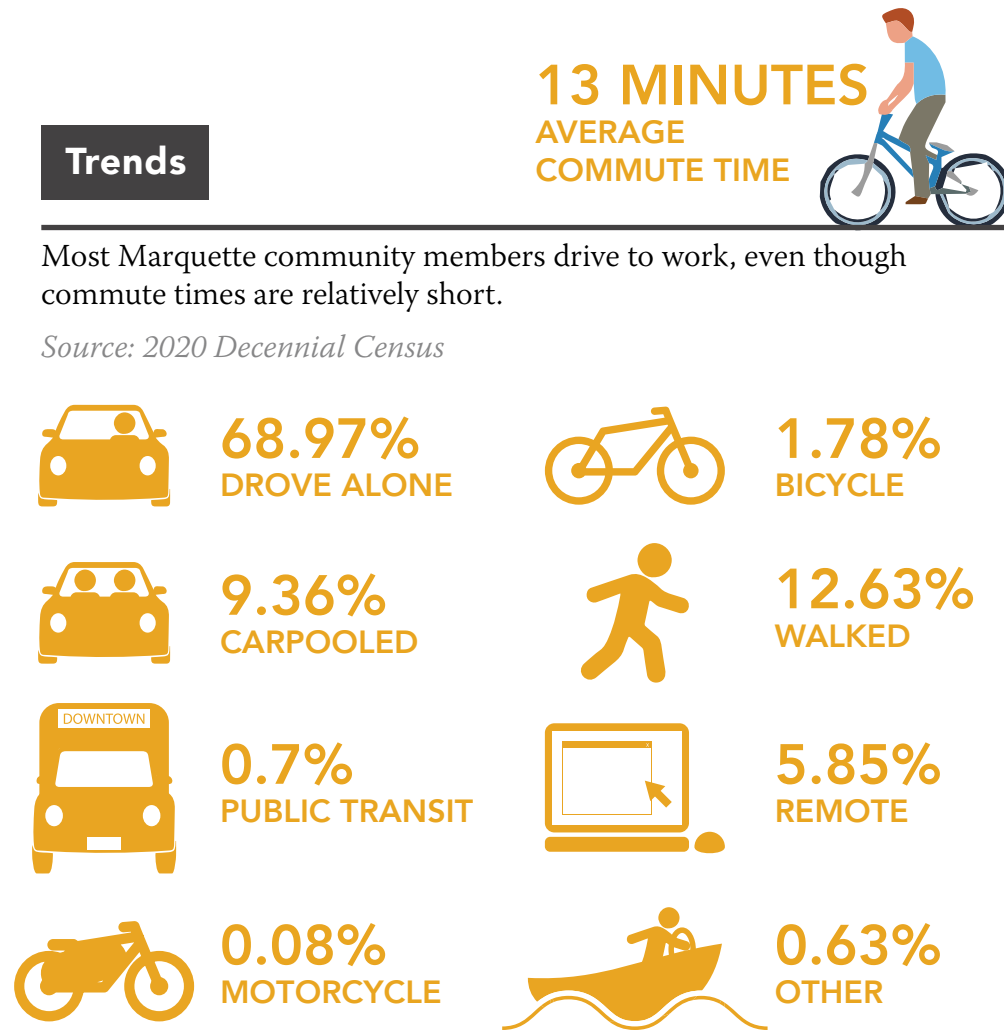
Role in Resiliency

Marquette is known for its dense, walkable downtown and neighborhoods. This is a strong foundation for urban transit which requires density to create regular routes. However, the only regular transit lines are currently serving the university. Resilient transportation in Marquette will focus on providing access to a diverse means of transportation options for residents. These transportation modes should be safe, low-cost and reduce the amount of vehicle miles traveled to connect people to jobs, education, amenities and housing.

Trends

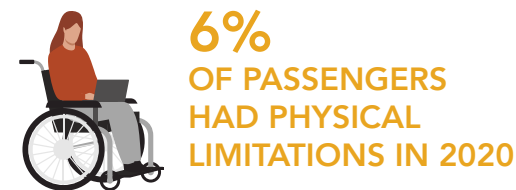
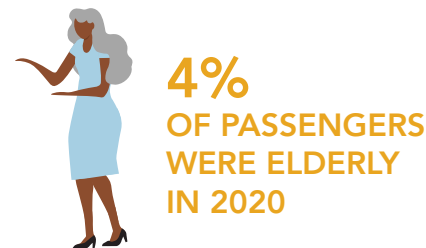
Most Marquette community members drive to work, even though commute times are relatively short.

Source: 2020 Decennial Census



Current ridership capacity has resulted in a limited amount of regular, commuter lines which are serviced by the Marquette County Transit Authority. Building dense city hubs will help expand this reach. It is important to consider the riders of most need when providing services.

Source: 2020 Michigan Public Transit Facts Ridership Report



Opportunities

GOALS

Safe Roads

Provide safe, well-maintained roads for all modes of transportation.

Accessibility

Provide diverse, convenient, affordable, safe and accessible transportation choices and modes with a priority on pedestrian, bicycle and transit infrastructure.

ACTIONS

★ Partner with the county and state transportation entities to improve multimodal, interconnected trade, supply chain logistics, and systems to enhance redundancies in transportation services and access to resources.

□ Continue to participate in county and regional intra- and inter-county trailway planning to offer trail connectivity among residents, employment, and shopping destinations. Examples include enhancing wayfinding on the Iron Ore Heritage Trail.

□ Continue to consider opportunities to further enhance pedestrian and cyclist facilities, enhance bus facilities in areas of commercial or residential density, incorporate alternative modes of transportation in the existing right-of-way, and other transit improvements when conducting design review and street reconstruction plans.

★ Implement future land use and zoning recommendations from the Community Master Plan and Smart Growth America study to encourage personal services (pharmacies, groceries, hardware stores, etc.) in localized areas and near access to transit and adequate bike and pedestrian infrastructure.

TIME-LINE

Long

Near

Near

Near

RESPONSIBLE PARTY

Center for Supply Chain Management at Northern Michigan University
US Army National Guard

Noquemanon Trail Network
North Country Trail Association
City Planning Department/PC
Marquette County Transit Authority

Tracking Metrics

- Increase mode split by increasing the use of transit, walking, and biking to lower amount of trip residents take driving alone (American Community Survey commuting mode-share data)
- Decreased Vehicle Miles Traveled (VMT) per capita.
- Measurement of proportion of residents living in locations with mixed land uses.

WATER

Role in Resiliency

The renowned shoreline of Marquette along Lake Superior provides incredible waterfront access. Resilient water systems in Marquette will go beyond coastal maintenance and include safe potable water, reliable wastewater infrastructure, and proper stormwater management.

Did you know you can see the risk to buildings, roads, and other infrastructure near the shore using the [Great Lakes Shoreviewer?](#)

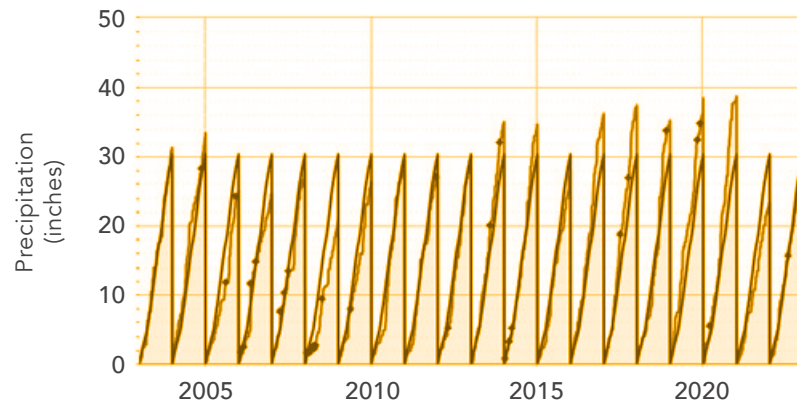


Trends

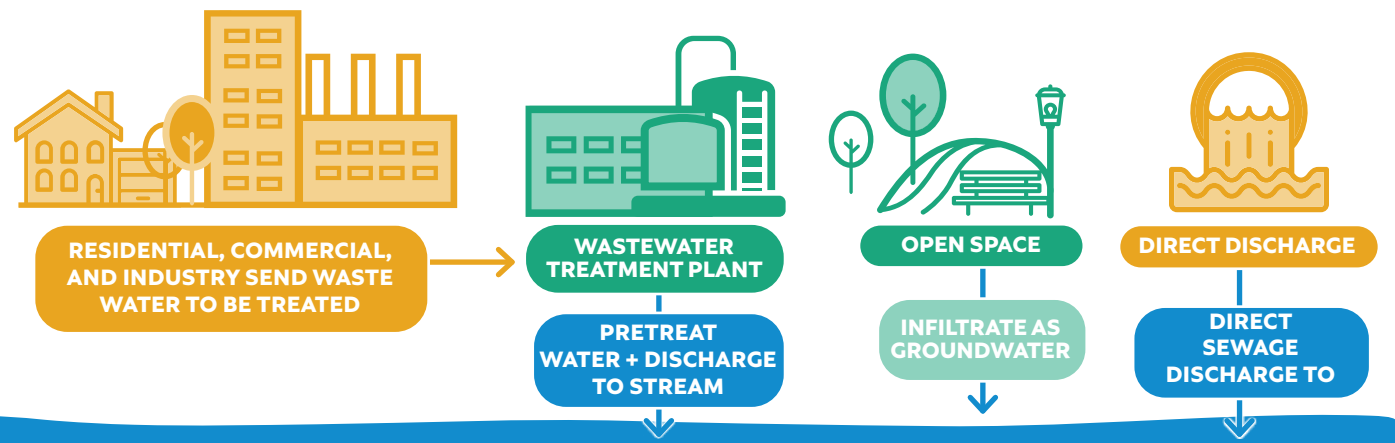
Since 2013, Marquette has more frequently seen precipitation exceeding normal averages throughout the year and rainfall is projected to increase by an average of 2 inches in the next 40 years.

Source: [NOAA Online Weather Data](#)

ACCUMULATED PRECIPITATION
2003 - 2023



In addition to maintaining a supply of clean, reliable, and safe water, the management of stormwater and waste water is of critical importance. Paying stricter attention to the water flows that go through wastewater and/or sewage management systems, or identifying how stormwater infrastructure can help to mitigate any unanticipated water flows.



Opportunities

GOALS

Water Consumption

Minimize water use and demand while providing safe, accessible drinking water to all residents.

ACTIONS

- ❑ Adopt a community-wide water management plan to improve water efficiency and conservation by residential and commercial sectors.
- ❑ Audit drinking water distribution lines; continue to repair or replace lines that are leaking, corroded, or cracked. Priority should be placed on addressing lead lines.
- ❑ Establish protocols in the case of insufficient clean water supply to meet the needs of low-income and other vulnerable populations.

Stormwater Management

Minimize runoff into stormwater infrastructure and reduce flooding.

- ❑ Encourage the use of native landscaping for public projects and private development to decrease water consumption and educate the community about the advantages of native plantings.
- ❑ Continue retrofitting existing streets to incorporate green infrastructure best practices to address stormwater management, wildlife passage, urban heat island impacts, and improve air quality and incorporate other natural systems best practices. (APA, 2020. P. 11, B.4.3)
- ❑ Encourage on-site rainwater and runoff capture, reuse, and infiltration (e.g., rain gardens, cisterns) in new developments and existing developments.
- ❑ Encourage the use of Low Impact Development (LID) stormwater control techniques like rain gardens, bio-retention areas, and bioswales in private developments.
- ❑ Reduce over time the percentage of residents living in designated high-risk flooding areas.

TIME-LINE	RESPONSIBLE PARTY
Near	Public Works
Mid	
Near	
Near	
Mid	
Near	
Near	
Long	

Tracking Metrics

- ❑ Percentage of residents living in designated high-risk flooding areas
- ❑ Potable water use
- ❑ Acres of naturalized landscaping

ENERGY

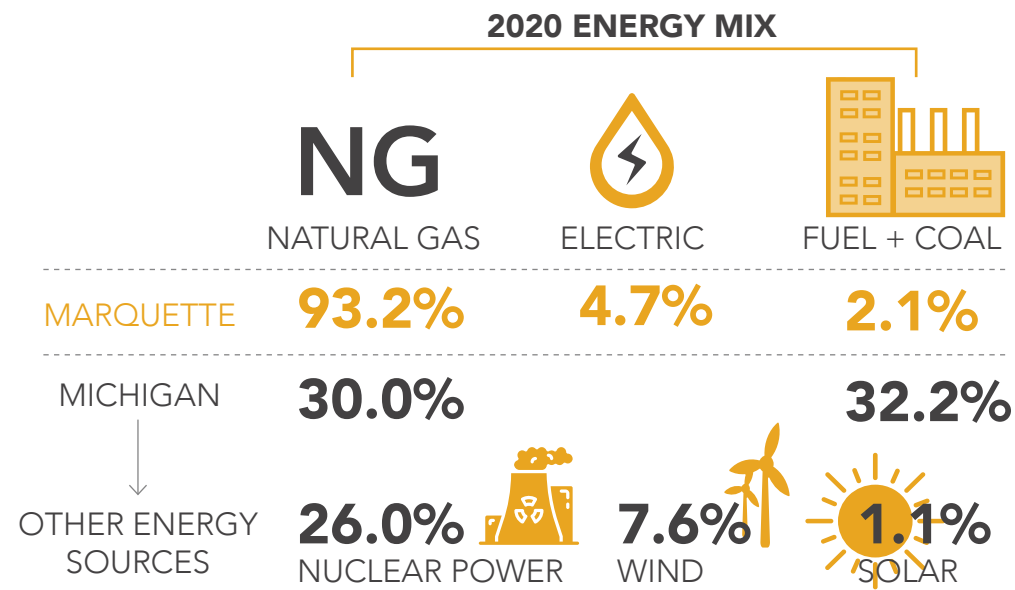
Role in Resiliency

Marquette’s energy systems are managed by the Marquette Board of Light and Power. While steps are already being taken to enhance access to sustainable energy sources, the city has an opportunity to make a major statement through larger shifts in energy supply. Marquette, like many cities with access to abundant natural resources, as a city founded on the mining industry. Showcasing a notable change to renewable sources could set a strong precedent for the future of cities across the state.

Trends

The city has a strong history of mining and is slowly shifting to be more renewable, but that legacy still impacts the city today with most homes powered by natural gas.

Source: 2020 Decennial Census



Marquette’s energy infrastructure is located to the north and managed by the Board of Light and Power, who is taking small steps to become more sustainable.

Source: U.S. Energy Atlas

REDUCED WASTE BY **17,000** TONS IN 2020

814.29 MWH OF SOLAR POWER PRODUCED IN 5 YEARS

THE VOLUNTARY GREEN PRICING PROGRAM ALLOWS COMMUNITY MEMBERS TO OPT IN TO **GREEN ENERGY USE**

THE GENERATING CHANGE PROGRAM PROVIDES ONE-TIME UTILITY ASSISTANCE TO CUSTOMERS WHO **CAN'T AFFORD UTILITY BILLS.**

Opportunities

GOALS

Sustainable Energy

Reduce the energy use intensities of the built environment.

Carbon Footprint

Lower the carbon footprint of the built environment.

ACTIONS

- ★ Create a community energy plan with a focus on sustainable energy choices and measurable outcomes for success.
- Investigate the potential of joining the [World Energy Council](#) as a member community to gain access and resources for enhanced energy resiliency.
- Approach the Marquette Board of Light and Power about permitting Demand Response for energy consumers. Demand response provides opportunities for consumers to improve the operation of the electric grid by encouraging them to reduce or shift their energy usage during peak periods in response to time-based or notification of high electricity usage.
- Continue to undertake periodic evaluations of public facilities and fleets to improve energy efficiencies and to facilitate the implementation of recommendations coming from those evaluations.
- Promote microgrids as a strategy for community energy independence.
- Use PACE financing mechanisms to solve financial gaps for commercial energy upgrades.

TIME-LINE	RESPONSIBLE PARTY
Mid	Marquette Board of Light and Power Johnson Controls Developers
Mid	
Near	
Near	
Mid	
Near	

Tracking Metrics

- Energy consumption by source (U.S. Census)
- Kw of solar panel power produced (Marquette Board of Light and Power)
- Number of LEED buildings (Marquette Department of Community Development: Engineering)
- Cost burden of energy by household (U.S. Census)

WASTE

Role in Resiliency

Waste comes from the consumption of many products and processes. Creating sustainable waste programs requires addressing the storage, transportation, use, composting and disposal of municipal waste.



4.4 lbs
The average american generates 4.4 pounds of trash per day.
Source: *U.S. Environmental Protection Agency*

Trends



20-30%
Composting food scraps and yard waste can reduce 20-30% of typical waste in landfills.*

Composting, when reapplied as part of a soil or fertilizer replenishment program, results in fewer emissions of greenhouse gases (GHGs) and small amounts of carbon storage. Waste-to-energy generation, when it displaces fossil-fuel derived generation, results in a reduction of GHG emissions. (APA, 2020. P. 21, C.7.5)



15-20%
Michigan recycling rate is estimated at 15-20% of the lowest in the country.*

In most cases, recycling reduces GHG emissions because it takes less energy to manufacture a recycled product than it does from virgin materials. The expansion of recycling will require both support for more recycling programs and identifying cost-effective uses for recycled products. This may include stricter requirements on solid waste and incentives for the use of recycled products. Regional composting and recycling solutions offer opportunities to make them more commercially viable. (APA, 2020. P. 21, C.7.4)

Opportunities

GOALS	ACTIONS	TIME-LINE	RESPONSIBLE PARTY
Waste Management Coordinate and promote community programs for waste, recycling, and compost.	□ Promote expansion of composting and recycling by adopting a waste management plan.	Mid	Recycle 906
	□ Operate specific waste management programs for critical waste stream types found in the community, such as organic waste, hazardous waste, electronic waste, and construction and demolition waste.	Near	

Tracking Metrics

- Cubic yards of waste diverted from the landfill

COMMUNICATIONS

Role in Resiliency

Communication infrastructure has become as much as a necessity as water and energy as we have shifted to the digital age. This became especially evident during the pandemic where isolation led to shifts in working and socializing.

Resilient communication systems are critical to the safety and wellbeing of residents. While most communication infrastructure is privatized, Marquette can enhance equitable access to information technology and create redundancy to protect commerce and public safety in the event of natural or human-made disasters.

Trends

If the City of Marquette installed and promoted public hotspots in public spaces, including parks, libraries, and city buildings, almost the entire city would be in a walkable distance of a Wi-Fi hotspot.



1
The State is only promoting 1 public hotspot in the city of Marquette.
Source: *Connected Nation Michigan*



Opportunities

GOALS	ACTIONS	TIME-LINE	RESPONSIBLE PARTY
Energy Communications Strengthen public emergency communication channels.	□ Partner with the Marquette Board of Light and Power to monitor the total amount of customers out of power per census tract after a mass power outage.	Near	Marquette Board of Light and Power
	□ Explore opportunities to construct underground utilities when funding is available to minimize issues caused by extreme weather.		
Wi-Fi Offer free public access to Wi-Fi in easily accessible locations.	□ Create Wi-Fi zones in strategic areas of the city.	Near	

Tracking Metrics

- Total amount of customers out of power per census tract after a mass power outage
- Number and dispersion of public access to Wi-Fi

SECTION 6

ECONOMY



Image Source | Michigan Municipal League

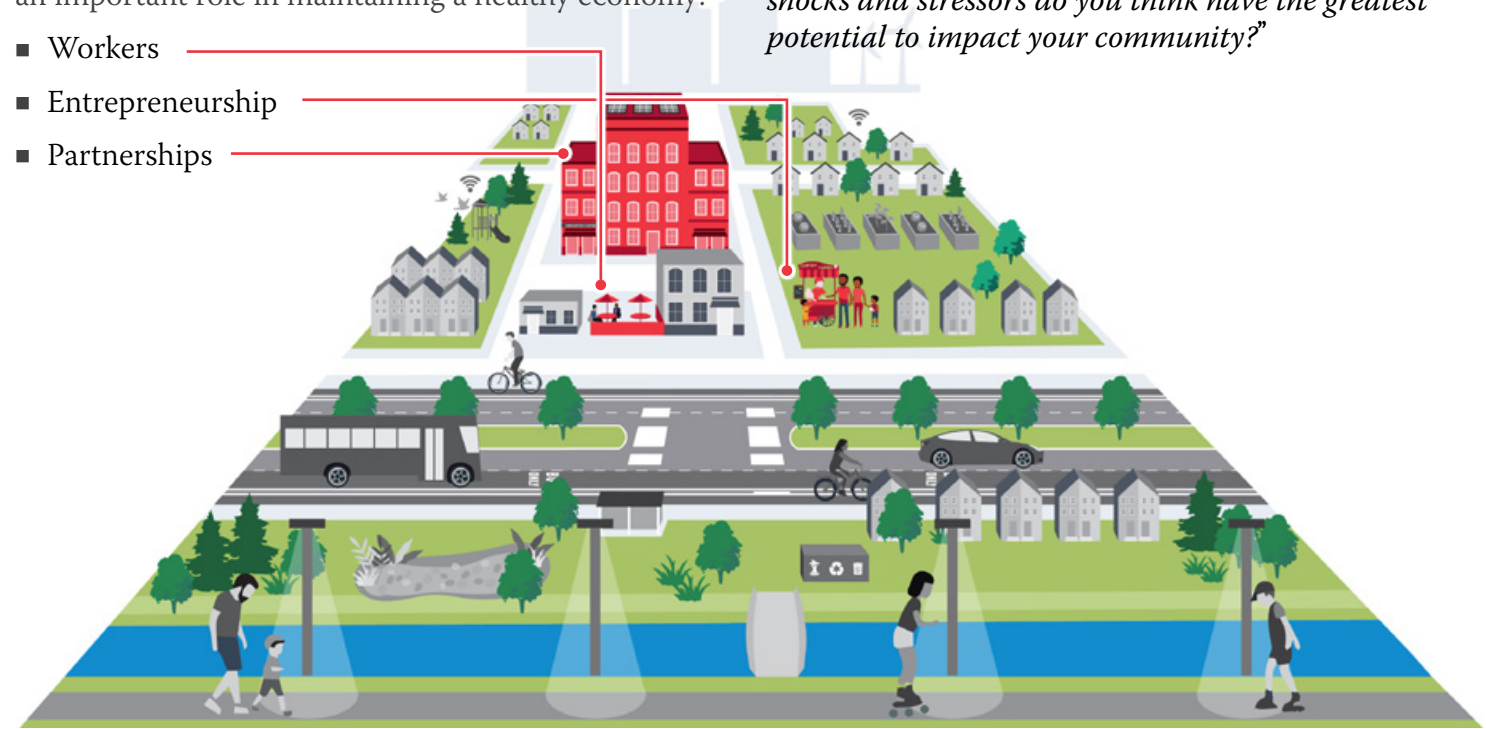
Resilient communities prepare residents to weather economic events by equipping communities with financial means and diverse skillsets.

Marquette knows first hand the need for financial adaptability, shifting from a strong mining economy to a focus on the health industry, eco-tourism, and new technology.

CATEGORIES

Most simply, the economy refers to the management of available resources. A successful economy depends on the active participation of suppliers, businesses, employees, and consumers. The following players have an important role in maintaining a healthy economy:

- Workers
- Entrepreneurship
- Partnerships



SHOCKS

- ★ Economic & local industry-specific downturns
 - Local educational closure impacting production of employees/labor
 - Large employer closure
 - Supply chain issues via natural/human made disasters
 - Civil disturbances
 - Public health emergencies

STRESSORS

- Aging population
- Breakdown in partnerships
- Climate adaptation costs
- Declining tax bases & property values
- Industrial or commercial activity decline
- Economic dependency
- Skills/job mismatch

- ★ Lack of childcare

Shocks and stressors with the star symbol were top responses on the self-assessment when asked "What shocks and stressors do you think have the greatest potential to impact your community?"

WORKERS

Role in Resiliency

Workers are the foundation of strong communities and strong economies. It is important to promote a diversity of work options so Marquette can withstand losses and gains of major industries as the global economy shifts post pandemic. It is also important workers are prepared for the types of jobs available by promoting and uplifting training programs and university ties to area employers.

Trends

Childcare is a top concern for workers in Marquette. Supporting programs such as [SPARK Childcare](#) will support local business growth and help workers.

Source: *Resiliency Self-Assessment Survey*



Most of Marquette is of working age.

Source: *2020 Decennial Census*

68%
of residents are
between ages 18-64.

Top industries in Marquette are **health care** (19.5%), **retail** (16%), and **food or accommodations** (10%).

1 in 5
Marquette residents
work in health care.

Access to quality paying jobs is essential.

Source: *2020 Decennial Census tables SE A13003A and SE A17005*



1 in 4
Marquette residents
are living below the
poverty line.

The ratio of residents living below the poverty line in Marquette is **double** that of the state.



Marquette has an
unemployment
rate of
7.2%

UP Health System is the largest area employer. It employs more workers than the next largest employer by almost 30%.

Source: *Lake Superior Community Partnership*

Private Employer	# Employees	Public Employer	# Employees
UP Health System	1,949	Northern Michigan University	914
Cleveland-Cliffs, Inc	972	Marquette Area Public Schools	410
UP Medical Center	603	Michigan Department of Corrections	284
Wal*Mart	392	County of Marquette	238
Resolve Surgical Tech	250	Negaunee Public Schools	190



Image Source | Travel Marquette

Opportunities

GOALS

Workforce Development

Expand job and educational training programs that support upward economic mobility, and better living wages so that all working people and their families can afford basic necessities.

Supportive & Fair Benefits

Provide benefits that support individuals and families during any stoppage of work, including retirement and unemployment.

ACTIONS

▣ Collaborate with existing young professionals to identify the concerns and needs of younger population. Based on this information, enact a set of initiatives in order to better support young professionals and entrepreneurs such as: business seminars, speakers, business plan competitions, investment forums, social events, relocation support, mentoring, and referrals.

★ Complete industry sector value chain and market analysis studies for locally targeted industries.

★ Approach larger employers about developing in-house programs around benefits for employees to reduce benefit/income burden; providing things like in-house childcare, additional days off, and flexible working hours can help to increase quality of life for workers.

TIME-LINE

RESPONSIBLE PARTY

Near

Northern Michigan University

Near

Mid

Northern Michigan Chamber Alliance
Lake Superior Community Partnership

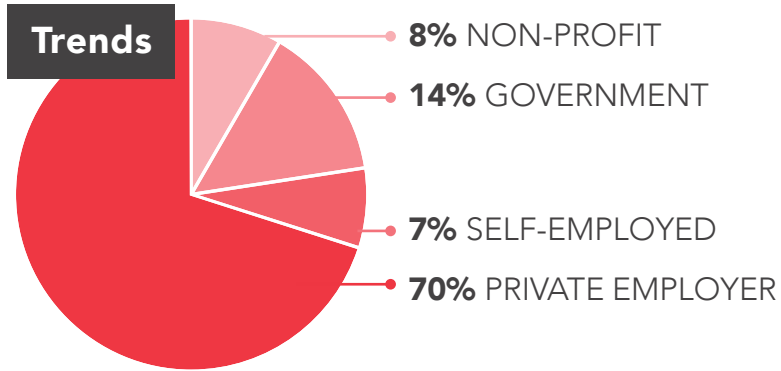
Tracking Metrics

- ▣ Number of childcare facilities (Lake Superior Community Partnership)
- ▣ Household income (U.S. Census)

ENTREPRENEURSHIP

Role in Resiliency

Marquette's economy outside of health and public industries is highly service based, which leaves it ripe for entrepreneurship. Continuing to support diverse entrepreneurs and industries will help Marquette withstand globally shifting work trends.



Opportunities

GOALS	ACTIONS	TIME-LINE	RESPONSIBLE PARTY
Business Retention & Development Strengthen and grow small and medium-sized enterprises.	<ul style="list-style-type: none"> Endorse local business through the promotion of purchasing preferences for locally produced goods and services in the local government and anchor institutions as well as creating/supporting promotional campaigns to bank locally, buy locally, or buy from small, independent businesses and retailers. 	Near	Travel Marquette Marquette Downtown Development Authority
Available Capital Ensure local capital and investment opportunities are available for starting new businesses.	<ul style="list-style-type: none"> Continue to partner with organizations such as Lake Superior Community Partnership to broaden the industrial base with diversification initiatives, such as targeting the development of emerging clusters or industries that (a) build on the region's unique assets and competitive strengths; and (b) provide stability during downturns that disproportionately impact any single cluster or industry. 	Near	Lake Superior Community Partnership
Innovation Incubation Create opportunities and incubators to support dynamic business activity.	<ul style="list-style-type: none"> Provide focused support, resources, and services to young entrepreneurial companies through business incubators, especially Downtown or in existing retail nodes. 	Near	Marquette Downtown Development Authority Innovate Marquette SmartZone

Tracking Metrics

- Visitors per year
- Amount of vacant retail space in commercial cores (Marquette Downtown Development Authority)
- Percentage of self-employed workers (U.S. Census)



Small business support is already underway!

Major local, regional, and state organizations such as Pure Michigan Business Connect, Michigan Economic Development Corporation, Innovate Marquette SmartZone, Lake Superior Community Partnership, and the Marquette Downtown Development Authority have been building tools for new and small businesses.

Image Source | Michigan Municipal League

PARTNERSHIPS

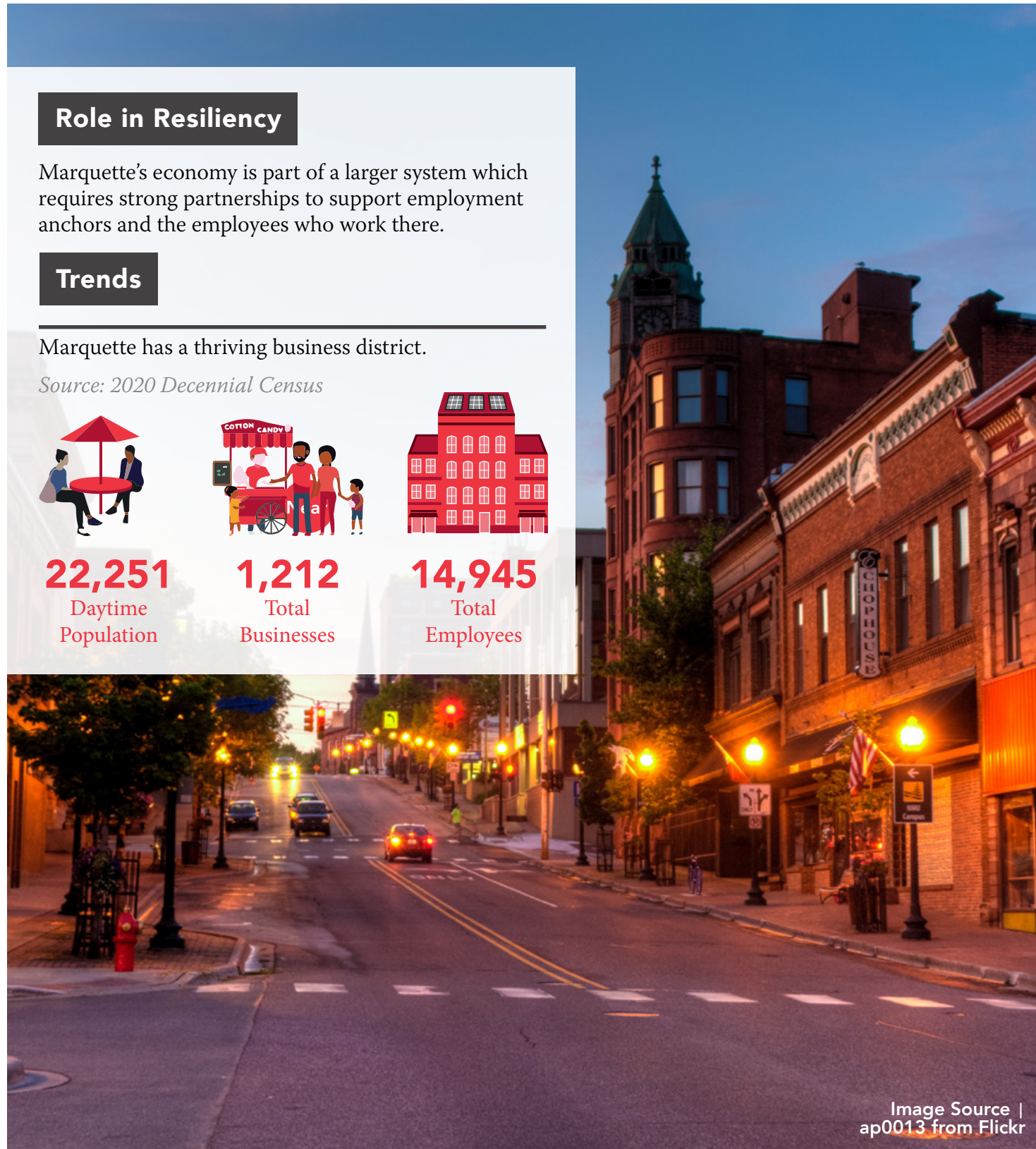


Image Source | ap0013 from Flickr

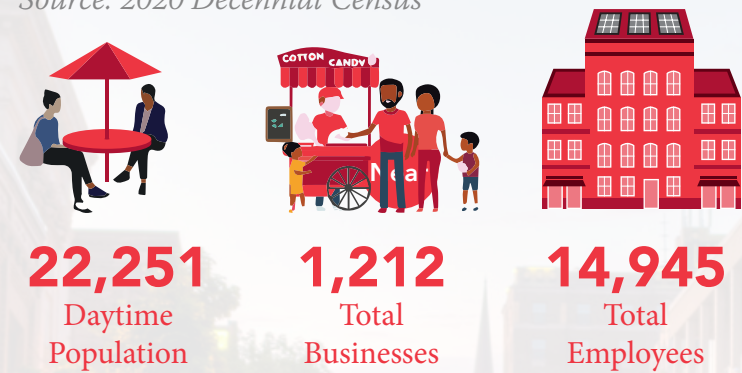
Role in Resiliency

Marquette's economy is part of a larger system which requires strong partnerships to support employment anchors and the employees who work there.

Trends

Marquette has a thriving business district.

Source: 2020 Decennial Census



Opportunities

GOALS	ACTIONS	TIME-LINE	RESPONSIBLE PARTY
Industry Diversity Diversify and plan for loss/gain of major employers.	<ul style="list-style-type: none"> Maintain and provide regional industrial and business park inventory and promote available sites. Address physical and sector vulnerabilities. Create and implement climate action and resilience plans and programs that identify strategies to address physical and sector vulnerabilities exacerbated by climate change, utilizing risk assessment practices. Such studies also need to take into consideration uncertainties in climate change impacts at regional levels so that adaptive responses are balanced with potential for risk. (APA, 2020. P. 28, D.7.1) 	Mid	Marquette County Brownfield Redevelopment Authority
Industry Recruitment Identify strategic opportunities for economic growth.	<ul style="list-style-type: none"> Work with local institutional and business leaders to support leadership succession and recovery plans for short, intermediate, and long-term recovery needs by using and investing in local talent. 	Near	Northern Michigan Chamber Alliance
Prepared P3s Strong public/private partnerships between government, major employers, educational, and non-profit institutions.	<ul style="list-style-type: none"> Developing clear estimations of financing gaps and needs to create thresholds of partnerships for private sector development. 	Near	Lake Superior Community Partnership

Tracking Metrics

- Jobs projected (Bureau of Labor Market Information and Strategic Initiatives)
- Jobs retained (Bureau of Labor Market Information and Strategic Initiatives)
- Expansion/retention (Bureau of Labor Market Information and Strategic Initiatives)

SECTION 7

TOP OPPORTUNITIES



Image Source | Michigan Municipal League

PRIORITIZATION

While all the opportunities in this assessment are applicable to Marquette and are important to achieve well rounded resiliency, the city can only take on so much at once. Prioritization is key to effective implementation and based on 5 key principles.

RESOURCES

Are there adequate resources currently devoted to this initiative?

AWARENESS

Does the community, partners, and city staff recognize the importance of this initiative?

IMPACT

What impact will this initiative have on the community? In the short term? In the long term?

FEASIBILITY

Does city staff and/or a partner have the fiscal and staffing capacity to achieve this initiative? Why/why not?

PARTNERSHIP

Are there partners who can help to achieve this initiative?

This process identified two key priorities for the City of Marquette that would have the most impact on the future resiliency of the city and region while aligning with existing partners and resources.

- Housing Action Planning
- Climate Action Planning

Suggestions for addressing these key priorities are included as separate strategy memos.



NEXT STEPS

Once selecting the priority actions for Marquette, action champions and responsible parties will need to regularly assess opportunities to make these goals a reality.

